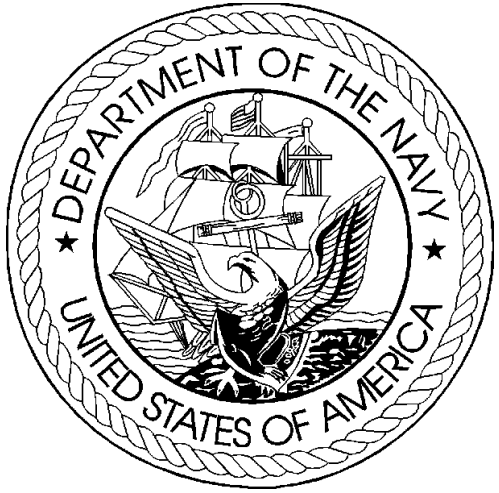
DEPARTMENT OF THE NAVY
FISCAL YEAR (FY) 2001
BUDGET ESTIMATES



JUSTIFICATION OF ESTIMATES
FEBRUARY 2000

OTHER PROCUREMENT, NAVY
BUDGET ACTIVITY 2

DEPARTMENT OF THE NAVY

FY 2001 PROCUREMENT PROGRAM

SUMMARY
($ IN MILLIONS)

February 2000

APPROPRIATION: OTHER PROCUREMENT, NAVY

ACTIVITY	FY 1999	FY 2000	FY 2001
01. SHIPS SUPPORT EQUIPMENT	948.4	910.4	573.5
02. COMMUNICATIONS AND ELECTRONICS EQUIPMENT	1,646.1	1,948.8	1,490.3
03. AVIATION SUPPORT EQUIPMENT	247.1	237.6	204.9
04. ORDNANCE SUPPORT EQUIPMENT	719.1	652.0	498.0
05. CIVIL ENGINEERING SUPPORT EQUIPMENT	54.4	68.7	97.7
06. SUPPLY SUPPORT EQUIPMENT	89.2	140.0	161.8
07. PERSONNEL AND COMMAND SUPPORT EQUIPMENT	98.4	71.0	99.5
08. SPARES AND REPAIR PARTS	243.9	273.2	208.9
TOTAL OTHER PROCUREMENT, NAVY	4,046.7	4,301.5	3,334.6

DEPARTMENT OF THE NAVY
FY 2001 PROCUREMENT PROGRAM EXHIBIT P-1

APPROPRIATION: 1810N OTHER PROCUREMENT, NAVY DATE: February 2000

LINE NO	ITEM NOMENCLATURE	IDENT CODE	MILLIONS OF DOLLARS FY 1999 QUANTITY	FY 1999 COST	FY 2000 QUANTITY	FY 2000 COST	FY 2001 QUANTITY	FY 2001 COST	SEC
	BUDGET ACTIVITY 01: SHIPS SUPPORT EQUIPMENT								
	SHIP PROPULSION EQUIPMENT								
1	LM-2500 GAS TURBINE	A		8.6		8.3		7.0	U
2	ALLISON 501K GAS TURBINE	A		6.7		8.3		6.3	U
3	STEAM PROPULSION IMPROVEMENT	A		.6					U
4	OTHER PROPULSION EQUIPMENT	A		12.0					U
	GENERATORS								
5	OTHER GENERATORS	A		18.1					U
	PUMPS								
6	OTHER PUMPS	A		1.0					U
	PROPELLERS								
7	SUBMARINE PROPELLERS	A		7.8				3.8	U
8	OTHER PROPELLERS AND SHAFTS	A		1.1					U
	NAVIGATION EQUIPMENT								
9	OTHER NAVIGATION EQUIPMENT	A		58.7		100.0		33.4	U
	UNDERWAY REPLENISHMENT EQUIPMENT								
10	UNDERWAY REPLENISHMENT EQUIPMENT	A		7.3		15.6		9.1	U
	PERISCOPES								
11	SUB PERISCOPES & IMAGING EQUIP	A		28.5		64.7		19.0	U
	OTHER SHIPBOARD EQUIPMENT								
12	FIREFIGHTING EQUIPMENT	A		11.1		16.9		16.8	U
13	COMMAND AND CONTROL SWITCHBOARD	A		10.0		14.2		10.5	U

DEPARTMENT OF THE NAVY
FY 2001 PROCUREMENT PROGRAM EXHIBIT P-1

APPROPRIATION: 1810N OTHER PROCUREMENT, NAVY DATE: February 2000

MILLIONS OF DOLLARS

LINE NO	ITEM NOMENCLATURE	IDENT CODE	FY 1999 QUANTITY	FY 1999 COST	FY 2000 QUANTITY	FY 2000 COST	FY 2001 QUANTITY	FY 2001 COST	SEC
14	POLLUTION CONTROL EQUIPMENT	B		117.0		114.4		47.8	U
15	SUBMARINE SILENCING EQUIPMENT	A		3.4					U
16	SUBMARINE SUPPORT EQUIPMENT	A				50.3		11.4	U
17	SUBMARINE BATTERIES	A		8.3		13.0		12.4	U
18	SSN21 CLASS SUPPORT EQUIPMENT	A		15.3					U
19	STRATEGIC PLATFORM SUPPORT EQUIP	A		10.1		21.0		6.2	U
20	DSSP EQUIPMENT	A		10.3		7.9		5.4	U
21	LCAC	A				4.0		3.6	U
22	MINESWEEPING EQUIPMENT	A		.4		19.6		16.6	U
23	HM&E ITEMS UNDER $2 MILLION	A		50.7					U
24	ITEMS LESS THAN $5 MILLION	A				127.7		58.9	U
25	SURFACE IMA	A		4.1				2.0	U
26	MINI/MICROMINI ELECTRONIC REPAIR	A		.5					U
27	SUBMARINE LIFE SUPPORT SYSTEM	A				1.3		4.9	U
	REACTOR PLANT EQUIPMENT								
28	REACTOR POWER UNITS	A		226.4					U
29	REACTOR COMPONENTS	A		210.5		198.0		203.4	U
	OCEAN ENGINEERING								
30	DIVING AND SALVAGE EQUIPMENT	A		5.6		5.5		5.6	U
31	EOD UNDERWATER EQUIPMENT	B		8.1					U
	SMALL BOATS								
32	STANDARD BOATS	A		1.4		3.1		2.7	U

DEPARTMENT OF THE NAVY
FY 2001 PROCUREMENT PROGRAM EXHIBIT P-1

APPROPRIATION: 1810N OTHER PROCUREMENT, NAVY DATE: February 2000

LINE NO	ITEM NOMENCLATURE	IDENT CODE	MILLIONS OF DOLLARS FY 1999 QUANTITY	FY 1999 COST	FY 2000 QUANTITY	FY 2000 COST	FY 2001 QUANTITY	FY 2001 COST	SEC
	TRAINING EQUIPMENT								
33	OTHER SHIPS TRAINING EQUIPMENT	A		1.8		3.8		3.3	U
	PRODUCTION FACILITIES EQUIPMENT								
34	OPERATING FORCES IPE	A		.7		4.5		2.7	U
	OTHER SHIP SUPPORT								
35	NUCLEAR ALTERATIONS	A		94.1		108.3		80.9	U
	DRUG INTERDICTION SUPPORT								
36	DRUG INTERDICTION SUPPORT	A		8.3					U
	TOTAL SHIPS SUPPORT EQUIPMENT			948.4		910.4		573.5	
	BUDGET ACTIVITY 02: COMMUNICATIONS AND ELECTRONICS EQUIPMENT								
	SHIP RADARS								
37	AN/SPS-49	A		1.0		2.2			U
38	RADAR SUPPORT	A		28.6		19.9			U
39	TISS	A		3.5		1.7			U
	SHIP SONARS								
40	AN/SQQ-89 SURF ASW COMBAT SYSTEM	A		23.2		31.7		14.3	U
41	SSN ACOUSTICS	A		142.7		216.4		106.6	U
42	UNDERSEA WARFARE SUPPORT EQUIPMENT	A				11.5		.8	U
43	SONAR SUPPORT EQUIPMENT	A		8.1		3.0			U
44	SONAR SWITCHES AND TRANSDUCERS	A		12.7		14.0		10.7	U
	ASW ELECTRONIC EQUIPMENT								
45	SUBMARINE ACOUSTIC WARFARE SYSTEM	A		7.3		11.1		10.7	U

DEPARTMENT OF THE NAVY
FY 2001 PROCUREMENT PROGRAM EXHIBIT P-1

APPROPRIATION: 1810N OTHER PROCUREMENT, NAVY DATE: February 2000

MILLIONS OF DOLLARS

LINE NO	ITEM NOMENCLATURE	IDENT CODE	FY 1999 QUANTITY	FY 1999 COST	FY 2000 QUANTITY	FY 2000 COST	FY 2001 QUANTITY	FY 2001 COST	SEC
46	SSTD	A		.8					U
47	ACOUSTIC COMMUNICATIONS	A		.4					U
48	FIXED SURVEILLANCE SYSTEM	A		9.4		16.6		29.9	U
49	SURTASS	A		12.5		7.2		5.5	U
50	ASW OPERATIONS CENTER	A		2.6		4.4		6.2	U
51	CARRIER ASW MODULE	A		.4					U
	ELECTRONIC WARFARE EQUIPMENT								
52	AN/SLQ-32	A		1.5		1.9			U
53	AN/WLR-1	A		1.8					U
54	INFORMATION WARFARE SYSTEMS	A		3.4		4.1		3.9	U
55	C-3 COUNTERMEASURES	A		10.0					U
	RECONNAISSANCE EQUIPMENT								
56	SHIPBOARD IW EXPLOIT	A		40.1		50.9		61.5	U
57	COMMON HIGH BANDWIDTH DATA LINK	A		55.6		36.8			U
	SUBMARINE SURVEILLANCE EQUIPMENT								
58	AN/WLQ-4	A		2.8					U
59	SUBMARINE SUPPORT EQUIPMENT PROG	A		3.9		38.2		17.3	U
	OTHER SHIP ELECTRONIC EQUIPMENT								
60	NAVY TACTICAL DATA SYSTEM	A		12.1		22.4			U
61	COOPERATIVE ENGAGEMENT CAPABILITY	B		81.7		60.2		15.9	U
62	GCCS-M EQUIPMENT AFLOAT	A		41.1		24.9		37.4	U
63	NAVAL TACTICAL COMMAND SUPPORT SYSTEM	A		79.2		58.2		46.7	U
64	ATDLS	A		28.8		19.0		19.2	U

DEPARTMENT OF THE NAVY
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APPROPRIATION: 1810N OTHER PROCUREMENT, NAVY DATE: February 2000

MILLIONS OF DOLLARS

LINE NO	ITEM NOMENCLATURE	IDENT CODE	FY 1999 QUANTITY	FY 1999 COST	FY 2000 QUANTITY	FY 2000 COST	FY 2001 QUANTITY	FY 2001 COST	SEC
65	MINESWEEPING SYSTEM REPLACEMENT	A		17.2		19.6		9.0	U
66	SHALLOW WATER MCM	B		7.3		18.7		16.9	U
67	NAVSTAR GPS RECEIVERS (SPACE)	A		9.4		8.5		9.6	U
68	ARMED FORCES RADIO AND TV	A		15.9		7.7		9.0	U
69	STRATEGIC PLATFORM SUPPORT EQUIP	A		12.5		24.7		15.4	U
	TRAINING EQUIPMENT								
70	OTHER SPAWAR TRAINING EQUIPMENT	A		1.0		1.0		1.3	U
71	OTHER TRAINING EQUIPMENT	A		26.8		51.1		21.4	U
	AVIATION ELECTRONIC EQUIPMENT								
72	MATCALS	A		11.6		12.3		4.3	U
73	SHIPBOARD AIR TRAFFIC CONTROL	B		8.5		7.5		7.9	U
74	AUTOMATIC CARRIER LANDING SYSTEM	A		10.7		18.5		18.5	U
75	NATIONAL AIR SPACE SYSTEM	B		7.7		34.9		30.5	U
76	AIR STATION SUPPORT EQUIPMENT	A		7.2		7.2		6.7	U
77	MICROWAVE LANDING SYSTEM	A		4.6		5.3		5.1	U
78	FACSFAC	A		3.7		5.3		4.3	U
79	ID SYSTEMS	A		17.6		9.2		14.3	U
80	SURFACE IDENTIFICATION SYSTEMS	A		2.6		.6			U
81	TAC A/C MISSION PLANNING SYS(TAMPS)	A		23.2		20.7		12.0	U
	OTHER SHORE ELECTRONIC EQUIPMENT								
82	GCCS-M EQUIPMENT ASHORE	A		4.0		9.4			U
83	OSIS EVOLUTIONARY DEVELOPMENT (OED)	A		.9					U
84	TADIX-B	A		4.3		18.8		*	U

DEPARTMENT OF THE NAVY
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MILLIONS OF DOLLARS

LINE NO	ITEM NOMENCLATURE	IDENT CODE	FY 1999 QUANTITY	FY 1999 COST	FY 2000 QUANTITY	FY 2000 COST	FY 2001 QUANTITY	FY 2001 COST	SEC
85	NAVAL SPACE SURVEILLANCE SYSTEM	A				7.8		2.7	U
86	GCCS-M EQUIPMENT TACTICAL/MOBILE	A		24.6		14.0			U
87	COMMON IMAGERY GROUND SURFACE SYSTEMS	A		65.2		41.0		47.0	U
88	RADIAC	A		4.0		4.3		8.3	U
89	GPETE	A		9.5		7.7		7.4	U
90	INTEG COMBAT SYSTEM TEST FACILITY	A		6.4		4.3		4.4	U
91	CALIBRATION STANDARDS	A		1.9					U
92	EMI CONTROL INSTRUMENTATION	A		7.5		6.5		5.4	U
93	SHORE ELEC ITEMS UNDER $2 MILLION	A		10.4					U
94	ITEMS LESS THAN $5 MILLION	A				10.9		4.9	U
	SHIPBOARD COMMUNICATIONS								
95	SHIPBOARD TACTICAL COMMUNICATIONS	A		31.9		25.2			U
96	PORTABLE RADIOS	A		6.4					U
97	SINCGARS	A		27.7					U
98	SHIP COMMUNICATIONS AUTOMATION	A		109.1		229.2		185.1	U
99	SHIP COMM ITEMS UNDER $5 MILLION	A		31.2		30.5			U
100	INTEGRATED BROADCAST SYSTEM	A		10.2					U
101	COMMUNICATIONS ITEMS UNDER $5M	A						30.9	U
	SUBMARINE COMMUNICATIONS								
102	SHORE LF/VLF COMMUNICATIONS	A		13.9		36.2		31.4	U
103	SUBMARINE COMMUNICATION EQUIPMENT	A		63.7		83.2		78.0	U
104	ADVANCED VLF RECEIVER	B		16.1					U

DEPARTMENT OF THE NAVY
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MILLIONS OF DOLLARS

LINE NO	ITEM NOMENCLATURE	IDENT CODE	FY 1999 QUANTITY	FY 1999 COST	FY 2000 QUANTITY	FY 2000 COST	FY 2001 QUANTITY	FY 2001 COST	SEC
	SATELLITE COMMUNICATIONS								
105	SATCOM SHIP TERMINALS (SPACE)	A		140.8		216.5			U
106	SATELLITE COMMUNICATIONS SYSTEMS	A						252.7	U
107	SATCOM SHORE TERMINALS (SPACE)	A		65.1		65.3			U
	SHORE COMMUNICATIONS								
108	JCS COMMUNICATIONS EQUIPMENT	A		3.3		3.7		2.5	U
109	NSIPS	A		5.1		7.0		1.8	U
110	JEDMICS	A		7.0		16.9			U
111	GCCS EQUIPMENT	A		2.5					U
112	NAVAL SHORE COMMUNICATIONS	A		105.8		113.4		176.1	U
	CRYPTOGRAPHIC EQUIPMENT								
113	INFO SYSTEMS SECURITY PROGRAM (ISSP)	A		39.2		66.8		46.6	U
	CRYPTOLOGIC EQUIPMENT								
114	SPECIAL DCP	A						15.0	U
115	CRYPTOLOGIC COMMUNICATIONS EQUIP	A		20.8		21.0		17.2	U
	DRUG INTERDICTION SUPPORT								
116	OTHER DRUG INTERDICTION SUPPORT	A		5.3					U
	TOTAL COMMUNICATIONS AND ELECTRONICS EQUIPMENT			1,646.1		1,948.8		1,490.3	
	BUDGET ACTIVITY 03: AVIATION SUPPORT EQUIPMENT								
	SONOBUOYS								
117	AN/SSQ-36 (BT)	A		2.9					U
118	AN/SSQ-53 (DIFAR)	A		28.0					U

DEPARTMENT OF THE NAVY
FY 2001 PROCUREMENT PROGRAM EXHIBIT P-1

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MILLIONS OF DOLLARS

LINE NO	ITEM NOMENCLATURE	IDENT CODE	FY 1999 QUANTITY	FY 1999 COST	FY 2000 QUANTITY	FY 2000 COST	FY 2001 QUANTITY	FY 2001 COST	SEC
119	PASSIVE SONOBUOYS (NON-BEAM FORMING)	A				20.8			U
120	AN/SSQ-57 (SPECIAL PURPOSE)	A		2.4					U
121	AN/SSQ-62 (DICASS)	A		24.3		16.6			U
122	AN/SSQ-101 (ADAR)	B		19.4		16.7			U
123	SIGNAL, UNDERWATER SOUND (SUS)	A		1.4					U
124	SONOBUOYS - ALL TYPES	A						49.5	U
125	MISCELLANEOUS SONOBUOYS LESS THAN $5 M	A				2.2			U
	AIRCRAFT SUPPORT EQUIPMENT								
126	WEAPONS RANGE SUPPORT EQUIPMENT	A		22.9		23.0		15.1	U
127	EXPEDITIONARY AIRFIELDS	A		2.4		.1		3.3	U
128	AIRCRAFT REARMING EQUIPMENT	A		12.7		12.4		10.7	U
129	AIRCRAFT LAUNCH & RECOVERY EQUIPMENT	A		37.5		40.4		36.4	U
130	METEOROLOGICAL EQUIPMENT	A		27.9		31.3		30.9	U
131	OTHER PHOTOGRAPHIC EQUIPMENT	A		.6		1.7		1.7	U
132	AVIATION LIFE SUPPORT	A		22.7		36.8		20.4	U
133	AIRBORNE MINE COUNTERMEASURES	A		35.3		31.3		32.1	U
134	REWSON PHOTOGRAPHIC EQUIPMENT	A		.8					U
135	OTHER AVIATION SUPPORT EQUIPMENT	A		5.8		4.2		4.9	U
	TOTAL AVIATION SUPPORT EQUIPMENT			247.1		237.6		204.9	
	BUDGET ACTIVITY 04: ORDNANCE SUPPORT EQUIPMENT								
	SHIP GUN SYSTEM EQUIPMENT								
136	GUN FIRE CONTROL EQUIPMENT	A		31.0		5.8		18.3	U

DEPARTMENT OF THE NAVY
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MILLIONS OF DOLLARS

LINE NO	ITEM NOMENCLATURE	IDENT CODE	FY 1999 QUANTITY	FY 1999 COST	FY 2000 QUANTITY	FY 2000 COST	FY 2001 QUANTITY	FY 2001 COST	SEC
	SHIP MISSILE SYSTEMS EQUIPMENT								
137	MK-92 FIRE CONTROL SYSTEM	A		1.0					U
138	TARTAR SUPPORT EQUIPMENT	A		*					U
139	POINT DEFENSE SUPPORT EQUIPMENT	A		*					U
140	NATO SEASPARROW	A		7.3		.5		21.7	U
141	RAM GMLS	A		63.1		39.1		37.3	U
142	SHIP SELF DEFENSE SYSTEM	B		38.6		38.6		9.4	U
143	AEGIS SUPPORT EQUIPMENT	A		89.4		91.2		36.8	U
144	SURFACE TOMAHAWK SUPPORT EQUIPMENT	A		96.7		85.3		70.6	U
145	SUBMARINE TOMAHAWK SUPPORT EQUIP	A		3.9		2.1		2.9	U
146	VERTICAL LAUNCH SYSTEMS	A		10.3		7.2		7.0	U
	FBM SUPPORT EQUIPMENT								
147	STRATEGIC PLATFORM SUPPORT EQUIP	A		2.9		9.3		2.9	U
148	STRATEGIC MISSILE SYSTEMS EQUIP	A		275.7		238.2		166.6	U
149	ANTI-SHIP MISSILE DECOY SYSTEM	A		21.9		32.3		33.8	U
	ASW SUPPORT EQUIPMENT								
150	SSN COMBAT CONTROL SYSTEMS	A		18.7		35.1		20.9	U
151	SUBMARINE ASW SUPPORT EQUIPMENT	A		5.7		3.7		4.0	U
152	SURFACE ASW SUPPORT EQUIPMENT	A		4.9		6.1		6.3	U
153	ASW RANGE SUPPORT EQUIPMENT	A		4.5		6.4		6.9	U
	OTHER ORDNANCE SUPPORT EQUIPMENT								
154	EXPLOSIVE ORDNANCE DISPOSAL EQUIP	B		8.8		8.9		7.5	U
155	UNMANNED SEABORNE TARGET	A		1.9					U

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MILLIONS OF DOLLARS

LINE NO	ITEM NOMENCLATURE	IDENT CODE	FY 1999 QUANTITY	FY 1999 COST	FY 2000 QUANTITY	FY 2000 COST	FY 2001 QUANTITY	FY 2001 COST	SEC
156	INDUSTRIAL FACILITIES (CALIBRATION EQU	A		1.0					U
157	ITEMS LESS THAN $5 MILLION	A				4.3		5.6	U
158	STOCK SURVEILLANCE EQUIPMENT	A		1.4					U
	OTHER EXPENDABLE ORDNANCE								
159	FLEET MINE SUPPORT EQUIPMENT	A		*					U
160	SURFACE TRAINING DEVICE MODS	A		6.8		10.6		7.9	U
161	SUBMARINE TRAINING DEVICE MODS	A		23.5		27.4		31.6	U
	TOTAL ORDNANCE SUPPORT EQUIPMENT			719.1		652.0		498.0	
	BUDGET ACTIVITY 05: CIVIL ENGINEERING SUPPORT EQUIPMENT								
	CIVIL ENGINEERING SUPPORT EQUIPMENT								
162	ARMORED SEDANS	A	1	.2			1	.2	U
163	PASSENGER CARRYING VEHICLES	A	102	3.2	25	.6	3	.1	U
164	SPECIAL PURPOSE VEHICLES	A		4.3					U
165	GENERAL PURPOSE TRUCKS	A		.1		1.6		1.0	U
166	CONSTRUCTION & MAINTENANCE EQUIP	A		1.5		2.7		6.2	U
167	FIRE FIGHTING EQUIPMENT	A		1.6		2.3		2.5	U
168	TACTICAL VEHICLES	B		1.3		9.3		10.5	U
169	AMPHIBIOUS EQUIPMENT	A		19.7		20.5		51.6	U
170	COMBAT CONSTRUCTION SUPPORT EQUIP	A		1.1					U
171	MOBILE UTILITIES SUPPORT EQUIPMENT	A		.4					U
172	OCEAN CONSTRUCTION EQUIPMENT	A		.4					U
173	POLLUTION CONTROL EQUIPMENT	A		20.7		23.9		22.2	U

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LINE NO	ITEM NOMENCLATURE	IDENT CODE	MILLIONS OF DOLLARS FY 1999 QUANTITY	FY 1999 COST	FY 2000 QUANTITY	FY 2000 COST	FY 2001 QUANTITY	FY 2001 COST	SEC
174	ITEMS UNDER $5 MILLION	A				7.8		3.4	U
	TOTAL CIVIL ENGINEERING SUPPORT EQUIPMENT			54.4		68.7		97.7	
	BUDGET ACTIVITY 06: SUPPLY SUPPORT EQUIPMENT								
	SUPPLY SUPPORT EQUIPMENT								
175	MATERIALS HANDLING EQUIPMENT	A		4.7		6.2		7.6	U
176	OTHER SUPPLY SUPPORT EQUIPMENT	A		11.9		6.9		5.2	U
177	FIRST DESTINATION TRANSPORTATION	A		4.4		1.6		4.1	U
178	SPECIAL PURPOSE SUPPLY SYSTEMS	A		68.3		125.2		144.9	U
	TOTAL SUPPLY SUPPORT EQUIPMENT			89.2		140.0		161.8	
	BUDGET ACTIVITY 07: PERSONNEL AND COMMAND SUPPORT EQUIPMENT								
	TRAINING DEVICES								
179	TRAINING SUPPORT EQUIPMENT	A		5.1		3.1		1.6	U
	COMMAND SUPPORT EQUIPMENT								
180	COMMAND SUPPORT EQUIPMENT	A		28.2		14.9		15.6	U
181	EDUCATION SUPPORT EQUIPMENT	A		2.3		2.3		2.1	U
182	MEDICAL SUPPORT EQUIPMENT	A		1.3		5.0		7.4	U
183	INTELLIGENCE SUPPORT EQUIPMENT	A		23.0		19.3		16.0	U
184	OPERATING FORCES SUPPORT EQUIPMENT	A		9.6		5.8		25.0	U
185	ENVIRONMENTAL SUPPORT EQUIPMENT	A		16.5		18.3		22.2	U
186	PHYSICAL SECURITY EQUIPMENT	A				2.3		9.6	U

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LINE NO	ITEM NOMENCLATURE	IDENT CODE	MILLIONS OF DOLLARS FY 1999 QUANTITY	FY 1999 COST	FY 2000 QUANTITY	FY 2000 COST	FY 2001 QUANTITY	FY 2001 COST	SEC
	OTHER								
187	CANCELLED ACCOUNT ADJUSTMENTS	A		12.4					U
	TOTAL PERSONNEL AND COMMAND SUPPORT EQUIPMENT			98.4		71.0		99.5	
	BUDGET ACTIVITY 08: SPARES AND REPAIR PARTS								
	SPARES AND REPAIR PARTS								
188	SPARES AND REPAIR PARTS	A		243.9		273.2		208.9	U
	TOTAL SPARES AND REPAIR PARTS			243.9		273.2		208.9	
	TOTAL OTHER PROCUREMENT, NAVY			4,046.7		4,301.5		3,334.6	

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

Identification code 17-1810-0-1-051	Budget Plan (amounts for PROCUREMENT actions programed)			Obligations		
	1999 actual	2000 est.	2001 est.	1999 actual	2000 est.	2001 est.
Program by activities:						
Direct program:						
00.0101 Ships support equipment	946,065	910,427	573,480	939,561	771,374	609,406
00.0201 Communications and electronics equipment	1,642,290	1,948,778	1,490,336	1,597,867	2,135,453	1,537,011
00.0301 Aviation support equipment	251,256	237,554	204,932	255,317	202,969	204,020
00.0401 Ordnance support equipment	714,877	651,967	497,956	674,332	580,051	510,092
00.0501 Civil engineering support equipment	54,367	68,674	97,670	42,748	68,151	93,629
00.0601 Supply support equipment	89,139	139,984	161,808	94,599	114,395	151,299
00.0701 Personnel and command support equipment	104,909	70,961	99,488	109,472	76,146	98,117
00.0801 Spares and repair parts	243,799	273,155	208,941	235,003	235,346	210,511
00.9101 Total direct program	4,046,702	4,301,500	3,334,611	3,948,899	4,183,885	3,414,085
01.0101 Reimbursable program	53,392	42,000	42,000	45,999	54,202	42,000
10.0001 Total	4,100,094	4,343,500	3,376,611	3,994,898	4,238,087	3,456,085
Financing:						
Offsetting collections from:						
11.0001 Federal funds(-)	-1,735	-42,000	-42,000	-1,627	-42,000	-42,000
14.0001 Non-Federal sources(-)	-51,657			-52,778		
17.0001 Recovery of prior year obligations				-8,731		
Unobligated balance available, start of year:						
21.4002 For completion of prior year budget plans				-465,555	-543,326	-648,739
21.4003 Available to finance new budget plans		-38,951			-38,951	
21.4009 Reprograming from/to prior year budget plan	-37,167					
Unobligated balance available, end of year:						
24.4002 For completion of prior year budget plans				543,326	648,739	569,265
24.4003 Available to finance subsequent year budget	38,951			38,951		
25.0001 Unobligated balance expiring	6,500			6,500		
39.0001 Budget authority	4,054,986	4,262,549	3,334,611	4,054,986	4,262,549	3,334,611
Budget authority:						
40.0001 Appropriation	4,060,662	4,320,238	3,334,611	4,060,662	4,320,238	3,334,611
40.3601 Unobligated Balance Rescinded	-28,500	-38,951		-28,500	-38,951	
40.7601 Reduction pursuant to P.L. 106-113(-), Titl		-22,138			-22,138	
40.7701 Reduction pursuant to P.L. 105-262 (-), 803	-55,247			-55,247		
41.0001 Transferred to other accounts (-)	-3,000			-3,000		
42.0001 Transferred from other accounts	81,071	3,400		81,071	3,400	
43.0001 Appropriation (adjusted)	4,054,986	4,262,549	3,334,611	4,054,986	4,262,549	3,334,611

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

Identification code 17-1810-0-1-051	Budget Plan (amounts for PROCUREMENT actions programed)			Obligations		
	1999 actual	2000 est.	2001 est.	1999 actual	2000 est.	2001 est.
Relation of obligations to outlays:						
71.0001 Obligations incurred				3,940,493	4,196,087	3,414,085
72.1001 From Federal sources: Receivables and unpaid, unfilled orders, SOY				-78,045	-66,263	-66,263
72.4001 Obligated balance, start of year				3,193,645	3,682,444	4,005,971
74.1001 From Federal sources: Receivables and unpaid, unfilled orders, EOY				66,263	66,263	66,263
74.4001 Obligated balance, end of year				-3,682,444	-4,005,971	-3,633,925
77.0001 Adjustments in expired accounts (net)				-68,467		
78.0001 Adjustments in unexpired accounts				-8,731		
90.0001 Outlays (net)				3,362,714	3,872,560	3,786,131

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

Identification code 17-1810-0-1-051	1999 actual	2000 est.	2001 est.
Direct obligations:			
125.101 Advisory and assistance services	21,340	23,159	21,976
125.201 Other services	7,603	131,712	159,771
Purchases goods/services from Government accounts			
125.301 Purchase of goods/services from Government accounts	126,825	138,806	131,034
125.303 Purchases from revolving funds	908,958	950,977	876,731
126.001 Supplies and materials	111,066	118,846	69,334
131.001 Equipment	2,773,107	2,820,385	2,155,239
199.001 Total Direct obligations	3,948,899	4,183,885	3,414,085
Reimbursable obligations:			
Purchases goods/services from Government accounts			
225.303 Purchases from revolving funds	14,718	41,598	41,591
226.001 Supplies and materials		402	409
231.001 Equipment	31,281	12,202	
299.001 Total Reimbursable obligations	45,999	54,202	42,000
999.901 Total obligations	3,994,898	4,238,087	3,456,085

Comparison of FY 1999 Financing as reflected in FY 2000 Budget with 1999 Financing as Shown in the FY 2001 Budget

($ In Thousands)

	Financing Per FY 2000 Budget	**Financing Per FY 2001 Budget**	**Increase (+) or Decrease (-)**
Program Requirements (Total)	4,050,915	$4,100,094	+$49,179
Program Requirements (Service Account)	($4,008,915)	($4,046,702)	(+37,787)
Program Requirements (Reimbursable)	($42,000)	($53,392)	(+11,392)
Appropriation (Adjusted)	**$3,980,415**	**$4,054,986**	**+$74,571**

Explanation of Changes in Financing

The Fiscal Year 1999 program has changed since the presentation of the FY 2000 budget as noted below:

1. Program Requirements. There has been a net increase to the appropriation (adjusted) of (+$49,179). This net change is comprised of an increase in program requirements (+$37,787) plus an increase in reimbursable authority of (+$11,392).

Comparison of FY 1999 program requirements as reflected in the FY 2000 Budget with FY 1999 program requirements as shown in the FY 2001 Budget

Summary of Requirements
($ in Thousands)

	Total Program Requirements per FY 2000 Budget	**Total Program Requirements per FY 2001 Budget**	**Increase (+) or Decrease (-)**
Ships Support Equipment	$954,401	$948,436	-$5965
Communications and Electronic Equip	1,184,901	1,646,128	-46,122
Aviation Support Equipment	243,679	247,148	-3,469
Ordnance Support Equipment	715,972	719,069	+3,097
Civil Engineering Support Equip	54,856	54,389	-467
Supply Support Equipment	89,537	89,230	-307
Personnel and Command Support Equip	74,063	98,411	+23,348
Spares and Repair Parts	246,506	243,891	-2,615
Total Fiscal Year Program	$4,063,915	$4,046,702	-$17,213

Explanation by Budget Activity

($ In Thousands)

1. SHIP SUPPORT EQUIPMENT (-$5,965) - Net decrease reflecting (-$17,650) FY 1999 Congressional adjustments and internal reprogrammings (+$11,685) including (+$5,300) for Counter Drug Interdiction.

Explanation by Budget Activity (Continued)

($ In Thousands)

2. COMMUNICATIONS & ELECTRONIC EQUIPMENT (-$46,122) - Net decrease reflecting (-$9,307) FY 1999 Congressional recissions, other Congressional adjustments (-$17,026), offsets for high priority Navy programs, (-$10,399), and internal reprogramming actions of (-$9390).

3. AVIATION SUPPORT EQUIPMENT (-$3469) - Net decrease reflecting (-$15,243) Congressional adjustments, and internal reprogrammings (+11,774).

4. ORDNANCE SUPPORT EQUIPMENT (+$3,097) - Net increase reflecting Congressional adjustments (-$7,073), and internal reprogrammings (+$10,170).

5. CIVIL ENGINEERING SUPPORT (-$467) - Net decrease reflecting Congressional adjustments (-$620), and internal realignments (+$153).

6. SUPPLY SUPPORT EQUIPMENT (-$307) - Net decrease reflecting Congressional adjustments (-$307).

7. PERSONNEL & COMMAND SUPPORT (+$23,348) - Net increase reflecting Congressional adjustments (+$6,500), economic assumptions (-$704), and increases for high priority Navy programs including paperless acquisition and smartcard (+$16,144).

8. SPARES & REPAIR PARTS (-$2,615) - Net decrease reflecting Congressional adjustments (-$3,191), and internal realignments (+$576).

Comparison of FY 2000 Financing as reflected in FY 2000 Budget with 2000 Financing as Shown in the FY 2001 Budget

($ In Thousands)

	Financing Per FY 2000 Budget	**Financing Per FY 2001 Budget**	**Increase (+) or Decrease (-)**
Program Requirements (Total)	$4,142,091	$4,343,500	+$201,409
Program Requirements (Service Account)	($4,100,091)	($4,301,500)	(+201,409)
Program Requirements (Reimbursable)	($42,000)	($42,000)	0
Appropriation (Adjusted)	**$4,100,091**	**$4,262,549**	**+$162,458**

Explanation of Changes in Financing

The Fiscal Year 2000 program has changed since the presentation of the FY 2000 budget as noted below:

1. Program Requirements. There has been a net increase to the appropriation (adjusted) of +$162,458. This net change is comprised of an increase in program requirements (+$184,596), less rescissions of (-$22,138).

Comparison of FY 2000 program requirements as reflected in the FY 2000 Budget with FY 2000 program requirements as shown in the FY 2001 Budget

Summary of Requirements ($ in Thousands)

	Total Program Requirements per FY 2000 Budget	**Total Program Requirements per FY 2001 Budget**	**Increase (+) or Decrease (-)**
Ships Support Equipment	$858,709	$910,427	+$51,718
Communications and Electronic Equip	1,845,227	1,948,778	+103,551
Aviation Support Equipment	216,237	237,554	+21,317
Ordnance Support Equipment	629,418	651,967	+22,549
Civil Engineering Support Equip	67,144	68,674	+1,530
Supply Support Equipment	139,628	139,984	+356
Personnel and Command Support Equip	67,598	70,961	+3,363
Spares and Repair Parts	276,130	273,155	-2,975
Total Fiscal Year Program	$4,100,091	$4,301,500	+$201,409

Explanation by Budget Activity
($ in Thousands)

1. Ships Support Equipment (+$51,718) – Net changes reflect FY 2000 Congressional adjustments (+$51,718).

2. Communications and Electronics Equipment (+$103,551) – Net changes reflect FY 2000 Congressional adjustments (+$103,551).

Comparison of FY 2000 program requirements as reflected
in the FY 2000 Budget with FY 2000 program requirements
as shown in the FY 2001 Budget

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

3. Aviation Support Equipment (+$21,317) - Changes reflect FY 2000 Congressional reductions (-$8953), and Congressional increases (+$30,270).

4. Ordnance Support Equipment (+$22,549) - Changes reflect FY 2000 Congressional adjustments (+$13,345), and DoN internal realignments (+$9,204).

5. Civil Engineering Support Equipment (+$1,530) - Changes reflect FY 2000 Congressional adjustments (+$1,530).

6. Supply Support Equipment (+$356) - Changes reflect FY 2000 Congressional reductions (-$744), and Congressional increases (+$1,100).

7. Personnel and Command Support (+$3,363) - Changes reflect Congressional reductions (-$286), and Department realignments (+$3,649).

8. Spare and Repair Parts (-$2,975) - Changes reflect FY 2000 Congressional reductions (-$1,435) and internal reprogrammings (-$1,540).

BUDGET ITEM JUSTIFICATION SHEET P-40												DATE: **February 2000**
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy/BA-2 COMMUNICATION & ELECT. EQ.**							P-1 ITEM NOMENCLATURE **AN/SPS-49 / 201505**					
Program Element for Code B Items:							Other Related Program Elements					
	Prior Years	ID Code		FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY				**0**	**0**	**0**	**0**	**0**	**0**	**0**	**N/A**	
COST (In Millions)				**$1.0**	**$2.2**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**N/A**	**$3.2**
SPARES COST (In Millions)				**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**N/A**	**$0.0**

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.

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 P-40												DATE: February 2000
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY - BA 2**							P-1 ITEM NOMENCLATURE **RADAR SUPPORT / 204000**					
Program Element for Code B Items:							Other Related Program Elements					
	Prior Years	ID Code		FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY						**SEE NOTE**						
COST (In Millions)				**$28.6**	**$20.0**							**$48.6**
SPARES COST (In Millions)				**$0.7**	**$1.3**							**$2.0**

AN/BPS RADAR AND UPGRADE KITS - PROVIDES REPLACEMENT RADAR FOR OBSOLETE SUBMARINE RADAR AND PROVIDES ECDIS-N UPGRADES.

AN/SPS-73(V) RADAR - PROVIDES REPLACEMENT RADAR FOR AN/SPS-64 RADAR ON ALL SHIP CLASSES AND REPLACEMENT FOR AN/SPS-55 AND AN/SPS-67(V)1 RADAR ON VARIOUS CLASS SHIPS.

FFG UPGRADES (NRF) - PROVIDES WEAPON/COMBAT SYSTEM UPGRADES FOR NAVAL RESERVE FORCE FFG.

EQUIPMENT INSTALLATION - FUNDING IS THE INSTALLATION OF EQUIPMENT INCLUDING FLEET MODERNIZATION PROGRAM INSTALLATIONS, INSTALLATION OF TRAINING EQUIPMENT, INSTALLATION OF EQUIPMENT IN OTHER SHORE FACILITIES AND INSTALLATION/CERTIFICATION/TESTING OF EQUIPMENT.

NOTE: FROM FY01 AND OUT THE RADAR SUPPORT BUDGET WAS TRANSFERRED TO BLI 298000 (Item #94).

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System											DATE: February 2000
APPROPRIATION/BUDGET ACTIVITY: **Other Procurement, Navy**			ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD: **RADAR SUPPORT / 204000**										
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			Prior Years				FY 1999			FY 2000			FY 2001		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	N87 SPONSOR														
	SUBMARINE EQUIPMENT														
KG015	AN/BPS RADAR, UPGRADE KITS	A													
	a. AN/BPS-16 FIELD CHANGE						10	900	9,000						
	a. AN/BPS-15/16 ECDIS-N FC									79	100	7,900			
KG900	CONSULTING SERVICES	A													
	N86 SPONSOR														
	SURFACE SHIPS EQUIPMENT														
KG018	AN/SPS-73(V) RADAR	A					51	149	7,599	50	155	7,750			
KG019	FFG UPGRADES	A					1	5,220	5,220						
KG830	PRODUCTION ENGINEERING	A							2,542			1,231			
KG901	CONSULTING SERVICES	A							800						
	INSTALLATION														
KG5IN	INSTALLATION OF EQUIPMENT - FMP								3,450			3,008			
			0						**28,611**			**19,889**			**0**

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE: February 2000
B. APPROPRIATION/BUDGET ACTIVITY: Other Procurement, Navy	C. P-1 ITEM NOMENCLATURE: RADAR SUPPORT / 204000	SUBHEAD: 82KG

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FISCAL YEAR (99)										
* KG018 AN/SPS-73(V)	51	149	0	N/A	SS/FP	RAYTHON SERVICES CO-PORTSMOUTH, RI	1/00	6/00	YES	
** KG015 AN/BPS-16 FC	10	900	NAVSEA	5/99	SS/FP	LITTON MARINE-CHARLOTTESVILLE,VA	6/99	6/00	YES	
KG019 FFG Upgrades	1	5,220	NAVSEA	6/99	SS/FP	VARIOUS	2/00	11/00	YES	
FISCAL YEAR (00)										
* KG018 AN/SPS-73(V)	50	155	NAVSEA	N/A	SS/FP	RAYTHON SERVICES CO-PORTSMOUTH, RI	5/00	10/00	YES	
** KG015 AN/BPS-16 FC	79	100	NAVSEA	3/00	SS/FP	LITTON MARINE-CHARLOTTESVILLE,VA	4/00	01/01	YES	

NOTE: FROM FY01 AND OUT THE RADAR SUPPORT BUDGET WAS TRANSFERRED TO BLI 29800.

D. REMARKS

* FUNDING ALSO INCLUDES SPS-73(V) RADAR PRODUCTION NRE AND FUNDING FOR PRE-PLANNED PRODUCT IMPROVEMENTS.

** THE UNIT COST INCLUDES FUNDING TO FIELD ACTIVITIES IN SUPPORT OF PRODUCTION ENGINEERING, QUALITY ASSURANCE, ACCEPTANCE TEST & EVALUATION, AND NRE FOR ECDIS-NAVY REQUIREMENTS.

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: RADAR SUPPORT (298000) TYPE MODIFICATION: N/A MODIFICATION TITLE: AN/SPS-73(V) RADAR (N86)

DESCRIPTION/JUSTIFICATION:

PROVIDE REPLACEMENT RADARS FOR LN-66, AN/SPS-64(V)9, AN/SPS-55 AND AN/SPS-67(V)1.

NOTE: FROM FY 01 AND OUT, THE RADAR SUPPORT BUDGET WAS TRANSFERRED TO BLI 2980.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.0
PROCUREMENT																						
INSTALLATION KITS																					0	0.0
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT			69	10.6	51	7.6	50	7.8												7.8	170	33.8
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT																						0.0
SUPPORT EQUIPMENT																						0.0
OTHER (Production Engineering)				0.7		2.5		1.2												4.4		8.8
OTHER (Consulting Services)				0.3		0.8		0.0												1.1		2.2
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST				2.8		3.4		3.0												9.2		18.4
TOTAL PROCUREMENT				11.6		10.9		9.0												40.7		72.2

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: RADAR SUPPORT (298000) TYPE MODIFICATION: N/A MODIFICATION TITLE: AN/BPS-15/16 RADAR (N87)

DESCRIPTION/JUSTIFICATION:

AN/BPS-15/16 ECDIS-N FC KITS - PROVIDES REPLACEMENT RADAR FOR OBSOLETE SUBMARINE RADAR AND PROVIDES ECDIS-N UPGRADES.

NOTE: FROM FY 01 AND OUT, THE RADAR SUPPORT BUDGET WAS TRANSFERRED TO BLI 2980.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																						0.0
PROCUREMENT																						
INSTALLATION KITS																						0.0
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT							79	8.0													79	8.0
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT																						0.0
SUPPORT EQUIPMENT																						0.0
OTHER (Production Engineering)																						0.0
OTHER (Consulting Services)																						0.0
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST																						0.0
TOTAL PROCUREMENT								8.0														8.0

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

MODELS OF SYSTEMS AFFECTED: RADAR SUPPORT (298000) MODIFICATION TITLE: AN/SPS-73(V) RADAR (N86)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: ALTERATION INSTALLATION TEAM (AIT)

ADMINISTRATIVE LEADTIME: 6 MONTHS PRODUCTION LEADTIME: 2 Months

CONTRACT DATES: FY 1999: 7/99 FY 2000: N/A FY 2001: N/A

DELIVERY DATE: FY 1999: 9/99 FY 2000: N/A FY 2001: N/A

($ in Millions)

Cost:	Prior Years		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS				0.0																	0	0.0
FY 1998 EQUIPMENT			69	2.8																	69	2.8
FY 1999 EQUIPMENT					51	3.4															51	3.4
FY 2000 EQUIPMENT							50	3.0													50	3.0
FY 2001 EQUIPMENT																					0	0.0
FY 2002 EQUIPMENT																					0	0.0
FY 2003 EQUIPMENT																					0	0.0
FY 2004 EQUIPMENT																					0	0.0
FY 2005 EQUIPMENT																					0	0.0
TO COMPLETE																						

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	5	3	2	0	0	32	32	32	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	109	314
Out	5	3	2	0	0	32	32	32	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	109	314

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A	P-1 ITEM NOMENCLATURE/PROJECT UNIT	DATE
	RADAR SUPPORT (82KG) - AN/SPS-73(V) RADAR (KG018)	**February 2000**

APPROPRIATION/BUDGET ACTIVITY	Installing Agent
Other Procurement, Navy	**NSWC PHDiv VA BEACH (AIT)**

1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1998								FY 1999							
						IX-517	1	LSD-52	1	LHD-1	2				
						NSWC, VAB	1	LPD-10	1	LHD-6	1				
						LPD-9	1	LSD-37	1						
						FTSCPAC	1								
						FTSCLANT	1								

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A	P-1 ITEM NOMENCLATURE/PROJECT UNIT	DATE
	RADAR SUPPORT (82KG) - AN/SPS-73(V) RADAR (KG018)	**February 2000**

APPROPRIATION/BUDGET ACTIVITY	Installing Agent
Other Procurement, Navy	**NSWC PHDiv VA BEACH (AIT)**

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							

INSTALLATIONS DURING FY 00 AND OUT WILL OCCUR BY BATTLEGROUPS PRIOR TO TCD DATES,

SUBJECT TO AVAILABILITY CONFERENCES.

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A	P-1 ITEM NOMENCLATURE/PROJECT UNIT **RADAR SUPPORT (82KG) - AN/SPS-73(V) RADAR (KG018)**	DATE **February 2000**

APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy**								Installing Agent **NSWC PHDiv VA BEACH (AIT)**							
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 2002								FY 2003							
INSTALLATIONS DURING FY 00 AND OUT WILL OCCUR BY BATTLEGROUPS PRIOR TO TCD DATES, SUBJECT TO AVAILABILITY CONFERENCES.															
FY 2004								FY 2005							

BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: February 2000	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-2 Communication & Elect. Eq							P-1 ITEM NOMENCLATURE THERMAL IMAGING SENSOR SYSTEM (TISS) 2043					
Program Element for Code B Items:							Other Related Program Elements					
	Prior Years	ID Code		FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)	N/A	A		**$3.5**	**$1.7**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**N/A**	**$5.2**
SPARES COST (In Millions)	N/A	A		**$0.3**	**$0.3**	**$0.3**	**$0.1**	**$0.1**	**$0.1**	**$0.1**	**N/A**	**$1.3**

Description: The AN/SAY-1 is a lightweight, state-of-the-art imaging/laser system manufactured by Boeing Company, formerly McDonnell Douglas Aircraft, Huntington Beach, California. This system provides 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. The Thermal Imaging Sensor System (TISS), now nomenclatured as the AN/SAY-1, is installed by Tiger Teams prior to ship deployment.

Remaining funds provide for installation of systems previously procured.

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: February 2000
APPROPRIATION/BUDGET ACTIVITY: **OTHER PROCUREMENT, NAVY BA:2 Communications & Electronics Equipment**	P-1 ITEM NOMENCLATURE: **AN/SQQ-89(V) Surface ASW Combat System/213600/5**
Program Element for Code B Items:	Other Related Program Elements

	Prior Years	ID Code		FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)				**$23.2**	**$31.7**	**$14.3**	**$23.3**	**$39.7**	**$58.6**	**$63.5**	**$342.6**	**$596.9**
SPARES COST (In Millions)												**$0.0**

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

The AN/SQQ-89(V)12 upgrade (EC-84) replaces the analog electronics of the SQS-53B Sonar with digital COTS processing and modern displays on CG47 class ships.

The AN/SQQ-89A(V)15 backfit upgrade will capitalize on the AN/SQQ-89(V)15 forward fit investment and will integrate a new tactical towed array sensor (MFTA) to provide a COTS-based USW combat system which will provide the capability for medium-frequency bistatic and multi-static sonar operations.

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

The Fire Control/TDSS EC's lines include the AEGIS Tactical Executive System (ATES) upgrade for DDGs 51 thru 53 and CGs 65 thru 72, upgrade of previously procured TDSS systems to the CADRT configuration, and upgrade of the MK 116 Fire Control System to enable the AN/SQQ-89(V) system to continue to interface with the AEGIS C&D (command and decision) system and provide safe tactical employment of new weapon types including the MK50 and MK 54 digital torpedoes.

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

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

WEAPONS SYSTEM COST ANALYSIS **P-5**	Weapon System		DATE: **February 2000**
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **AN/SQQ-89(V) Surface ASW Combat System/213600/5/C2DB**	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years	FY 1998			FY 1999			FY 2000			FY 2001		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	N863														
DB100	AN/UYQ-25B	A								2	21	42			
DB100	TDSS EC's	A										1,600			500
DB006	INSTALLATION FOR DB100								706			126			835
DB300	AN/SQQ-89(V)12	A							1,777			1,691			970
DB300	AN/UYQ-25B	A					4	21	84	3	21	63			
DB300	System Level Recorder	A					2	285	570	2	285	570			
DB300	TRAFS	A					2	308	616	4	370	1,480			
DB300	TDSS/CADRT	A								6	315	1,890			
DB300	Fire Control/TDSS EC's	A							1,110			3,528			2,824
DB006	INSTALLATION FOR DB300								2,545			4,122			2,867
DB400	AN/UYQ-25B	A					1	21	21						
DB400	TRAFS	A					11	308	3,385	2	370	740			
DB400	TDSS/CADRT	A					4	310	1,240	1	315	315			
DB400	Fire Control/TDSS EC's	A							982			3,653			500
DB006	INSTALLATION FOR DB400								1,478			3,750			1,350
DB600	TDSS/CADRT	A					1	310	310						
DB600	System Level Recorder	A								1	285	285			
DB600	TDSS EC's	A										291			
DB700	TDSS/CADRT	A					1	310	310						
DB700	System Level Recorder	A											1	300	300
DB700	TDSS EC's	A										194			
DB700	SSAAC Upgrade	A							698			221			187
DB830	Production Engineering								3,206			3,206			1,524
DB900	Consulting Services								2,170			1,927			1,249
DB984	Systems Technical Support								1,969			2,042			1,185
			0			**0**			**23,177**			**31,736**			**14,291**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A) | Weapon System | **A. DATE** February 2000

B. APPROPRIATION/BUDGET ACTIVITY
Other Procurement, Navy

C. P-1 ITEM NOMENCLATURE
AN/SQQ-89(V) Surface ASW Combat System

SUBHEAD
C2DB

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FISCAL YEAR (99)										
DB300/AN/UYQ-25B	4	21	NAVSEA	Aug-95	Option FP	Lockheed,Syracuse	Mar 99	Nov 99	Yes	
DB300/System Level Rcdr	2	285	NAVSEA	Aug-95	Option FP	Lockheed,Syracuse	Mar 99	Jan 00	Yes	
DB300/TRAFS	2	308	NUWC, NEWPORT	May-94	Option FP	Northrup Grumman, MD	Feb 99	Jan 00	Yes	
DB400/AN/UYQ-25B	1	21	NAVSEA	Aug-95	Option FP	Lockheed,Syracuse	Mar 99	Nov 99	Yes	
DB400/TRAFS	11	308	NUWC, NEWPORT	May-94	Option FP	Northrup Grumman, MD	Feb 99	Jan 00	Yes	
DB400/TDSS/CADRT	4	310	NAVSEA	Aug-95	FFP	Lockheed,Syracuse	May 99	May 00	Yes	
DB600/TDSS/CADRT	1	310	NAVSEA	Aug-95	FFP	Lockheed,Syracuse	May 99	May 00	Yes	
DB700/TDSS/CADRT	1	310	NAVSEA	Aug-95	FFP	Lockheed,Syracuse	May 99	May 00	Yes	
FISCAL YEAR (00)										
DB100/AN/UYQ-25B	2	21	NAVSEA	Aug-95	Option FP	Lockheed,Syracuse	Feb 00	Jan 01	Yes	
DB300/AN/UYQ-25B	3	21	NAVSEA	Aug-95	Option FP	Lockheed,Syracuse	Feb 00	Jan 01	Yes	
DB300/System Level Rcdr	2	285	NAVSEA	Aug-95	Option FP	Lockheed,Syracuse	Feb 00	Jan 01	Yes	
DB300/TRAFS	4	370	NUWC, NEWPORT	May-94	Option FP	Northrup Grumman, MD	Dec 99	Jan 01	Yes	
DB300/TDSS/CADRT	6	315	NAVSEA	Aug-95	FFP	Lockheed,Syracuse	Nov 99	Jan 01	Yes	
DB400/TRAFS	2	370	NUWC, NEWPORT	May-94	Option FP	Northrup Grumman, MD	Dec 99	Jan 01	Yes	
DB400/TDSS/CADRT	2	315	NAVSEA	Aug-95	FFP	Lockheed,Syracuse	Nov 99	Jan 01	Yes	
DB600/System Level Rcdr	1	285	NAVSEA	Aug-95	Option FP	Lockheed,Syracuse	Feb 00	Jan 01	Yes	
FISCAL YEAR (01)										
DB700/System Level Rcdr	1	300	NAVSEA	Aug-95	FFP	Lockheed, Syracuse	Feb 01	Jan 02	Yes	

D. REMARKS

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: DD 963 Class Ships / DB100 TYPE MODIFICATION: Added Capability MODIFICATION TITLE: AN/SQQ-89 Surf ASW Combat Sys

DESCRIPTION/JUSTIFICATION:

Installation of AN/SQQ-89 ASW Combat System modifications of Analog to Digital components, and upgrades to provide improved torpedo alertment and automated USW contact management on previously installed systems.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1998 & Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																				
PROCUREMENT																				
INSTALLATION KITS																				0.0
INSTALLATION KITS - UNIT COST																				0.0
INSTALLATION KITS NONRECURRING																				0.0
EQUIPMENT	30	276.6																	30	276.6
EQUIPMENT NONRECURRING																				0.0
ENGINEERING CHANGE ORDERS																				0.0
DATA																				0.0
TRAINING EQUIPMENT																				0.0
SUPPORT EQUIPMENT																				0.0
OTHER - ECPs	Var	14.5			Var	1.6	Var	0.5												16.6
OTHER - ENGINEERING SUPPORT		219.4		0.4		0.4		0.2												220.4
OTHER																				0.0
INTERIM CONTRACTOR SUPPORT																				0.0
INSTALL COST	30	96.3		0.7		0.1		0.8		0.0		0.0		0.0		0.0			30	97.9
TOTAL PROCUREMENT		606.8		1.1		2.1		1.5		0.0		0.0		0.0		0.0				611.5

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

MODELS OF SYSTEMS AFFECTED: DD963 Class Ships MODIFICATION TITLE: AN/SQQ-89(V) Surface ASW Combat Sys Components

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: Shipyards & AITs
ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: Various for torpedo alertment upgrade components
CONTRACT DATES: FY 1999: ___ FY 2000: Feb 00 FY 2001: ___
DELIVERY DATE: FY 1999: ___ FY 2000: Jan 01 FY 2001: ___

($ in Millions)

Cost:			Prior Years		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
			Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS			30	96.3																	30	96.3
FY 1998 EQUIPMENT					Var	0.7															0	0.7
FY 1999 EQUIPMENT																					0	0.0
FY 2000 EQUIPMENT							Var	0.1	Var	0.5											0	0.6
FY 2001 EQUIPMENT									Var	0.3											0	0.3
FY 2002 EQUIPMENT																					0	0.0
FY 2003 EQUIPMENT																					0	0.0
FY 2004 EQUIPMENT																					0	0.0
FY 2005 EQUIPMENT																					0	0.0
TO COMPLETE																						

INSTALLATION SCHEDULE:

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

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: CG47 Class Ships / DB300 TYPE MODIFICATION: Added Capability MODIFICATION TITLE: AN/SQQ-89 Surf ASW Combat Sys

DESCRIPTION/JUSTIFICATION:

Installation of AN/SQQ-89 ASW Combat System modifications of Analog to Digital components, and upgrades to provide improved torpedo alertment and automated USW contact management on previously installed systems.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **In Production**

	FY 1998 & Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																				
PROCUREMENT																				
INSTALLATION KITS																				0.0
INSTALLATION KITS - UNIT COST																				0.0
INSTALLATION KITS NONRECURRING																				0.0
EQUIPMENT	11	16.9																	11	16.9
EQUIPMENT NONRECURRING																				0.0
ENGINEERING CHANGE ORDERS																				0.0
DATA																				0.0
TRAINING EQUIPMENT																				0.0
SUPPORT EQUIPMENT																				0.0
OTHER - ECPs	Var	6.2	Var	4.2	Var	9.2	Var	3.8	Var	5.3	Var	4.2			Var	2.4				35.3
OTHER - ENGINEERING SUPPORT		19.3		3.2		2.7		2.0		2.0		2.6		1.0		1.0				33.8
OTHER																				0.0
INTERIM CONTRACTOR SUPPORT																				0.0
INSTALL COST	7	9.8	2	2.5	2	4.1	Var	2.9	Var	0.2	Var	1.2	Var	0.9					11	21.6
TOTAL PROCUREMENT		52.2		9.9		16.0		8.7		7.5		8.0		1.9		3.4				107.6

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

MODELS OF SYSTEMS AFFECTED: CG47 Class Ships MODIFICATION TITLE: AN/SQQ-89(V) Surface ASW Combat Sys

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: Shipyards & AITs
ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: Various for torpedo alertment components
CONTRACT DATES: FY 1999: Feb 99 FY 2000: Feb 00 FY 2001:
DELIVERY DATE: FY 1999: Jan 00 FY 2000: Jan 01 FY 2001:

($ in Millions)

Cost:			Prior Years		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
			Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS			7	7.3	2	1.7	2	1.9													11	10.9
FY 1998 EQUIPMENT			Var	2.5	Var	0.7	Var	1.1	Var	0.2											0	4.5
FY 1999 EQUIPMENT					Var	0.1			Var	0.9											0	1.0
FY 2000 EQUIPMENT							Var	1.1	Var	1.8											0	2.9
FY 2001 EQUIPMENT											Var	0.2									0	0.2
FY 2002 EQUIPMENT													Var	1.2							0	1.2
FY 2003 EQUIPMENT															Var	0.9					0	0.9
FY 2004 EQUIPMENT																					0	0.0
FY 2005 EQUIPMENT																					0	0.0
TO COMPLETE																						

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	7	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	0	11
Out	6	1	0	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	11

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: DDG 51 Class Ships / DB400 TYPE MODIFICATION: Added Capability MODIFICATION TITLE: AN/SQQ-89 Surf ASW Combat Sys

DESCRIPTION/JUSTIFICATION:

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

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **AN/SQQ-89A(V)15 development to be completed in FY01, pre-production unit installed in FY03, DT/OT in FY04**

	FY 1998 & Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																				
PROCUREMENT																				
INSTALLATION KITS																				0.0
INSTALLATION KITS - UNIT COST																				0.0
INSTALLATION KITS NONRECURRING																				0.0
EQUIPMENT											1	12.4	4	47.3	4	46.3	18	208.0	27	314.0
EQUIPMENT NONRECURRING																				0.0
ENGINEERING CHANGE ORDERS																				0.0
DATA																				0.0
TRAINING EQUIPMENT																				0.0
SUPPORT EQUIPMENT																				0.0
OTHER - ECPs	Var	8.3	Var	5.6	Var	4.7	Var	0.5			Var	1.4								20.5
OTHER - ENGINEERING SUPPORT		5.2		3.6		3.9		1.6		2.2		4.0		6.7		6.1		36.0		69.3
OTHER																				0.0
INTERIM CONTRACTOR SUPPORT																				0.0
INSTALL COST		1.5		1.5		3.7		1.4		2.1		1.1		2.7	1	7.7	26	98.6	27	120.3
TOTAL PROCUREMENT		15.0		10.7		12.3		3.5		4.3		18.9		56.7		60.1		342.6		524.1

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

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

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AITs
ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: Various for torpedo alertment upgrade components
CONTRACT DATES: FY 1999: Feb 99 FY 2000: Dec 99 FY 2001:
DELIVERY DATE: FY 1999: Jan 00 FY 2000: Jan 01 FY 2001:

($ in Millions)

Cost:			Prior Years		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
			Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																					0	0.0
FY 1998 EQUIPMENT			Var	1.5	Var	0.7	Var	0.9													0	3.1
FY 1999 EQUIPMENT					Var	0.8	Var	2.8													0	3.6
FY 2000 EQUIPMENT									Var	1.4	Var	1.3									0	2.7
FY 2001 EQUIPMENT											Var	0.8									0	0.8
FY 2002 EQUIPMENT																					0	0.0
FY 2003 EQUIPMENT													Var	1.1	Var	2.7	1	3.8			1	7.6
FY 2004 EQUIPMENT																	Var	3.9	4	15.0	4	18.9
FY 2005 EQUIPMENT																			4	15.0	4	15.0
TO COMPLETE																			18	68.6	18	68.6

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	26	27
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	26	27

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: Trainers & Shore Sites / DB600 & DB700 TYPE MODIFICATION: Added Capability MODIFICATION TITLE: AN/SQQ-89 Surf ASW Combat Sys

DESCRIPTION/JUSTIFICATION:

Installation of AN/SQQ-89 ASW Combat System modifications to match upgrades to current ship systems.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **AN/SQQ-89A(V)15 development to be completed in FY01, pre-production unit installed in FY03, DT/OT in FY04**

	FY 1998 & Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																				
PROCUREMENT																				
INSTALLATION KITS																				0.0
INSTALLATION KITS - UNIT COST																				0.0
INSTALLATION KITS NONRECURRING																				0.0
EQUIPMENT																				0.0
EQUIPMENT NONRECURRING																				0.0
ENGINEERING SUPPORT																				0.0
DATA																				0.0
TRAINING EQUIPMENT			Var	16.7	Var	0.3	Var	0.6					1	10.6					1	28.2
SUPPORT EQUIPMENT			Var	37.8	Var	1.0	Var	0.4	Var	0.5	Var	9.6								49.3
OTHER - ENGINEERING SUPPORT				39.1		0.2		0.2		0.2		1.9		2.2						43.8
OTHER																				0.0
OTHER																				0.0
INTERIM CONTRACTOR SUPPORT																				0.0
INSTALL COST																				0.0
TOTAL PROCUREMENT				93.6		1.5		1.2		0.7		11.5	1	12.8		0.0		0.0	1	121.3

BUDGET ITEM JUSTIFICATION SHEET P-40												DATE: February 2000
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY/BA:2**							P-1 ITEM NOMENCLATURE **SSN ACOUSTICS 214700**					
Program Element for Code B Items: **0604503N**							Other Related Program Elements					
	Prior Years	ID Code		FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY	N/A	B										**0**
COST (In Millions)				**$146.7**	**$216.4**	**$106.6**	**$117.9**	**$229.3**	**$162.8**	**$165.4**		**1145.1**
SPARES COST (In Millions)				**$18.5**	**$17.8**	**$18.0**	**$26.7**	**$26.1**	**$20.8**	**$16.0**		**143.9**

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 SSN's.

All future Acoustic Upgrades of Acoustic-Rapid COTS Insertion (A-RCI) equipment are incorporated into this budget item. 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 program successfully completed a program review in April 1999 approving the FY99 procurement options. The RDT&E program element is PE 0604503N/F0219. TECH EVAL/OPEVAL is scheduled for completion in 4Q/FY00 and Milestone III approval is planned for 1Q/FY01.

SA101 AN/BQQ-5 UPGRADES:

Procures A-RCI TA, SA, SV and TA to SA Upgrade Kits; supports the refurbishment and installation of the upgrades.

SA102 TOWED SYSTEMS:

Towed Array refurbishment material required to support reliability improvements and upgrades to SPALT-9080, TB-16, TB-23, TB-29 Arrays and Towed Array Handling Systems procured through this line. Handling system reliability improvements include: improved cables in the outboard systems, new slip rings, EMI improvements, roller boxes, and additional hydraulic filtering. The Towed Array improvements include: improved internal connectors, tank and pendant cables, and hydrophones. There is also a block upgrade program planned to add heading sensors and a wideband hydrophone to increase performance to the arrays. These upgrades significantly increase the reliability and service life of the arrays resulting in fewer failures and an increase in inventory available for fleet use. This line also procures TB-29 ( ) Arrays and OA-9070 ( ) Handling Systems.

SA103 AN/BSY-1 UPGRADES:

Funding procures A-RCI TA, SA, TA to SA Upgrade Kits and HF Kits. Precision Bottom Mapping Kits procured through this line.

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: February 2000
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY/BA: 2**	P-1 ITEM NOMENCLATURE **SSN ACOUSTICS 214700**

SA201 BLOCK CHANGES:

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

SA202 PRODUCTION/ENGINEERING SUPPORT:

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

SA203 UNIQUE TEST EQUIPMENT:

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

SA301 MSRA/SMF:

Funding procures test equipment and piece part hardware to support the AN/BSY-1 and AN/BQQ-5 Module Screen and Repair Activity (MSRA). The MSRA, equipped with analog and digital automatic test equipment (ATE) and test programs sets (TPS), provides an enhanced capability to screen and repair Standard Electronic Modules (SEM) at the Intermediate Maintenance Activity.

SA302 OP TRAINER UPGRADES:

Funding 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 MSRA. The depot will be equipped with analog and digital ATE and TPS's necessary to screen and repair SEM modules. Also procures COTS Tech Insertion and Refresh Material. Provides for APB Integration.

SA401 INITIAL TRAINING:
Provides for initial training curriculum development, training management materials, exercise control group development, pilot services and services to the Fleet.

SA500 AN/BQG-5 WAA:
Funding supports Wide Apperature Array Shore Spares for both AN/BQG-5 and AN/BSY-2 systems. Funding also supports engineering changes and logistics updates unique to the AN/BQG-5 systems.

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: February 2000
APPROPRIATION/BUDGET ACTIVITY: OTHER PROCUREMENT, NAVY/BA: 2	P-1 ITEM NOMENCLATURE: SSN ACOUSTICS 214700

SA501 AN/BSY-2:
Funding supports engineering changes and upgrades, EOL parts program and Consolidated Shore Facility (CSF) Upgrades in support of the AN/BSY-2 program. This funding also supports procurement, installation and test of B2-CI Phase 1 and 2 Kits, as well as the Integration and test of B2-CI Phase 1 hardware which replaces obsolete Combat System Display Consoles in the AN/BSY-2 system with AN/UYQ-70 Common Display Console.

SA502 COMBAT SYSTEMS COMMONALITY:
Funding supports combat systems commonality efforts and incorporates increased funding provided by PBD 752. Funds provided in FY 00 for procurement and installation of improved processor cards and disc drives for Signal Data Convertor Stores which supports the fleet release of SFMPL 6.1 which provides complete range dependent search planning capability.

SA5IN EQUIPMENT INSTALLATION:
Funds actual hardware installation during shipyard and pierside availabilities.

SA900 CONSULTING SERVICES:
Includes specification validation, contract deliverable monitoring, prime contractor monitoring for cost, schedule and performance slips, ILS planning and coordination of GFI. Additional support will assess the impact of Diminishing Manufacturing Sources/Material Shortages (DMSMS) as Original Equipment Manufacturers discontinue their production lines. Life-of-type procurements will be accomplished where necessary based on these analyses. Also, consulting services will review and support analysis associated with the procurement of ATE and TPS's for the AN/BSY-1 and AN/BQQ-5 Organic Repair Depot and MSRA.

NOTE: FY 99 PROGRAM WAS INCREASED BY $4.0M FOR BTR ACTIONS THAT SUPPORTED EFFORTS WITHIN THIS BUDGET LINE ITEM.

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System		DATE: February 2000
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy** **BA-2: COMMUNICATIONS AND ELECTRONICS EQUIPMENT**	ID Code **B**	P-1 ITEM NOMENCLATURE/SUBHEAD **SSN ACOUSTICS/H2SA**	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years				FY 1999			FY 2000			FY 2001		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	SPONSOR: N87														
SA101	**AN/BQQ-5 UPGRADES**								**$57,957**			**$32,085**			**$8,846**
	INSTALL SUPPORT	A							590			551			925
	REFURBISHMENT MATERIAL	A							3,497			4,550			1,060
	A-RCI SA KITS	B					1	8,281	8,281						
	A-RCI TA RCI KITS	B					17	2,682	45,589						
	A-RCI TA TO SA UPGRADES KITS	B								4	6,746	26,984	1	6,861	6,861
SA5IN	**INSTALLATION**								**2,266**			**13,850**			**5,304**
SA102	**TOWED SYSTEMS**								**$24,012**			**$32,124**			**$31,872**
	TB-23 ARRAY ECP-320	A					11	337	3,707						
	TB-23 ARRAY ECP-320	A													
	TOWED ARRAY REFURBISHMENT & UPGRADE	A							6,489			17,989			10,328
	TOWED ARRAY HANDLING SYSTEM REFURBS	A							6,690			5,789			6,714
	TB-29 ( )	B								3	2,127	6,381	5	2,163	10,815
	OA-9070 ( ) ENGINEERING CHANGE	A							5,203						
	OA-9070 ( ) UPGRADES	B					3	641	1,923	3	655	1,965	6	669	4,015
SA5IN	**INSTALLATION**								**0**			**2,868**			**5,805**
SA103	**AN/BSY-1 UPGRADES**								**$18,468**			**$82,900**			**$7,998**
	A-RCI TA RCI KITS	B					2	2,791	5,582						
	A-RCI SA KITS	B					1	7,346	7,346	5	7,471	37,355			
	A-RCI HF KITS	B					2	2,770	5,540	9	2,817	25,353	1	2,865	2,865
	A-RCI TA TO SA UPGRADES KITS	B								4	5,048	20,192	1	5,133	5,133
SA5IN	**INSTALLATION**								**6,966**			**4,775**			**14,400**

WEAPONS SYSTEM COST ANALYSIS **P-5**	Weapon System		DATE: **February 2000**
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy** **BA-2: COMMUNICATIONS AND ELECTRONICS EQUIPMENT**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **SSN ACOUSTICS/H2SA**	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years				FY 1999			FY 2000			FY 2001		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
SA201	**BLOCK CHANGES**								**$3,354**			**$4,678**			**$3,149**
	AN/BQQ-5/AN/BSY-1								1,170			854			1,350
	SSEP											2,000			
	DESK TOP CALCULATOR								118			200			200
	TOWED ARRAYS								2,066			1,624			1,599
SA202	**PROD/ENG'G SUPPT**								**$4,683**			**$6,037**			**$4,509**
	AN/BQQ-5/AN/BSY-1								1,799			2,861			1,462
	TOWED ARRAYS/HANDLING EQUIP								2,884			3,176			3,047
SA203	**UNIQUE TEST EQUIPMENT**								**$1,329**			**$2,906**			**$2,884**
SA301	**MSRA/SMF**								**$800**			**$1,037**			**$1,041**
	MODULE SCREEN & REPAIR ACTIVITY								0			0			0
	SOFTWARE MAINTENANCE FACILITY								800			1,037			1,041
SA302	**OP TRAINER UPGRADES**								**$1,059**			**$1,000**			**$1,004**
	ENGINEERING CHANGES								1,059			1,000			1,004
SA303	**ORGANIC REP DEPOT/DMSMS**								**$4,188**			**$10,624**			**$3,494**
	ORGANIC REPAIR DEPOT								1,325			635			368
	COTS TECH INSERTION								2,863			4,812			2,073
	COTS TECH REFRESH											5,177			1,053
SA401	**INITIAL TRAINING**								**$2,687**			**$3,007**			**$939**
	ACOUSTICS								2,465			2,778			703
	TOWED ARRAY/HANDLING EQUIPMENT								222			229			236

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System		DATE: February 2000
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy** **BA-2: COMMUNICATIONS AND ELECTRONICS EQUIPMENT**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **SSN ACOUSTICS/H2SA**	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years				FY 1999			FY 2000			FY 2001		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
SA500	**AN/BQG-5 WAA**								**$2,989**			**$101**			**$2,727**
	ENGINEERING CHANGES								364			101			103
	WAA OUTBD SPARES								2,625						2,624
	ENGINEERING SUPPORT														
SA501	**AN/BSY-2**								**$8,867**			**$5,627**			**$9,501**
	EOL PARTS								1,634			1,315			1,532
	ENGINEERING CHANGE/UPGRADES								3,318			1,273			1,880
	INTEGRATION, INSTALLATION AND TESTING								3,915			3,039			1,826
	B2-CI PHASE 1 KIT SEAWOLF												1	4,263	4,263
SA51N	**EQUIPMENT INSTALLATION**											**100**			**200**
SA51N	**EQUIPMENT INSTALLATION ***								**4,000**			**5,784**			**0**
SA900	**CONSULTING SERVICES**								**3,073**			**2,901**			**2,974**
SA502	**COMBAT SYSTEMS COMMONALITY**								**$0**			**$3,975**			**$0**
	SDCS									63	63	3,975			
	*INSTALLATION OF PRIOR YEAR EQUIPMENT														
			0						**146,698**			**216,379**			**106,647**

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

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CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 2000
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-2: COMMUNICATIONS AND ELECTRONICS EQUIPMENT	C. P-1 ITEM NOMENCLATURE SSN ACOUSTICS/H2SA	SUBHEAD

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FY 1999										
SA101 - A-RCI TA KITS	17	$2,682	NAVSEA		SS/FP/Opt	Lockheed Martin, VA	3/99	3/00	YES	
SA101 - A-RCI SA KITS	1	$8,281	NAVSEA		SS/FP/Opt	Lockheed Martin, VA	3/99	3/00	YES	
SA102 - TB-23 ECP-320	11	$337	NAVSEA		SS/FP/Opt	ALLIED SIGNAL, CA	3/99	3/00	YES	
SA102 - OA-9070 ( ) Upgrade kits	3	$641	NUWC, NEWPORT		C/FP/Opt	NUWC, NEWPORT	3/99	3/00	YES	
SA103 - A-RCI HF KITS	2	$2,770	NAVSEA		SS/FP/Opt	Lockheed Martin, VA	3/99	3/00	YES	
SA103 - A-RCI SA KITS	1	$7,346	NAVSEA		SS/FP/Opt	Lockheed Martin, VA	3/99	3/00	YES	
SA103 - A-RCI TA KITS	2	$2,791	NAVSEA		SS/FP/Opt	Lockheed Martin, VA	3/99	3/00	YES	
FY 2000										
SA101 - A-RCI TA - SA KITS	4	$6,746	NAVSEA		SS/FP/Opt	Lockheed Martin, VA	3/00	3/01	YES	
SA102 - TB-29 ( ) ARRAYS	3	$2,127	NAVSEA		C/IF/Opt	Lockheed Martin, MD	7/00	7/02	YES	
SA102 - OA-9070 ( ) Upgrade kits	3	$655	NAVSEA		C/FFP/Opt	Lockheed Martin, MD	2/00	8/00	YES	
SA103 - A-RCI SA KITS	5	$7,471	NAVSEA		SS/FP/Opt	Lockheed Martin, VA	3/00	3/01	YES	
SA103 - A-RCI HF KITS	9	$2,817	NAVSEA		SS/FP/Opt	Lockheed Martin, VA	3/00	3/01	YES	
SA103 - A-RCI TA-SA KITS	4	$5,048	NAVSEA		SS/FP/Opt	Lockheed Martin, VA	3/00	3/01	YES	
SA502 - SDCS	63	$63	NUWC,NEWPORT		C/FP/Opt	NUWC,NEWPORT	3/00	9/00	YES	

D. REMARKS

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 2000

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Other Procurement, Navy BA-2: COMMUNICATIONS AND ELECTRONICS EQUIPMENT	SSN ACOUSTICS/H2SA	

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FY 2001										
SA101 - A-RCI TA - SA KITS	1	$6,861	NAVSEA		SS/FP/Opt	Lockheed Martin, VA	2/01	2/02	YES	
SA102 - TB-29 ( ) ARRAYS	5	$2,163	NAVSEA		C/IF/Opt	Lockheed Martin, MD	8/01	5/03	YES	
SA102 - OA-9070 ( ) Upgrade kits	6	$669	NAVSEA		C/FFP/Opt	Lockheed Martin, MD	2/01	8/01	YES	
SA103 - A-RCI TA - SA KITS	1	$5,133	NAVSEA		SS/FP/Opt	Lockheed Martin, VA	2/01	2/02	YES	
SA103 - A-RCI HF KITS	1	$2,865	NAVSEA		SS/FP/Opt	Lockheed Martin, VA	2/01	2/02	YES	
SA501 - B2CI PHASE 1 KIT	1	$4,263	NAVSEA		SS/AF/Opt	Lockheed Martin, MN	2/01	1/02	YES	

D. REMARKS

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AN/BQQ-5 A-RCI TA/SV KITS TYPE MODIFICATION: SHIP ALT MODIFICATION TITLE: SSN ACOUSTICS

DESCRIPTION/JUSTIFICATION:

PROVIDES TB-29 ARRAY CAPABILITY AND IMPROVED DETECTION

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1998 & Prior				FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.000
PROCUREMENT																						
INSTALLATION KITS	4	7.590			16	42.912															20	50.502
INSTALLATION KITS - UNIT COST		1.898				2.682																
INSTALLATION KITS NONRECURRING																						0.000
EQUIPMENT																						0.000
EQUIPMENT NONRECURRING																						0.000
ENGINEERING CHANGE ORDERS																						0.000
DATA																						0.000
TRAINING EQUIPMENT					1	2.682																2.682
SUPPORT EQUIPMENT																						0.000
OTHER																						0.000
OTHER																						0.000
OTHER																						0.000
INTERIM CONTRACTOR SUPPORT																						0.000
INSTALL COST	1	0.644			3	2.266	16	10.252														13.162
TOTAL PROCUREMENT		10.132				47.860		10.252														68.244

FY97 AND PRIOR INCLUDES 1 SPATIAL VERNIER KIT AND 1 TA KIT

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

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

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **SHIP ALT**
ADMINISTRATIVE LEADTIME: 24 MOS PRODUCTION LEADTIME: 12 Months
CONTRACT DATES: FY 1999: 3/99 FY 2000: N/A FY 2001: N/A
DELIVERY DATE: FY 1999: 3/00 FY 2000: FY 2001:

($ in Millions)

Cost:	Prior Years				FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS	1	0.644			1	0.198															1	0.842
FY 1998 EQUIPMENT					2	1.269															2	1.269
FY 1999 EQUIPMENT							16	10.252													16	10.252
FY 2000 EQUIPMENT																					0	0.0
FY 2001 EQUIPMENT																					0	0.0
FY 2002 EQUIPMENT																					0	0.0
FY 2003 EQUIPMENT																					0	0.0
FY 2004 EQUIPMENT																					0	0.0
FY 2005 EQUIPMENT																					0	0.0
TO COMPLETE																						

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	1	0	1	2	0	0	5	5	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Out	1	0	1	2	0	0	5	5	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AN/BQQ-5 TA to SA KITS TYPE MODIFICATION: SHIP ALT MODIFICATION TITLE: SSN ACOUSTICS

DESCRIPTION/JUSTIFICATION:

PROVIDES SPERICAL ARRAY PROCESSING CAPABILITY.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1998 & Prior				FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																						0.000
PROCUREMENT																						
INSTALLATION KITS	1	4.319					4	26.984	1	6.861			1	7.096	2	14.433	1	7.339			10	67.032
INSTALLATION KITS - UNIT COST		4.319						6.746		6.861				7.096		7.217		7.339				
INSTALLATION KITS NONRECURRING																						0.000
EQUIPMENT																						0.000
EQUIPMENT NONRECURRING																						0.000
ENGINEERING CHANGE ORDERS																						0.000
DATA																						0.000
TRAINING EQUIPMENT																						0.000
SUPPORT EQUIPMENT																						0.000
OTHER																						0.000
OTHER																						0.000
OTHER																						0.000
INTERIM CONTRACTOR SUPPORT																						0.000
INSTALL COST							1	1.327	4	5.304	1	1.287			1	1.620	2	3.204	1	1.493		14.235
TOTAL PROCUREMENT		4.319		0.000				28.311		12.165		1.287		7.096		16.053		10.543				79.774

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

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

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: SHIP ALT
ADMINISTRATIVE LEADTIME: PRODUCTION LEADTIME: 12 Months
CONTRACT DATES: FY 1999: N/A FY 2000: 3/00 FY 2001: 3/01
DELIVERY DATE: FY 1999: FY 2000: 3/01 FY 2001: 3/02

($ in Millions)

Cost:	Prior Years				FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																					0	0.000
FY 1998 EQUIPMENT							1	1.327													1	1.327
FY 1999 EQUIPMENT																					0	0.000
FY 2000 EQUIPMENT									4	5.304											4	5.304
FY 2001 EQUIPMENT											1	1.287									1	1.287
FY 2002 EQUIPMENT																					0	0.000
FY 2003 EQUIPMENT															1	1.620					1	1.620
FY 2004 EQUIPMENT																	2	3.204			2	3.204
FY 2005 EQUIPMENT																			1	1.493	1	1.493
TO COMPLETE																						

INSTALLATION SCHEDULE:

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

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AN/BQQ-5 SA KITS TYPE MODIFICATION: SHIP ALT MODIFICATION TITLE: SSN ACOUSTICS

DESCRIPTION/JUSTIFICATION:

PROVIDES SPHERICAL ARRAY PROCESSING CAPABILITY.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1998 & Prior				FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																						
PROCUREMENT																						
INSTALLATION KITS					1	8.281							2	19.495							3	27.776
INSTALLATION KITS - UNIT COST						8.281								9.748								
INSTALLATION KITS NONRECURRING																						
EQUIPMENT																						
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE ORDERS																						
DATA																						
TRAINING EQUIPMENT																						
SUPPORT EQUIPMENT																						
OTHER																						
OTHER																						
OTHER																						
INTERIM CONTRACTOR SUPPORT																						
INSTALL COST							1	2.271							2	4.932						7.203
TOTAL PROCUREMENT						8.281	1.0	2.271						19.495		4.932		0.000				34.979

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

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

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **SHIP ALT**
ADMINISTRATIVE LEADTIME 24 MOS PRODUCTION LEADTIME: 12 Months
CONTRACT DATES: FY 1999: 3/99 FY 2000: N/A FY 2001: N/A
DELIVERY DATE: FY 1999: 3/00 FY 2000: FY 2001:

($ in Millions)

Cost:	Prior Years				FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																					0	0.000
FY 1998 EQUIPMENT																					0	0.000
FY 1999 EQUIPMENT							1	2.271													1	2.271
FY 2000 EQUIPMENT																					0	0.000
FY 2001 EQUIPMENT																					0	0.000
FY 2002 EQUIPMENT																					0	0.000
FY 2003 EQUIPMENT															2	4.932					2	4.932
FY 2004 EQUIPMENT																					0	0.000
FY 2005 EQUIPMENT																					0	0.000
TO COMPLETE																						

INSTALLATION SCHEDULE:

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

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AN/BSY-1 TA KITS TYPE MODIFICATION: SHIP ALT MODIFICATION TITLE: SSN ACOUSTICS

DESCRIPTION/JUSTIFICATION:

PROVIDES TB-29 ARRAY PROCESSING CAPABILITY AND IMPROVED DETECTION.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1998 & Prior				FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																						
PROCUREMENT																						
INSTALLATION KITS	10	26.912			2	5.582															12	32.494
INSTALLATION KITS - UNIT COST		2.691				2.791																
INSTALLATION KITS NONRECURRING																						
EQUIPMENT																						
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE ORDERS																						
DATA																						
TRAINING EQUIPMENT																						
SUPPORT EQUIPMENT																						
OTHER																						
OTHER																						
OTHER																						
INTERIM CONTRACTOR SUPPORT																						
INSTALL COST	1	0.775			9	6.966	2	1.568														9.309
TOTAL PROCUREMENT		27.687				12.548		1.568														41.803

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

MODELS OF SYSTEMS AFFECTED: AN/BSY-1 TA KITS MODIFICATION TITLE: SSN ACOUSTICS

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **SHIP ALT**
ADMINISTRATIVE LEADTIME: 24 MOS PRODUCTION LEADTIME: 12 Months
CONTRACT DATES: FY 1999: 3/99 FY 2000: N/A FY 2001: N/A
DELIVERY DATE: FY 1999: 3/00 FY 2000: FY 2001:

($ in Millions)

Cost:	Prior Years				FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS	1	0.775																			0	0.000
FY 1998 EQUIPMENT					9	6.966															9	6.966
FY 1999 EQUIPMENT							2	1.568													2	1.568
FY 2000 EQUIPMENT																						
FY 2001 EQUIPMENT																						
FY 2002 EQUIPMENT																						
FY 2003 EQUIPMENT																						
FY 2004 EQUIPMENT																						
FY 2005 EQUIPMENT																						
TO COMPLETE																						

INSTALLATION SCHEDULE:

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

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AN/BSY-1 TA-SA KITS TYPE MODIFICATION: SHIP ALT MODIFICATION TITLE:

DESCRIPTION/JUSTIFICATION:

PROVIDES SPHERICAL ARRAY PROCESSING - TA to SA KITS AND HIGH FREQUENCY KITS ARE INSTALLED AT THE SAME TIME TO PROVIDE PREVIOUSLY UPGRADED TA KITS WITH PHASE IV HIGH FREQUENCY CAPABILITY.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1998 & Prior				FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	
PROCUREMENT																						
INSTALLATION KITS/TA-SA KITS	1	3.495			0		4	20.192	1	5.133	1	5.221	5	26.547							12	60.588
INSTALLATION KITS - UNIT COST		3.495						5.048		5.133		5.221		5.309								
INSTALLATION KITS/ HF UPGRADE					1	2.770	4	11.268	1	2.865	1	2.913	5	14.815								34.631
INSTALLATION KITS - UNIT COST						2.770		2.817		2.865		2.913		2.963								14.328
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE ORDERS																						
DATA																						
TRAINING EQUIPMENT																						
SUPPORT EQUIPMENT																						
OTHER																						
OTHER																						
OTHER																						
INTERIM CONTRACTOR SUPPORT																						
INSTALL COST							1	1.310	4	4.993	1	1.325	1	1.411	5	6.766						15.805
TOTAL PROCUREMENT		3.495		0.000		2.770		24.319		12.991		9.459		30.921		6.766						90.721

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

MODELS OF SYSTEMS AFFECTED: AN/BSY-1 TA-SA MODIFICATION TITLE: SSN ACOUSTICS

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: SHIP ALT
ADMINISTRATIVE LEADTIME: 24 MOS PRODUCTION LEADTIME: 12 Months
CONTRACT DATES: FY 1999: 6/99 FY 2000: 3/00 FY 2001: 3/01
DELIVERY DATE: FY 1999: 6/00 FY 2000: 3/01 FY 2001: 3/02

($ in Millions)

Cost:	Prior Years				FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																					0	
FY 1998 EQUIPMENT																					0	
FY 1999 EQUIPMENT							1	1.310													1	1.310
FY 2000 EQUIPMENT									4	4.993											4	4.993
FY 2001 EQUIPMENT											1	1.325									1	1.325
FY 2002 EQUIPMENT													1	1.411							1	1.411
FY 2003 EQUIPMENT															5	6.766					5	6.766
FY 2004 EQUIPMENT																						
FY 2005 EQUIPMENT																						
TO COMPLETE																						

TA to SA KIT PROCURED IN FY98 INSTALLED WITH THE HF UPGRADE KIT IN FY00.

INSTALLATION SCHEDULE:

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

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AN/BSY-1 SA KITS & HF UPGRADES TYPE MODIFICATION: SHIP ALT MODIFICATION TITLE: SSN ACOUSTICS

DESCRIPTION/JUSTIFICATION:

PROVIDES SPHERICAL ARRAY PROCESSING CAPABILITY - SPHERICAL ARRAY KITS AND HF UPGRADE KITS ARE INSTALLED AT THE SAME TIME TO PROVIDE BSY-1 SHIPS PHASE IV CAPABILITY.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1998 & Prior				FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																						
PROCUREMENT																						
INSTALLATION KITS/ SA KITS					1	7.346	5	37.555			2	15.454	3	23.575							11	83.930
INSTALLATION KITS - UNIT COST						7.346		7.511				7.727		7.858								
INSTALLATION KITS/ HF UPGRADE KITS					1	2.770	5	14.085			2	5.826	3	8.889							11	31.570
INSTALLATION KITS - UNIT COST						2.770		2.817				2.913		2.963								11.463
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE ORDERS																						
DATA																						
TRAINING EQUIPMENT																						
SUPPORT EQUIPMENT																						
OTHER																						
OTHER																						
OTHER																						
INTERIM CONTRACTOR SUPPORT																						
INSTALL COST							1	1.897	5	9.407			2	3.891	3	5.937						21.132
TOTAL PROCUREMENT						10.116		42.269		9.407		18.367		30.429		5.937						116.525

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

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

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: SHIP ALT
ADMINISTRATIVE LEADTIME: 24 MOS PRODUCTION LEADTIME: 12 Months
CONTRACT DATES: FY 1999: 6/99 FY 2000: 3/00 FY 2001: N/A
DELIVERY DATE: FY 1999: 6/00 FY 2000: 3/01 FY 2001:

($ in Millions)

Cost:	Prior Years				FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																						
FY 1998 EQUIPMENT																						
FY 1999 EQUIPMENT							1	1.897													1	1.897
FY 2000 EQUIPMENT									5	9.407											5	9.407
FY 2001 EQUIPMENT																					0	0.000
FY 2002 EQUIPMENT													2	3.891							2	3.891
FY 2003 EQUIPMENT															3	5.937					3	5.937
FY 2004 EQUIPMENT																						
FY 2005 EQUIPMENT																						
TO COMPLETE																						

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999					FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	1	0	1	2	2	0	0	0	0	0	1	1	0	0	1	1	1	0	0	0	0	0	11
Out	0	0	0	0	0	0	0	0	0	1	0	1	2	2	0	0	0	0	0	1	1	0	0	1	1	1	0	0	0	0	0	11

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AN/BSY-1 TYPE MODIFICATION: SHIP ALT MODIFICATION TITLE: SSN ACOUSTICS

DESCRIPTION/JUSTIFICATION:

PROVIDES AN/BSY-1 CLASS SUBMARINES UNDER ICE AND BOTTOM MAPPING CAPABILITY.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1998 & Prior				FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																						
PROCUREMENT																						
INSTALLATION KITS											6	1.104	7	1.316	10	1.912	4	0.778			27	5.110
INSTALLATION KITS - UNIT COST												0.184		0.188		0.191		0.195				
INSTALLATION KITS NONRECURRING																						
EQUIPMENT																						
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE ORDERS																						
DATA																						
TRAINING EQUIPMENT																						
SUPPORT EQUIPMENT																						
OTHER																						
OTHER																						
OTHER																						
INTERIM CONTRACTOR SUPPORT																						
INSTALL COST											6	0.324	7	0.385	10	0.560	4	0.224				1.493
TOTAL PROCUREMENT				0.0		0.0						1.428		1.701		2.472		1.002				6.603

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

MODELS OF SYSTEMS AFFECTED: AN/BSY-1 MODIFICATION TITLE: PRECISSION BOTTOM MAPPING

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: SHIP ALT
ADMINISTRATIVE LEADTIME: 24 MOS PRODUCTION LEADTIME: 6 Months
CONTRACT DATES: FY 1999: N/A FY 2000: N/A FY 2001: N/A
DELIVERY DATE: FY 1999: FY 2000: FY 2001:

($ in Millions)

Cost:	Prior Years				FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																						
FY 1998 EQUIPMENT																						
FY 1999 EQUIPMENT																						
FY 2000 EQUIPMENT																						
FY 2001 EQUIPMENT																						
FY 2002 EQUIPMENT											6	0.324									6	0.324
FY 2003 EQUIPMENT													7	0.385							7	0.385
FY 2004 EQUIPMENT															10	0.560					10	0.560
FY 2005 EQUIPMENT																	4	0.224			4	0.224
TO COMPLETE																						

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999					FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	0	2	2	3	2	2	3	3	2	2	0	0	0	27
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	0	2	2	3	2	2	3	3	2	2	0	0	0	27

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: OA-9070 ( ) UPGRADE TYPE MODIFICATION: SHIP ALT MODIFICATION TITLE: SSN ACOUSTICS

DESCRIPTION/JUSTIFICATION:

PROVIDES NECESSARY TECHNICAL CONVERSION TO ACCOMMODATE THE TB-29 (A) ARRAYS.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1998 & Prior				FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																						
PROCUREMENT																						
INSTALLATION KITS					3	1.923	3	1.965	5	3.345	8	5.472	11	7.689	7	5.040					37	25.434
INSTALLATION KITS - UNIT COST						0.641		0.655		0.669		0.684		0.699		0.720						
INSTALLATION KITS NONRECURRING																						
EQUIPMENT																						
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE ORDERS																						
DATA																						
TRAINING EQUIPMENT									1	0.669											1	0.669
SUPPORT EQUIPMENT																						
OTHER																						
OTHER																						
OTHER																						
INTERIM CONTRACTOR SUPPORT																						
INSTALL COST							2	2.868	4	5.805	5	7.356	8	11.238	11	15.219	7	7.677				50.163
TOTAL PROCUREMENT				0.0		1.923		4.833		9.819		12.828		18.927		20.259		7.677				76.266

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

MODELS OF SYSTEMS AFFECTED: OA-9070 ( ) UPGRADE MODIFICATION TITLE: SSN ACOUSTICS

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: SHIP ALT
ADMINISTRATIVE LEADTIME: 24 MOS PRODUCTION LEADTIME: 8-12 Months
CONTRACT DATES: FY 1999: 3/99 FY 2000: 4/00 FY 2001: 4/01
DELIVERY DATE: FY 1999: 3/00 FY 2000: 10/00 FY 2001: 10/01

($ in Millions)

Cost:	Prior Years		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																						
FY 1998 EQUIPMENT																						
FY 1999 EQUIPMENT							2	2.868	1	1.477											3	4.345
FY 2000 EQUIPMENT									3	4.328											3	4.328
FY 2001 EQUIPMENT											5	7.356									5	7.356
FY 2002 EQUIPMENT													8	11.238							8	11.238
FY 2003 EQUIPMENT															11	15.219					11	15.219
FY 2004 EQUIPMENT																	7	7.677			7	7.677
FY 2005 EQUIPMENT																					0	0.000
TO COMPLETE																						

Unit cost decreases in FY04-FY05 due to Pearl Harbor IMF/NSY adjustments.
FY99 Procurement provides one system for additional system checkout testing.

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999					FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	1	1	0	1	1	1	1	1	2	1	1	2	2	2	2	3	3	3	2	2	2	2	1	0	37
Out	0	0	0	0	0	0	0	1	1	0	1	1	1	1	1	2	1	1	2	2	2	2	3	3	3	2	2	2	2	1	0	37

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: B2-CI PHASE 1 KITS TYPE MODIFICATION: MODIFICATION TITLE:

DESCRIPTION/JUSTIFICATION:

REPLACES AGING AND OBSOLETE COMBAT SYSTEM DISPLAY CONSOLES WITH THE AN/UYQ-70 COMMON DISPLAY.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1998 & Prior				FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																						
PROCUREMENT																						
INSTALLATION KITS									1	4.263	1	4.338					1	4.626			3	13.227
INSTALLATION KITS - UNIT COST										4.263		4.338						4.626				
INSTALLATION KITS NONRECURRING																						
EQUIPMENT																						
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE ORDERS																						
DATA																						
TRAINING EQUIPMENT																	1	4.626			1	4.626
SUPPORT EQUIPMENT																						
OTHER																						
OTHER																						
OTHER																						
INTERIM CONTRACTOR SUPPORT																						
INSTALL COST							AP	0.100	AP	0.100	1	0.250	1	0.250					1	0.250		0.950
TOTAL PROCUREMENT								0.100		4.363		4.588		0.250				9.252		0.250		18.803

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

MODELS OF SYSTEMS AFFECTED: B2-CI PHASE 1 MODIFICATION TITLE: SSN ACOUSTICS

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: SHIPYARD
ADMINISTRATIVE LEADTIME: 3-4 MOS PRODUCTION LEADTIME: 9-12 Months
CONTRACT DATES: FY 1999: N/A FY 2000: N/A FY 2001: 02/01
DELIVERY DATE: FY 1999: N/A FY 2000: N/A FY 2001: 01/02

($ in Millions)

Cost:	Prior Years				FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																						
FY 1998 EQUIPMENT																						
FY 1999 EQUIPMENT																						
FY 2000 EQUIPMENT																						
FY 2001 EQUIPMENT											1	0.250									1	0.250
FY 2002 EQUIPMENT													1	0.250							1	0.250
FY 2003 EQUIPMENT																						
FY 2004 EQUIPMENT																						
FY 2005 EQUIPMENT																			1	0.250	1	0.250
TO COMPLETE																						

INSTALLATION SCHEDULE:

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

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: B2-CI PHASE II TYPE MODIFICATION: SHIP ALT MODIFICATION TITLE: SSN ACOUSTICS

DESCRIPTION/JUSTIFICATION:

IMPLEMENTS A-RCI PHASE II FUNCTIONALITY IN THE AN/BSY-2 SUBMARINE COMBAT SYSTEMS AND SEAWOLF CLASS PLATFORMS. ACHIEVES ENHANCED TB-29 TOWED ARRAY DETECTION CAPABILITY WITH SPATIAL VERNIER AND FULL SPECTRUM PROCESSING. MIGRATES THE AN/BSY-2 COMBAT SYSTEM AND SEAWOLF CLASS PLATFORMS TO SUBMARINE COMMONALITY THROUGH THE INTEGRATED DEVELOPMENT PLAN. REPLACES THE ENHANCED MODULAR SIGNAL PROCESSOR WITH THE COTS BASED MULTI-PURPOSE PROCESSORS.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1998 & Prior				FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																						
PROCUREMENT																						
INSTALLATION KITS/ PHASE II KITS													1	3.427	1	3.504	1	3.584			3	10.515
INSTALLATION KITS - UNIT COST														3.427		3.504		3.584				
INSTALLATION KITS NONRECURRING																						
EQUIPMENT																						
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE ORDERS																						
DATA																						
TRAINING EQUIPMENT/ PHASE II KIT																	1	3.584				3.584
SUPPORT EQUIPMENT																						
OTHER																						
OTHER																						
OTHER																						
INTERIM CONTRACTOR SUPPORT																						
INSTALL COST									AP	0.100	AP	0.970	AP	1.234	1	0.496	1	0.494	1	0.500		3.794
TOTAL PROCUREMENT				0.0		0.0				0.100		0.970		4.661		4.000		7.662		0.500		17.893

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

MODELS OF SYSTEMS AFFECTED: B2-CI PHASE II MODIFICATION TITLE: SSN ACOUSTICS

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: SHIPYARD
ADMINISTRATIVE LEADTIME: 3-4 MOS PRODUCTION LEADTIME: 12-15 Months
CONTRACT DATES: FY 1999: N/A FY 2000: N/A FY 2001: N/A
DELIVERY DATE: FY 1999: FY 2000: FY 2001:

($ in Millions)

Cost:	Prior Years				FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																						
FY 1998 EQUIPMENT																						
FY 1999 EQUIPMENT																						
FY 2000 EQUIPMENT																						
FY 2001 EQUIPMENT																						
FY 2002 EQUIPMENT																						
FY 2003 EQUIPMENT															1	0.496					1	0.496
FY 2004 EQUIPMENT																	1	0.494			1	0.494
FY 2005 EQUIPMENT																			1	0.500	1	0.500
TO COMPLETE																						

INSTALLATION SCHEDULE:

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

BUDGET ITEM JUSTIFICATION SHEET **P-40**										DATE: **February 2000**	
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY BA-2 COMMUNICATIONS & ELECTRONIC EQUIPMENT**						P-1 ITEM NOMENCLATURE **Undersea Warfare Support Equipment** BLI: 217600,217605,217606 C2VM					
Program Element for Code B Items:						Other Related Program Elements					
	Prior Years	ID Code	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY											
COST (In Millions)				**$11.5**	**$0.8**	**$4.3**	**$3.8**	**$7.0**	**$6.5**	**Cont.**	**$33.9**
SPARES COST (In Millions)											**$0.0**

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

N86

Surface Ship Torpedo Defense

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

Surface Sonar Windows and Domes

AN/SQS-26/53 Sonar Dome Rubber Windows are installed in CG47, DDG51, and DDG993 class ships. This program provides emergency replacement wire-reinforced, pressurized rubber acoustic windows which experience failure due to corrosion, fatigue, and impact in the splice region. The SDRW significantly improves the surface ship sonar performance by reducing flow-induced self-noise, and by providing increased source level receiving and sensitivity resulting from reduced attenuation. AN/SQS-56 SRD provides emergency replacement Sonar Rubber Domes for FFG-7 Class AN/SQS-56 active/passive duct sonar systems. Production Engineering support provides technical evaluation, failure analyses, implementation of the inwater one-side backscatter xray program, manufacturer GFE refurbishments, engineering and field service. An FY00 Congressional Plus-Up was authorized for continued development and implementation of composite bow dome technology, including the fabrication of permanent tooling.

BUDGET ITEM JUSTIFICATION SHEET P-40		DATE: **February 2000**
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY BA-2 COMMUNICATIONS & ELECTRONIC EQUIPMENT**	P-1 ITEM NOMENCLATURE **Undersea Warfare Support Equipment** BLI: 217600,217605,217606 C2VM	
Program Element for Code B Items:	Other Related Program Elements	

N87

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

N88

Aircraft Carrier Tactical Support Center
The CV-TSC of the Carrier Combat Direction System (CDS) is the focal point of supply for force ASW/SUW functions. The system supports the multi-mission, tactical employment of embarked airborne weapon systems (S-3B and SH-60 Helicopters) by providing mission planning, in-flight support and post mission assessment/intelligence collection. CV-TSC provides real time and post mission analysis of relayed or taped acoustic and non-acoustic signals to support CV/CVN USW Self Defense. The system consist of digital computers, commercial workstation displays, mass memories, plotters, acoustic analysis equipment and interface devices. The CV-TSC furnishes timely evaluated USW and SUW information to the Officer in Tactical Command as inputs to the decision making process. Procurement of AN/SQQ-34A(V) CV-TSC baseline systems completed during FY98. Procurement of non-developmental engineering changes to maintain system IT-21 supportability and interoperability with embarked aircraft, airborne sensors, and shipboard interfaces will continue beginning in FY98. Naval Undersea Warfare Center (NUWC), Division Keyport has been designated as the Alteration Installation Team (AIT) for all items. Installations will be accomplished at NUWC, the CV-TSC training site at Fleet Combat Training Center Atlantic (FCTCL) Dam Neck, VA, CV-TSC Ashore NAS/JAX, FL, and on board CV-63 through CVN-75.

FY 2000 provides for procurement, integration and installation of five (4) CV-TSC Engineering Change One (EC-1) supportability and IT-21 interoperability updates and three (3) RTSDL.
FY 2001 provides for procurement, integration and installation of three (3) CV-TSC Engineering Change One (EC-1) supportability and IT-21 interoperability updates and one (1) RTSDL.

CLASSIFICATION:

BUDGET ITEM JUSTIFICATION SHEET FOR AGGREGATED ITEMS P-40a							DATE: February 2000				
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY**						P-1 ITEM NOMENCLATURE BLI: 217600,217605,217606 C2VM	**Undersea Warfare Support Equipment**				
Procurement Items	ID Code	Prior Years	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
											$0.0
FY 2000											**$0.0**
N88											**$0.0**
CV-ASWM EC-1 (4)				168							**$168.0**
RT SENS DATA LINK (3)				453							**$453.0**
											$0.0
N86											**$0.0**
LEAD MK 15 (18)				4032							**$4,032.0**
LEAD MK 12 (27)				2686							**$2,686.0**
											$0.0
N86											**$0.0**
SQS-26/53 SDRW (1)				2532							**$2,532.0**
											$0.0
N87											**$0.0**
Acous Comm				262							**$262.0**
											$0.0
FY 2001											**$0.0**
N88											**$0.0**
CV-ASWM EC-1 (3)					132						**$132.0**
RT SENS DATA LINK (1)					151						**$151.0**
											$0.0
											$0.0
N87											**$0.0**
Acous Comm					277						**$277.0**
											$0.0
											$0.0
											$0.0
											$0.0
											$0.0
Production Support Services				895	147						**$1,042.0**
Installation FMP				355	51						**$406.0**
Installation Non-FMP				157	89						**$246.0**
											$0.0
											$0.0
											$0.0
											$0.0
											$0.0
											$0.0
											$0.0
TOTAL				11540	847						**$12,387.0**
											$0.0
											$0.0
											$0.0
											$0.0
											$0.0
											$0.0

P-1 SHOPPING LIST CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION:

BUDGET ITEM JUSTIFICATION SHEET FOR AGGREGATED ITEMS P-40a								DATE: **February 2000**			
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY**						P-1 ITEM NOMENCLATURE BLI: 217600,217605,217606 C2VM		**Undersea Warfare Support Equipment**			
Procurement Items	ID Code	Prior Years	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
FY 2002											**$0.0**
N88											**$0.0**
CV-ASWM EC-1 (5)						225					**$225.0**
RT SENS DATA LINK (3)						462					**$462.0**
											$0.0
N86											**$0.0**
SQS-26/53 SDRW (1)						2438					**$2,438.0**
											$0.0
N87											**$0.0**
Acous Comm						281					**$281.0**
											$0.0
											$0.0
FY 2003											**$0.0**
N88											**$0.0**
CV-ASWM EC-2 (3)							138				**$138.0**
RT SENS DATA LINK (1)							154				**$154.0**
N86											**$0.0**
SQS-26/53 SDRW (1)							2503				**$2,503.0**
											$0.0
N87											**$0.0**
Acous Comm							285				**$285.0**
											$0.0
											$0.0
FY 2004											**$0.0**
N88											**$0.0**
CV-ASWM EC-1 (5)								235			**$235.0**
RT SENS DATA LINK (3)								465			**$465.0**
N86											**$0.0**
LEAD MK 15 (16)								344			**$344.0**
LEAD MK 12 (24)								516			**$516.0**
SQS-26/53 SDRW (2)								4104			**$4,104.0**
											$0.0
											$0.0
N87								293			**$293.0**
Acous Comm											**$0.0**
											$0.0
FY 2005											**$0.0**
N88											**$0.0**
CV-ASWM EC-1 (5)									235		**$235.0**
RT SENS DATA LINK (3)									465		**$465.0**
N86											**$0.0**
SQS-26/53 SDRW (2)									4590		**$4,590.0**
											$0.0
N87									302		**$302.0**
Acous Comm											**$0.0**
											$0.0
Production Support Services						605	633	744	682		**$2,664.0**
Installation FMP						99	50	51	147		**$347.0**
Installation Non-FMP						156	84	209	126		**$575.0**
TOTAL						4266	3847	6961	6547		**$21,621.0**

BUDGET ITEM JUSTIFICATION SHEET P-40												DATE: February 2000
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY BA-2 COMMUNICTIONS & ELECTRONICS EQUIPMENT**							P-1 ITEM NOMENCLATURE **Sonar Support Equipment/ C2WK/ 218000**					
Program Element for Code B Items: **PE #0204281N**							Other Related Program Elements					
	Prior Years	ID Code		FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)				**$8.1**	**$3.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**		**$11.0**
SPARES COST (In Millions)				**$0.2**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**		**$0.2**

Starting with the FY 2000 budget, this program was consolidated into the Submarine Support Equipment line - 256000

However, FY00 had an Congressional increase for $3.0M to procure CV-Tactical Support Center (TSC) equipment.

BUDGET ITEM JUSTIFICATION SHEET P-40												DATE: February 2000
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY/BA-2 COMMUNICATIONS & ELECTRONICS EQUIPMENT**							P-1 ITEM NOMENCLATURE **SONAR SWITCHES AND TRANSDUCERS 218100**					
Program Element for Code B Items: **PE# 0204281N**							Other Related Program Elements					
	Prior Years	ID Code		FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)				**$9.9**	**$14.0**	**$10.7**	**$12.5**	**$17.2**	**$15.7**	**$15.9**	`	**$95.9**
SPARES COST (In Millions)				**$0.4**	**$0.4**	**$0.4**	**$0.4**	**$0.6**	**$0.4**	**$0.4**		**$3.0**

This program procures hydrophones, transducers, cables, and acoustic windows for In-Service Under Sea Warfare Sonars on all classes of submarines. The components are required to support units in the fleet on a replacement basis, at regularly scheduled ship overhauls, at interim availabilities when units are defective, and for upgrades.

PU100 SONAR SWITCHES AND TRANSDUCERS

Included in this line are procurements of transducers, hydrophones, windows, cables, domes, their support equipment and materials for the following Under Sea Warfare Sonars: BSY-1, BSY-2, BQQ-5, BQQ-6, BQS-15, BQS-14A, WQC-2, WLR-9/12, BQN-17, BQA-8, and BQH-1.

PU200 ENGINEERING CHANGES

Funds ECPs and hardware changes affecting the SSN688, 688I, and SSBN 726 (TRIDENT) Class submarines.

PU300 PROGRAM SUPPORT

Supports the procurement of equipment of sonar hydrophones, transducers, cables, and acoustic windows for In-Service Under Sea Warfare Sonars.

*FY 99 PROGRAM WAS REDUCED BY $2.8M FOR BTR ACTIONS THAT SUPPORTED SIMILAR EFFORTS WITHIN ANOTHER BUDGET ITEM.

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System											DATE: February 2000
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy/ BA-2** **COMMUNICATIONS & ELECTRONICS EQUIPMENT**			ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **SONAR SWITCHES AND TRANDSUCERS (82PU)**										
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			Prior Years				FY 1999			FY 2000			FY 2001		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
PU100	**SONAR SWITCHES & TRANSDUCERS**														
	TR-353A	A					374	3.5	1,307	725	2.7	1,956	550	2.3	1,265
	CW-1147	A					27	16.0	433	30	8.3	249	25	8.5	213
	CW-1181C	A					26	32.0	831	80	17.3	1,384	25	17.4	434
	MX-10624	A								23	12.7	292	15	2.9	44
	MX-11474	A					5	124.6	623						
	DT-574	A													
	DT-511B	A													
	DT-513C	A													
	DT-513 ( )	A					127	2.5	318	150	0.8	120	350	0.7	245
	DT-592	A					47	13.5	633						
	DT-592R	A													
	TR-232 ( )	A					48	27.7	1331	26	14.1	367	35	14.5	508
	TR-233B	A								33	20.3	670	75	9.6	721
	TR-302B & CBL	A					17	25.3	431	20	26.6	533			
	TR-302 (WINDOW)	A					10	0.6	6	10	0.6	6	10	0.6	6
	TR-321 ()	A					23	22.5	518	56	6.8	380	86	5.3	456
	TR-338A &CBL	A					30	10.9	326						
	TR-339	A													
	TR-340	A													
	TR-341 ()	A											18	35.8	644
	NCC CONNECTORS	A					193.0	0.6	120	570	0.6	342	592	0.6	355
	HFSP RECEIVE	A								10	118.5	1,185	15	62.7	941
	HFSP XMIT	A								5	253.0	1,265	4	136.0	544
	WAA	A								150	13.5	2,025	125	10.4	1,298
PU200	ENGINEERING CHANGES	A							100			227			197
PU300	PROGRAM SUPPORT	A							2,944			3,015			2,855
			0			**0**			**9,921**			**14,016**			**10,726**

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 2000

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Other Procurement, Navy/ BA-2 COMMUNICATIONS & ELECTRONICS EQUIPMENT	SONAR SWITCHES AND TRANSDUCERS	H2PU

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
PU100										
FY 1999										
CW-1147(WLR-9)*	27	16.0	NUWC	7/98	C/FP	ANTENNA ASSOCIATES	4/99	5/00	YES	
CW-1181C (WLR-9)*	26	32.0	NUWC	7/98	C/FP	BF GOODRICH	4/99	5/00	YES	
MX-11474 (BSY-2)*	5	124.6	NUWC	7/98	C/FP	ANTENNA ASSOCIATES	2/99	5/00	YES	
TR-353A (BSY-2)	374	3.5	NUWC		OPTION	HAZELTINE-MASSA	3/99	4/00	YES	
DT-513( )(BQA-8)*	127	2.5	NUWC	7/98	C/FP	SEABEAM	4/99	5/00	YES	
DT-592 (WLR-9)	47	13.5	NUWC		OPTION	ITC	3/99	3/00	YES	
TR-338A (BSY1& 2)	30	10.9	NUWC		OPTION	EDO	3/99	3/00	YES	
TR-302B CABLE(BQN-17)	17	25.3	NUWC		OPTION	EDO	3/99	5/00	YES	
TR-302 WDW (BQN-17)	10	0.6	NUWC		WR	NUWC	3/99	8/99	YES	
NCC CONNECTORS(ALL CBL)	193	0.6	NUWC		C/FP	VARIOUS	4/99	4/00	YES	
TR-232( ) (WQC-2)*	48	27.7	NUWC	7/98	C/FP	EDO	3/99	12/00	YES	
TR-321A( ) (BQH-1C)*	23	22.5	NUWC	10/98	C/FP	ITC	3/99	10/00	YES	

D. REMARKS

* INCLUDES FIRST ARTICLE COSTS

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A) | Weapon System | A. DATE: February 2000

B. APPROPRIATION/BUDGET ACTIVITY: **Other Procurement, Navy/ BA-2**
COMMUNICATIONS & ELECTRONICS EQUIPMENT

C. P-1 ITEM NOMENCLATURE: **SONAR SWITCHES AND TRANSDUCERS**

SUBHEAD: **H2PU**

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
PU100										
FY 2000										
TR-353A (BSY-2)	725	2.7	NUWC		OPTION	HAZELTINE-MASSA	4/00	4/01	YES	
CW-1147(WLR-9)	30	8.3	NUWC		OPTION	ANTENNA ASSOCIATES	3/00	5/01	YES	
CW-1181C (WLR-9)	80	17.3	NUWC		OPTION	BF GOODRICH	3/00	5/01	YES	
MX-10624 (BSY-1 & 2)	23	12.7	NUWC	10/99	C/FP	NUWC	3/00	3/01	YES	
DT-513( ) (BQA-8)	150	0.8	NUWC		OPTION	SEABEAM	3/00	3/01	YES	
TR-232 ( ) (WQC-2)	26	14.1	NUWC		OPTION	EDO	3/00	3/01	YES	
TR-233B (WQC-2)*	33	20.3	NUWC	10/99	C/FP	UNKNOWN	3/00	3/01	YES	
TR-302B & CBLE (BQN-17)	20	26.6	NUWC		OPTION	EDO	3/00	3/01	YES	
TR-302 WDW (BQN-17)	10	0.6	NUWC		WR	NUWC	1/00	3/01	YES	
TR-321 () (BQH-1C)	56	6.8	NUWC		OPTION	ITC	3/00	3/01	YES	
NCC CONNECTORS	570	0.6	NUWC		C/FP	VARIOUS	4/00	4/01	YES	
HFSP RECEIVE *BSY-1)*	10	118.5	NUWC	10/99	C/FP	UNKNOWN	4/00	4/01	YES	
HFSP XMIT (BSY-1)*	5	253.0	NUWC	10/99	C/FP	UNKNOWN	4/00	4/01	YES	
WAA*	150	13.5	NUW C	10/99	C/FP	UNKNOWN	4/00	4/01	YES	
FY 2001										
TR-353A (BSY-2)	550	2.3	NUWC		OPTION	HAZELTINE-MASSA	3/01	3/02	YES	
CW-1147(WLR-9)	25	8.5	NUWC		OPTION	ANTENNA ASSOCIATES	3/01	3/02	YES	
CW-1181C (WLR-9)	25	17.4	NUWC		OPTION	BF GOODRICH	3/01	3/02	YES	
MX-10624 (BSY-1&2)	15	2.9	NUWC		WR	NUWC	3/01	3/02	YES	
DT-513( )(BQA-8)	350	0.7	NUWC		OPTION	SEABEAM	3/01	3/02	YES	

D. REMARKS
* INCLUDES FIRST ARTICLE COSTS

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 2000

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Other Procurement, Navy/ BA-2 COMMUNICATIONS & ELECTRONICS EQUIPMENT	SONAR SWITCHES AND TRANSDUCERS	H2PU

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
PU100										
FY 2001										
								3/02	YES	
TR-232A (WQC-2)	35	14.5	NUWC		OPTION	EDO	3/01	3/02	YES	
TR-233B (WQC-2)	75	9.6	NUWC		OPTION	UNKNOWN	3/01	3/02	YES	
TR-302 WDW (BQN-17)	10	0.6	NUWC		WR	NUWC	1/01	3/02	YES	
TR-321 ( ) (BQH-1C)	86	5.3	NUWC		OPTION	ITC	3/01	3/02	YES	
TR-341 ( ) (BQN-13A)*	18	35.8	NUWC	10/00	C/FP	UNKNOWN	3/01	3/02	YES	
HFSP RECEIVE (BSY-1)	15	62.7	NUWC		OPTION	UNKNOWN	3/01	3/02	YES	
HFSP XMIT (BSY-1)	4	136.0	NUWC		OPTION	UNKNOWN	3/01	3/02	YES	
NCC CONNECTORS	592	0.6	NUWC		C/FP	VARIOUS	3/01	3/02	YES	
WAA	125	10.4	NUWC		OPTION	UNKNOWN	3/01	3/02	YES	

D. REMARKS

* INCLUDES FIRST ARTICLE COSTS

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: February 2000
APPROPRIATION/BUDGET ACTIVITY: **OTHER PROCUREMENT, NAVY BA-2 OPN 221000**	P-1 ITEM NOMENCLATURE: **SUBMARINE ACOUSTIC WARFARE SYSTEM (SAWS) / C2WM**
Program Element for Code B Items: **0101226N**	Other Related Program Elements

	Prior Years	ID Code		FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)				**$7.3**	**$11.1**	**$10.7**	**$14.0**	**$21.6**	**$30.8**	**$33.6**		**$129.4**
SPARES COST (In Millions)												**$0.0**

PROGRAM DESCRIPTION/JUSTIFICATION:

The Submarine Acoustic Warfare System (SAWS) provides submarines with an enhanced capability against guided and unguided torpedoes and the means to reduce the effectiveness of enemy sensors. This program provides ongoing production of countermeasure devices needed to sustain fleet inventories, production of preplanned improvements to enhance the readiness and effectiveness of acoustic intercept receivers and processors, and production of countermeasure devices and associated countermeasure launcher systems.

The FY99 funds procured the ADC MK 3 (and associated lauch tubes), ADC MK 2, AN/WLR-9 Engineering Changes, GG MK 77 for 6" Countermeasures, GG MK 77 Engineering Change, and associated production support.
The FY00 funds are required to procure 6" Countermeasures (ADC MK 3 and ADC MK 4 with associated launch tubes), ADC MK 2, CSA MK 2 Mod 1 Countermeasure Launchers, AN/WLY-1, GG MK 77 for 6" Countermeasures and GG MK 77 Engineering Changes, and associated production support.
The FY01 funds are required to procure 6" Countermeasures (ADC MK 3 and ADC MK 4 with associated launch tubes), ADC MK 2, CSA MK 2 Mod 1 Countermeasure Launchers, AN/WLY-1, AN/WLR-9 Engineering Changes, GG MK 77 for 6" Countermeasures, and associated production support.

This budget reflects the transfer of design services into the appropriate equipment P-1 line item in accordance with full funding policy FY99 and out.

AN/WLY-1 Installations:

Install Agent	Date	End Item	Funding	Install Agent	Date	End Item	Funding	Install Agent	Date	End Item	Funding
AIT	2Q/FY01	SSN763	.081M	AIT	1Q/FY04	SSN760	.695M	AIT	2Q/FY05	SSN761	.646M
AIT	3Q/FY02	SSN753	.639M	AIT	2Q/FY04	SSN751	.696M	AIT	3Q/FY05	SSN762	.646M
AIT	4Q/FY02	SSN757	.640M	AIT	3Q/FY04	SSN752	.696M	AIT	4Q/FY05	SSN765	.646M
AIT	1Q/FY03	SSN759	.640M	AIT	1Q/FY05	SSN754	.646M	AIT	Q/FY05	SSN765	
AIT	3Q/FY03	SSN764	.641M	AIT	2Q/FY05	SSN755	.646M				
AIT	2Q/FY04	SSN760		AIT	Q/FY05	SSN762					

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System		DATE: February 2000
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy** **BA-(2): Communication and Electronic Equipment - ASW**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **SUBMARINE ACOUSTIC WARFARE SYSTEM (SAWS) / C2WM**	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years	FY 1998			FY 1999			FY 2000			FY 2001		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
WM014	6" COUNTERMEASURE DEVICES	A					79	26	2,033	147	26	3,843	95	27	2,526
	ADC MK3 MOD 0 (TORPEDO)						79	26	2,033	82	26	2,144	60	27	1,595
	ADC MK 4 MOD 0 (SONAR)									65	26	1,699	35	27	931
WM014	6" COUNTERMEASURE NON-RECUR	A							893			627			
WM014	6" COUNTERMEASURE LAUNCH TUBE	A					79	3	235	147	3	445	95	3	292
WM015	ADC MK 2 MOD 1	A					175	2	300	150	4	647	150	4	658
WM017	AN/WLR-9 ENGINEERING CHANGE	A					10	117	1,171				7	45	315
WM019	CSA MK 2 MOD 1 (SSN 688 CLASS)	A								2	302	604	2	307	615
WM021	AN/WLY-1 HARDWARE	B								2	1,291	2,582	2	1,867	3,734
WM021	AN/WLY-1 NON RECURRING														234
WM5IN	INSTALLATION								60						167
WM022	GAS GENERATOR MK 77	A					79	3	234	147	3	442	95	3	291
WM022	GAS GENRATOR MK 77 ECP								375			200			
WM830	PRODUCTION ENGINEERING								1,251			1,111			1,292
WM900	CONSULTING SERVICES								744			700			700
NOTE: NON RECURRING WM014 FIRST ARTICLE COST. WM020 COMBINED WITH WM014 FOR 6" COUNTERMEASURE PROCUREMENT.															
			0			**0**			**7,296**			**11,202**			**10,823**

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 2000

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Other Procurement, Navy	SUBMARINE ACOUSTIC WARFARE SYSTEM	C2WM

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FY99										
6" COUNTERMEASURES- WM014	79	25.73	NSWC/CRANE		WR	NSWC, CRANE, IN	8/99	8/00	YES	N/A
LAUNCH TUBES - WM014	79	2.977	NSWC/CRANE		WX	NRAD, SAN DIEGO, CA	1/99	7/99	YES	N/A
ADC MK 2 MOD 1 - WM015	175	1.714	NAVSEA	8/99	SS/FFP	GEC Marconi, Braintree, MA	9/99	12/99	YES	N/A
AN/WLR-9(B) EC - WM017	10	117.072	NUWCDIVNPT		WX	NUWC, NEWPORT, RI	1/99	1/00	YES	N/A
GG MK 77 - WM022	79	2.962	NSWC/CRANE	1/99	CM4/FFP	UNKNOWN	9/99	9/00	YES	N/A
FY00										
6" COUNTERMEASURES -WM014	147	26.143	NAVSEA	7/98	CM4/FFP	UNKNOWN	1/00	1/01	YES	N/A
LAUNCH TUBES - WM014	147	3.025	NSWC/CRANE		WX	NRAD, SAN DIEGO, CA	1/00	7/00	YES	N/A
ADC MK 2 MOD 1 - WM015	150	4.31	NAVSEA	11/99	CM4/FFP	UNKNOWN	6/00	6/01	NO	11/99
CSA MK 2 MOD 1- WM019	2	302.117	NAVSEA	9/99	CM4/FFP	UNKNOWN	3/00	3/01	NO	9/99
AN/WLY-1 - WM021	2	1291.225	NAVSEA		OPTION	NORDEN, MELVILLE, NY	1/00	1/01	YES	N/A
GG MK 77 - WM022	147	3.01	NSWC/CRANE		WX	UNKNOWN	1/00	1/01	YES	N/A
FY01										
6" COUNTERMEASURES - WM014	95	26.588	NAVSEA		OPTION	UNKNOWN	1/01	1/02	YES	N/A
LAUNCH TUBES - WM014	95	3.077	NSWC/CRANE		WX	NRAD, SAN DIEGO, CA	1/01	7/01	YES	N/A
ADC MK 2 MOD 1 - WM015	150	4.384	NAVSEA		OPTION	UNKNOWN	1/01	1/02	NO	11/99
CSA MK 2 MOD 1 - WM019	2	307.26	NAVSEA		OPTION	UNKNOWN	1/01	1/02	NO	9/99
AN/WLY-1- WM021	2	1866.924	NAVSEA	3/00	CM4/FFP	UNKNOWN	3/01	3/02	NO	3/00
GG MK 77 - WM022	95	3.061	NSWC/CRANE		OPTION	UNKNOWN	1/01	1/02	YES	N/A
AN/WLR-9(B) EC - WM017	7	45	NUWCDIV/NPT		WR	NUWC, NEWPORT, RI	1/01	1/02	YES	N/A

D. REMARKS

FY99 WM015 ADC MK 2 MOD 1 - UNIT COST CHANGE REFLECTS REMANUFACTURING OF DEVICES.

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

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

DESCRIPTION/JUSTIFICATION:

Installation of the CSA MK 2.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																						0.0
PROCUREMENT																						0.0
INSTALLATION KITS																						0.0
INSTALLATION KITS - UNIT COST																						0.0
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT							2	0.6	2	0.6	2	0.6	2	0.6	7	2.3	7	2.3	8	2.7	30	9.7
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT																						0.0
SUPPORT EQUIPMENT																						0.0
OTHER																						0.0
OTHER																						0.0
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST						0.06			1	0.1	2	0.3	2	0.3	2	0.3	5	0.8	13	2.0	25	3.7
TOTAL PROCUREMENT				0.0		0.06		0.6		0.7		0.9		0.9		2.6		3.1		4.7		13.4

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

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

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: PRODUCTION LEADTIME: 12 Months
CONTRACT DATES: FY 1999: FY 2000: FY 2001:
DELIVERY DATE: FY 1999: FY 2000: FY 2001:

($ in Millions)

Cost:	Prior Years		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																					0	0.0
FY 1998 EQUIPMENT																					0	0.0
FY 1999 EQUIPMENT						0.06															0	0.06
FY 2000 EQUIPMENT									1	0.1											1	0.1
FY 2001 EQUIPMENT											2	0.3									2	0.3
FY 2002 EQUIPMENT													2	0.3							2	0.3
FY 2003 EQUIPMENT															2	0.3					2	0.3
FY 2004 EQUIPMENT																	5	0.8			5	0.8
FY 2005 EQUIPMENT																			13	2.0	13	2.0
TO COMPLETE																						

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	1	0	0	1	1	0	1	2	1	1	13	25
Out	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	1	0	0	1	1	0	1	2	1	1	13	25

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

P3A **INDIVIDUAL MODIFICATION**

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

DESCRIPTION/JUSTIFICATION:

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

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																						0.0
PROCUREMENT																						0.0
INSTALLATION KITS																						0.0
INSTALLATION KITS - UNIT COST																						0.0
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT							2	2.5	2	3.7	2	3.7	3	5.6	7	11.9	7	12.3	8	14.4	31	54.1
EQUIPMENT NONRECURRING										0.2												0.2
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT																						0.0
SUPPORT EQUIPMENT																						0.0
OTHER																						0.0
OTHER																						0.0
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST									1	0.1	2	1.3	2	1.3	3	2.1	5	3.2	13	11.0	26	18.9
TOTAL PROCUREMENT				0.0		0.0		2.5		4.0		5.0		6.9		14.0		15.5				47.9

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

MODELS OF SYSTEMS AFFECTED: AN/WLY-1 MODIFICATION TITLE: AIT

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: PRODUCTION LEADTIME: 12 Months
CONTRACT DATES: FY 1999: FY 2000: FY 2001:
DELIVERY DATE: FY 1999: FY 2000: FY 2001:

($ in Millions)

Cost:	Prior Years		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																					0	0.0
FY 1998 EQUIPMENT																					0	0.0
FY 1999 EQUIPMENT																					0	0.0
FY 2000 EQUIPMENT									1	0.1											1	0.1
FY 2001 EQUIPMENT											2	1.3									2	1.3
FY 2002 EQUIPMENT													2	1.3							2	1.3
FY 2003 EQUIPMENT															3	2.1					3	2.1
FY 2004 EQUIPMENT																	5	3.2			5	3.2
FY 2005 EQUIPMENT																			13	11	13	11
TO COMPLETE																						

INSTALLATION SCHEDULE:

	FY 1998	FY 1999					FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	
	& Prior	1	2	3	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		TOTAL
In	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	1	0	1	1	1	0	1	2	1	1	13	26
Out	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	1	0	1	1	1	0	1	2	1	1	13	26

NOTE: 5 Systems are procured as Landbase units and do not require installation.
In FY01 there is 1 Landbase system procured, and 1 Development System installed on the Santa Fe.

FY 2000/01 BUDGET PRODUCTION SCHEDULE, P-21			DATE February 2000	
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY**		Weapon System	P-1 ITEM NOMENCLATURE	

		Production Rate			Procurement Leadtimes					
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
6" COUNTERMEASURES	UNKNOWN	10	200	200						
LAUNCH TUBES	NSWC, CRANE, INDIANA	50	400	400						
ADC MK 2	UNKNOWN		10							
GG MK 77	UNKNOWN		10							

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 1998												FISCAL YEAR 1999										BAL
						1997	CALENDAR YEAR 1998												CALENDAR YEAR 1999										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
6" COUNTERMEASURE DEVICES																													
UNKNOWN	99		79	0	79																						A		79
UNKNOWN	00		147	0	147																								147
UNKNOWN	01		95	0	95																								95
LAUNCH TUBES/NSWC CRANE																													
NRAD, SAN DIEGO, CA	99		79	0	79															A						79			0
NRAD, SAN DIEGO, CA	00		147	0	147																								147
NRAD, SAN DIEGO, CA	01		95	0	95																								95
HARDWARE CONTINUED ON P21(2)																													

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2000												FISCAL YEAR 2001										BAL
						1999	CALENDAR YEAR 2000												CALENDAR YEAR 2001										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
6" COUNTERMEASURE DEVICES																													
UNKNOWN	99		79	79												16	16	16	16	15									0
UNKNOWN	00		147	147					A												13	13	13	13	13	13	12	12	12	33
UNKNOWN	01		95	95																	A									95
LAUNCH TUBES/NSWC CRANE																														
NRAD, SAN DIEGO, CA	99		79	0																										0
NRAD, SAN DIEGO, CA	00		147	147					A						147															0
NRAD, SAN DIEGO, CA	01		95	95																	A						95			0
HARDWARE CONTINUED ON P21(2)																														

Remarks:

FY 2000/01 BUDGET PRODUCTION SCHEDULE, P-21			DATE February 2000	
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY**		Weapon System	P-1 ITEM NOMENCLATURE	

		Production Rate			Procurement Leadtimes					
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
6" COUNTERMEASURES	UNKNOWN	10	200	200						
LAUNCH TUBES	NSWC, CRANE, INDIANA	50	400	400						
ADC MK 2	UNKNOWN		10							
GG MK 77	UNKNOWN		10							

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 1998												FISCAL YEAR 1999												BAL
						1997			CALENDAR YEAR 1998										CALENDAR YEAR 1999												
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
ADC MK 2 MOD 1																														
UNKNOWN	99		175	0	175																								A	175
UNKNOWN	00		150	0	150																									150
UNKNOWN	01		150	0	150																									150
GG MK 77																														
UNKNOWN	99		79	0	79																								A	79
UNKNOWN	00		147	0	147																									147
UNKNOWN	01		95	0	95																									95

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2000												FISCAL YEAR 2001												BAL
						1999			CALENDAR YEAR 2000										CALENDAR YEAR 2001												
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
ADC MK 2 MOD 1																														
UNKNOWN	99		175	0	175			25	25	25	25	25	25	25																0
UNKNOWN	00		150	0	150									A												20	20	20	10	80
UNKNOWN	01		150	0	150																A									150
GG MK 77																														
UNKNOWN	99		79	0	79												20	20	20	19										0
UNKNOWN	00		147	0	147				A												13	13	13	13	13	13	12	12	12	33
UNKNOWN	01		95	0	95																A									95

Remarks:

FY 2000/01 BUDGET PRODUCTION SCHEDULE, P-21			DATE February 2000	
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY**		Weapon System	P-1 ITEM NOMENCLATURE	

		Production Rate			Procurement Leadtimes					
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
6"COUNTERMEASURES	UNKNOWN	10	200	200						
LAUNCH TUBES	NSWC, CRANE, INDIANA	50	400	400						
ADC MK 2	UNKNOWN		10							
GG MK 77	UNKNOWN		10							

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2002												FISCAL YEAR 2003												BAL
						2001			CALENDAR YEAR 2002									CALENDAR YEAR 2003												
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
6" COUNTERMEASURES																													
UNKNOWN	99		79	79	0																								0
UNKNOWN	00		147	114	33	11	11	11																					0
UNKNOWN	01		95	0	95				12	12	12	12	12	12	12	11													0
LAUNCH TUBES																													
NRAD, SAN DIEGO,CA	99		79	79	0																								
NRAD, SAN DIEGO,CA	00		147	147	0																								
NRAD, SAN DIEGO,CA	01		95	95	0																								
HARDWARE CONT. ON P-21-1(2)																													

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2004												FISCAL YEAR 2005												BAL
						2003			CALENDAR YEAR 2004									CALENDAR YEAR 2005												
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Remarks:

FY 2000/01 BUDGET PRODUCTION SCHEDULE, P-21			DATE February 2000
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY**		Weapon System	P-1 ITEM NOMENCLATURE

		Production Rate			Procurement Leadtimes					
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
6" COUNTERMEASURES	UNKNOWN	10	200	200						
LAUNCH TUBES	NSWC, CRANE, INDIANA	50	400	400						
ADC MK 2	UNKNOWN		10							
GG MK 77	UNKNOWN		10							

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2002												FISCAL YEAR 2003												BAL
						2001			CALENDAR YEAR 2002									CALENDAR YEAR 2003												
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
ADC MK 2 MOD 1																														
UNKNOWN	99		175	175	0																								0
UNKNOWN	00		150	70	80	10	10	10	10	10	10	10	10																0
UNKNOWN	01		150	0	150				20	20	20	10	10	10	10	10	10	10	10	10									0
GG MK 77																														
UNKNOWN	99		79	79	0																								0
UNKNOWN	00		147	114	33	11	11	11																					0
UNKNOWN	01		95	0	95				12	12	12	12	12	12	12	11													0

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2004												FISCAL YEAR 2005												BAL
						2003			CALENDAR YEAR 2004									CALENDAR YEAR 2005												
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Remarks:

BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: February 2000	
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY: BA2 Communications and Electronic Equipment**							P-1 ITEM NOMENCLATURE **Surface Ship Torpedo Defense (SSTD) BLI: 221300 SBHD: C2WL**					
Program Element for Code B Items:							Other Related Program Elements					
	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)				**$0.8**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.8**
SPARES COST (In Millions)												**$0.0**

Starting with the FY 2000 budget, this program was consolidated into the Undersea Warfare Support Equipment line - 217600.

BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: February 2000	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA-2: COMMUNICATIONS AND ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE/LINE ITEM # *Acoustic Communications - 221500 -C2WN*					
Program Element for Code B Items: N/A							OTHER RELATED PROGRAM ELEMENTS					
	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0
EQUIPMENT COST (In Millions)			$0.4	$0.4	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.8
SPARES COST (In Millions)												

PROGRAM DESCRIPTION/JUSTIFICATION:

Starting with the FY 2000 budget, this program was consolidated into the Undersea Warfare Support Equipment line - 217600.

									DATE February 2000		
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT							**P-1 ITEM NOMENCLATURE BLI 2225** FIXED SURVEILLANCE SYSTEMS (FSS)			**SUBHEAD** 52WQ	
	PY	**FY 1998**	**FY 1999**	**FY 2000**	**FY 2001**	**FY 2002**	**FY 2003**	**FY 2004**	**FY 2005**	**TO COMP**	**TOTAL**
QUANTITY											
COST (in millions)			**$9.4**	**$16.6**	**$29.9**	**$29.0**	**$63.6**	**$52.9**	**$51.2**	**Continuing**	**Continuing**

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

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

The program includes the following major elements:
a. Ship Improvement: Procurement of mission equipment to improve operational readiness for IUSS cable ship.
b. Cable Upgrade/Engineering: FY99 is the last procurement of fiber optic cable and associated cable engineering and loading.
c. Shore Electronics: Communications and ASWC4I procurements to provide upgraded capabilities and interoperability.
d. Special Projects: Hardware procurements in accordance with international agreements.
e. Shore Processing: Procurement of improved shore processing equipment.

The FY99 through FY05 program procures upgraded ship electronics, handling, tracking and repair equipment and procures Communications and ASWC4I systems to support IUSS requirements to ensure current operational and tactical information availability and to maintain communications connectivity. FSS maintains cooperative agreements with foreign countries. The details of these special projects agreements are of a higher classification.

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.

INSTALLING AGENTS: General Dynamics, Greensboro, NC; Lockheed/Martin, Manassas,VA; SSC Charleston, Charleston,SC and MSC, Washington, D.C.

COST ANALYSIS | **DATE** February 2000

APPROPRIATION ACTIVITY: OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT
P-1 ITEM NOMENCLATURE: FIXED SURVEILLANCE SYSTEMS (FSS) 2225
SUBHEAD: 52WQ

TOTAL COST IN THOUSANDS OF DOLLARS

COST CODE	ELEMENT OF COST	ID CODE	PY QTY	PY TOTAL COST	FY 1999 QTY	FY 1999 UNIT COST	FY 1999 TOTAL COST	FY 2000 QTY	FY 2000 UNIT COST	FY 2000 TOTAL COST	FY 2001 QTY	FY 2001 UNIT COST	FY 2001 TOTAL COST
WQ002	SHIP EQUIPMENT / CABLE UPGRADE						VAR	N/A	4406	VAR	N/A	5,657	VAR	N/A	2,100
WQ004	SHORE ELECTRONICS						VAR	N/A	776	VAR	N/A	300	VAR	N/A	1,719
WQ006	SPECIAL PROJECTS									VAR	N/A	9,820	VAR	N/A	25,242
WQ009	SHORE PROCESSING SYSTEM						VAR	N/A	3515						
WQ011	SITE SURVEYS						VAR	N/A		VAR	N/A	460	VAR	N/A	375
WQ776	INSTALLATION OF EQUIPMENT						VAR	N/A	660	VAR	N/A	344	VAR	N/A	433
	TOTAL CONTROL					**0**			**9,357**			**16,581**			**29,869**

Remarks:
1) Unit cost are various due to procurement of various types of equipment to upgrade IUSS sites and USNS ZEUS.

9,357

PROCUREMENT HISTORY AND PLANNING

A. DATE: February 2000

B. APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

C. P-1 ITEM NOMENCLATURE: FIXED SURVEILLANCE SYSTEMS (FSS)

SUBHEAD: 52WQ

COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
WQ002	CABLE UPGRADE	99	ALCATEL	OPTION	SPAWAR - SD	N/A	Apr-99	Mar-00	1	898	YES	
WQ002	SHIP EQUIPMENT	00A	MSC MIDLANT	WX	WASH. DC	N/A	Mar-00	Dec-00	1	3,157	YES	
		00B	MSC MIDLANT	WX	WASH. DC	N/A	Mar-00	Oct-01	1	2,500	YES	
		01	MSC MIDLANT	WX	WASH. DC	N/A	Mar-01	Dec-01	1	2,100	YES	
WQ004	SHORE ELECTRONICS	00	SSC CHARS	WX	CHARLS SC	N/A	Mar-00	Oct-00	3	VAR	YES	
		01	SSC CHARS	WX	CHARLS SC	N/A	Mar-01	Oct-01	3	VAR	YES	
WQ006	SPECIAL PROJECTS	00	Lockheed Martin	Option	SPAWAR SD	N/A	Dec-99	Mar-01	1	5,628	YES	
		00	Lockheed Martin	Option	SPAWAR SD	N/A	Jan-00	Jul-01	1	4,192	YES	
		01	Lockheed Martin	Option	SPAWAR SD	N/A	Oct-00	Mar-02	1	25,242	YES	

D. REMARKS

WQ002, Ship Equipment: There are two FY 00 procurements identified due to the production lead time required to purchase individual pieces of ship equipment. Production of 00B requires eighteen months. Installation of equipment is FY 01, 00A and FY 02, 00B.

February 2000

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

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	6	3.9	1	1.0	1	1.9	2	5.6	1	2.1	1	5.3	1	4.4	0	0.0	0	0.0	0	0.0	13	24.2
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	6	2.8	0	0	1	0.5	1	0.3	1	0.3	2	1.5	1	0.4	1	0.7	0	0.0	0	0.0	13	6.5
PRIOR YR EQUIP	5	2.5																			5	2.5
FY 97 EQUIP	1	0.3																			1	0.3
FY 98 EQUIP					1	0.5															1	0.5
FY 99 EQUIP							1	0.3													1	0.3
FY 00 EQUIP									1	0.3	1	1.0									2	1.3
FY 01 EQUIP											1	0.5									1	0.5
FY 02 EQUIP													1	0.4							1	0.4
FY 03 EQUIP															1	0.7					1	0.7
FY 04 EQUIP																						
FY 05 EQUIP																						
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		2.8		0.0		0.5		0.3		0.3		1.5		0.4		0.7		0.0		0.0		6.5
TOTAL PROCUREMENT COST		6.7		1.0		2.4		5.9		2.4		6.8		4.8		0.7		0.0		0.0		30.7

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 6 PRODUCTION LEADTIME: 9

CONTRACT DATES: FY 1999 Mar-99 FY 2000: Mar-00 FY 2001: Mar-01

DELIVERY DATES: FY 1999: Dec-99 FY 2000: Dec-00 FY 2001: Dec-01

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT	6		1				1				1			2			
OUTPUT	6		1				1				1				2		

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT		1				1								13
OUTPUT		1				1								13

Notes/Comments

February 2000

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

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	1	2.9			3	0.8	3	0.3	3	1.7	3	3.6	3	2.5	3	4.0	3	3.5			22	19.3
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.0	1	0.3	3	0.2	0	0.0	3	0.1	3	0.3	3	0.4	3	0.5	3	0.9	3	1.0	22	3.7
PRIOR YR EQUIP																					0	0.0
FY 97 EQUIP			1	0.3																	1	0.3
FY 98 EQUIP																					0	0.0
FY 99 EQUIP					3	0.2															3	0.2
FY 00 EQUIP									3	0.1											3	0.1
FY 01 EQUIP											3	0.3									3	0.3
FY 02 EQUIP													3	0.4							3	0.4
FY 03 EQUIP															3	0.5					3	0.5
FY 04 EQUIP																	3	0.9			3	0.9
FY 05 EQUIP																			3	1.0	3	1.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		0.0		0.3		0.2		0.0		0.1		0.3		0.4		0.5		0.9		1.0		3.7
TOTAL PROCUREMENT COST		2.9		0.3		1.0		0.3		1.8		3.9		2.9		4.5		4.4		1.0		23.0

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 6 PRODUCTION LEADTIME: 6

CONTRACT DATES: FY 1999: Mar-99 FY 2000: Mar-00 FY 2001: Mar-01

DELIVERY DATES: FY 1999: Sep-99 FY 2000: Oct-00 FY 2001: Oct-01

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT	1				3					3				3			
OUTPUT	1				3					3				3			

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT	3				3				3				3	22
OUTPUT	3				3				3				3	22

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

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

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	3	22.0					1	9.8	1	25.2	1	16.0					1	19.8			7	93
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	3	10.6	1	1.6	0	0.0		0.0	1	0.0	1	0.0	1.0	0.0	0.0	0.0	0	0.0	1	0.0	8	12
PRIOR YR EQUIP	2	8.5																			2	9
FY 95 EQUIP																					0	0
FY 96 EQUIP	1	2.1																			1	2
FY 97 EQUIP			1	1.6																	1	2
FY 98 EQUIP																					0	0
FY 99 EQUIP																					0	0
FY 00 EQUIP																					0	0
FY 01 EQUIP																					0	0
FY 02 EQUIP																					0	0
FY 03 EQUIP																					0	0
FY TC EQUIP																					0	0
TOTAL INSTALLATION COST		10.6		1.6		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		12.2
TOTAL PROCUREMENT COST		32.6		1.6		0.0		9.8		25.2		16.0		0.0		0.0		19.8		0.0		105.0

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: PRODUCTION LEADTIME: 18 months

CONTRACT DATES: FY 1999: N/A FY 2000: Oct-99 FY 2001: Oct-00

DELIVERY DATES: FY 1999: N/A FY 2000: Mar-01 FY 2001: Mar-02

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT	3											1				1	
OUTPUT	4												1				1

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT			1										1	7
OUTPUT				1									1	8

Notes/Comments
GW006 FUNDS "SHARED COSTS" SPECIAL PROJECTS UNDER RESTRICTED ACCESS INTERNATIONAL AGREEMENTS.
FY97: HOST COUNTRY FUNDED PROCUREMENT OF EQUIPMENT, U.S. FUNDED INSTALLATION.
FUNDS IN FY 00, 01 AND FY 02 PROCURE SUBSYSTEMS IAW AN INTERNATIONAL AGREEMENT.
THE HOST COUNTRY WILL FUND INSTALLATION EFFORTS ASSOCIATED WITH PROCUREMENTS.

February 2000

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

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05				TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment	11	15.1									3	2.0					2	27.0					16	44.1
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware*	10	10.8	1	7.6	0	0.0	0	0.0	0	0.0	3	0.0	0	0.0	0	0.0	2	0.0	0	0.0	0	0.0	16	18.4
PRIOR YR EQUIP	6	10.4																					6	10.4
FY 97 EQUIP	4	0.4																					4	0.4
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											3	0.0											3	0.0
FY 03 EQUIP																							0	0.0
FY 04 EQUIP																							0	0.0
FY 05 EQUIP																	2	0.0					2	0.0
FY TC EQUIP																				0.0			0	0.0
TOTAL INSTALLATION COST		10.8		7.6		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		18.4
TOTAL PROCUREMENT COST		25.9		7.6		0.0		0.0		0.0		2.0		0.0		0.0		27.0		0.0		0.0		62.5

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 PRODUCTION LEADTIME: 6

CONTRACT DATES: FY 1999 Jan-99 FY 2000: N/A FY 2001: N/A

DELIVERY DATES: FY 1999 Jul-99 FY 2000: N/A FY 2001: N/A

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				FY 02			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT	11														3		
OUTPUT	11															3	

INSTALLATION SCHEDULE:	FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT												2		16
OUTPUT													2	16

Notes/Comments

Procurements in FY 02 and FY 05 are turnkey .

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE
February 2000

APPROPRIATION/BUDGET ACTIVITY
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE
FIXED SURVEILLANCE SYSTEMS (FSS)

SUBHEAD NO.
52WQ

COST CODE	ITEM/MANUFACTURER	FY	SERV	PROC QTY	ACCEP PRIOR TO 1-Oct	BAL DUE AS OF 1-Oct	FISCAL YEAR 99												FISCAL YEAR 00												FISCAL YEAR 01											
							PY98			CALENDAR YEAR 99												CALENDAR YEAR 00												CALENDAR YEAR 01								
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
WQ002	CABLE / ALCATEL	99		1		1																			A											1						
WQ002	SHIP EQUIPMENT / MSC MIDLANT	00		1		1																		A									1									
	SHIP EQUIPMENT / MSC MIDLANT	00		1		1																		A																		
	SHIP EQUIPMENT / MSC MIDLANT	01		1		1																														A						
WQ004	SHORE ELECTRONICS (SSC CHARS)	00		3		3																		A							3											
	SHORE ELECTRONICS (SSC CHARS)	01		3		3																														A						
WQ006	PHASE II, Underwater System (Lockheed)	00		1		1															A															1						
	PHASE II, Underwater System (Lockheed)	00		1		1																A																		1		
	PHASE II, Underwater System (Lockheed)	01		1		1																									A											
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP

		PRODUCTION RATE			PROCUREMENT LEADTIMES					
ITEM	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
WQ002 / CABLE	ALCATEL				**0**	**8**	**12**	**12**		**LOT**
WQ002 / SHIP EQUIPMENT	MSC MIDLANT				**0**	**6**	**9**	**N/A**		**EA**
WQ004 / SHORE ELECTRONICS	SSC CHARS				**0**	**6**	**6**	**N/A**		**EA**
WQ006 / SPECIAL PROJECTS	LOCKHEED MARTIN				**0**	**3**	**15**	**N/A**		**LOT**
WQ009 / SHORE PROCESSING	LOCKHEED MARTIN				**0**	**5**	**4**	**N/A**		**LOT**

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE February 2000

APPROPRIATION/BUDGET ACTIVITY
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE
FIXED SURVEILLANCE SYSTEMS (FSS)

SUBHEAD NO.
52WQ

COST CODE	ITEM/MANUFACTURER/ PROCUREMENT YEAR	FISCAL YEAR	CARRY OVER	FISCAL YEAR 02														FISCAL YEAR 03												FISCAL YEAR 04												LATER
				CY01			CALENDAR YEAR 02														CALENDAR YEAR 03												CALENDAR YEAR 04												
				OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
WQ002	CABLE / ALCATEL	99	0																																					0
																																								0
																																								0
WQ002	SHIP EQUIPMENT / MSC MIDLANT	00	0																																					0
	SHIP EQUIPMENT / MSC MIDLANT	00	1	1																																				0
	SHIP EQUIPMENT / MSC MIDLANT	01	1			1																																		
																																								0
																																								0
WQ004	SHORE ELECTRONICS	00	0																																					0
	SHORE ELECTRONICS	01	3	3																																				0
WQ006	PHASE II, Underwater System	00	0																																					0
	PHASE II, Underwater System	00	0																																					0
	PHASE II, Underwater System	01	1						1																															0
																																								0
				OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

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

NAVMAT FORM 7110/4 (REVISED 11/77)

P-1 SHOPPING LIST
ITEM NO. 48 PAGE NO. 09 of 09

P-21A Exhibit

								DATE	February 2000	
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						**P-1 ITEM NOMENCLATURE BLI 2237** Surveillance Towed Array Sensor (SURTASS)			**SUBHEAD** 52VG	
	PY	**FY 1999**	**FY 2000**	**FY 2001**	**FY 2002**	**FY 2003**	**FY 2004**	**FY 2005**	**TO COMP**	**TOTAL**
QUANTITY										
COST (in millions)		**$12.5**	**$7.2**	**$5.5**	**$17.2**	**$9.3**	**$19.4**	**$24.2**	**Continuing**	**Continuing**

PROGRAM COVERAGE: Surveillance Towed Array Sensor System (SURTASS) is a mobile, tactical arm of the Navy's undersea surveillance capability that provides long-range and littoral acoustic detection and cueing for tactical weapons platforms against both diesel and nuclear submarines. Dedicated T-AGOS ships towing long acoustic arrays relay acoustic data via satellite to shore facilities for processing. There are three configurations of T-AGOS ships with differing capabilities as follows: (1). T-AGOS monohull ships, SCN funded FY79 to FY87, are currently equipped with long passive receiving arrays or twinline receiving arrays with the SURTASS processing and display suite. Of the original eighteen monohulls, three are in active service. (2). Four "small" T-AGOS Small Waterplane Area Twin Hull (SWATH) ships were SCN funded FY87 through FY89. This ship incorporates the improved detection and classification capabilities and onboard analysis developed by the SURTASS Block Upgrade program including the Reduced Diameter Array (RDA) and A180R arrays. The RDA and A180R arrays provide improved passive capability and allow those ships equipped with it to operate in a bi-static mode with T-AGOS ships equipped with Low Frequency Active (LFA) systems. These four small SWATH ships are equipped with standard Desktop Computer (DTC II) processing and display configuration and have been upgraded with an improved tactical communications suite. (3) The first "large" SWATH ship, T-AGOS 23, will be delivered in FY00. It includes the Next Evolution architecture: Force and UltraSPARC high speed computers and large data storage devices, and will be the first T-AGOS ship equipped with Low Frequency Active (LFA) capability. This active capability will provide greatly improved detection against diesel submarines as well as the quiet nuclear threat. In addition to the eight T-AGOS ships above, three shore sites are configured with SURTASS Block Upgrade and Next Evolution processing and display suites to receive the T-AGOS acoustic data via SHF satellite communication links, analyze it and correlate it with the IUSS fixed shore site arrays, and provide the resulting contact information to the tactical commanders. A cost sharing agreement with Japan also provides a shore site and two Japanese SWATH ships with a similar capability to the TAGOS SWATH ships for the Western Pacific region. The Japanese Auxiliary Ocean Surveillance Ship (JAOS) SWATH ships are being upgraded to Next Evolution processing and display suites and currently utilize the original Production Baseline Arrays. Under the cost sharing agreement JAOS ships are being upgraded to the next evolution computer processing and display equipment and to the newer A180R or twinline passive receiving arrays.

OPN funded procurements include: VG006 provides for procurement and upgrade of twinline arrays, common tow cables and common TB 29 arrays, procurement of LFA trainers, and communications upgrades ADNS and DMR; VG007 funds changes resulting from in service improvements of communications equipment, arrays, processing and display equipment; VG010 funds shore and ship electronics upgrade; and VG776 funds the installation of equipment.

FY99: Funds are required for the following:

- VG006 Block Upgrade (JAOS) provides for upgrade of JAOS ship mission equipment to Next Evolution configuration. Twinline array provides for array receiver improvements for littoral areas.
- VG007 Field Changes/Modifications provide for correction of deficiencies identified by Fleet use, array support equipment, communication equipment, replacement of aging/unsupportable equipment.
- VG010 Next Evolution processing and display upgrades provide ship processing suite for twinline arrays.
- VG776 Installation of equipment.

BUDGET ITEM JUSTIFICATION SHEET		DATE February 2000
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	**P-1 ITEM NOMENCLATURE** Surveillance Towed Array Sensor (SURTAS	**SUBHEAD** 52VG

FY00: Funds are required for the following:
VG006 Block Upgrade (JAOS) provides for A180R passive array for JAOS ship. Low Frequency Active (LFA) trainer provides for initial and refresher training of MILDET personnel assigned to
LFA ships. TRU/Common Tow Cable allows array processing improvement for SWATH ships. LFA Mitigation Sonar provides mammal search in vicinity of an active SURTASS platform.
VG007 Field Changes/Modifications provide for correction of deficiencies identified by Fleet use, array support equipment, communication equipment, replacement of aging/unsupportable
equipment.
VG776 Installation of equipment.
FY01: Funds are required for the following:
VG006 Block Upgrade (JAOS) provides for A180R twin-line passive array for second JAOS ship. TRU/Common Tow Cable allows array processing improvement for SWATH ship. Low Frequency
Active (LFA) trainer provides for initial and refresher training of MILDET personnel assigned to LFA ships.
VG007 Field Changes/Modifications provide for correction of deficiencies identified by Fleet use, array support equipment, communication equipment, replacement of aging/unsupportable
equipment.
VG776 Installation of equipment.

COST ANALYSIS											**DATE** February 2000					
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT											**SUBHEAD** 52VG					
			TOTAL COST IN THOUSANDS OF DOLLARS													
				PY	**FY 1999**			**FY 2000**			**FY 2001**					
COST CODE	**ELEMENT OF COST**	**ID CODE**	**QTY**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**			
VG006	UPGRADE PROCUREMENT															
	Block Upgrade (JAOS)	A			1	2,734	2,734	1	2,024	2,024	1	2,046	2,046			
	Twinline Arrays	A			1	4,124	4,124									
	TRU/Common Tow Cable	A						1	450	450	1	393	393			
	Twinline SWATH Mod	A						3	137	410						
	LFA Trainer-IOSC/Dam Neck	A						1	1,264	1,264						
	LFA Trainer-Whidbey	A									1	1,264	1,264			
	LFA Mitigation Sonar	A						1	1,100	1,100						
VG007	FIELD CHANGES/MODIFICATIONS	A					578			1,141			1,284			
VG010	ELECTRONICS UPGRADE															
	Ship Electronics	A			2	2,020	4,039									
VG776	INSTALLATION OF EQUIPMENT (NON FMP)						977			838			529			
	TOTAL CONTROL						**12,452**			**7,227**			**5,516**			
Remarks: VG006 JAOS Ship Mission Equipment is funded in FY99. JAOS Arrays are funded in FY00-01.																

PROCUREMENT HISTORY AND PLANNING

A. DATE: February 2000

B. APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

C. P-1 ITEM NOMENCLATURE: Surveillance Towed Array Sensor (SURTASS)

SUBHEAD: 52VG

COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
VG006	UPGRADE PROCUREMENT											
	Block Upgrade (JAOS)	99	Raytheon, Portsmouth, RI	SS/CPFF/OP	SPAWAR	May-96	Oct-98	Apr-00	1	2,734	Yes	N/A
	Twinline Arrays	###	TBD	Compete/CPFF	SSC-Charl	Apr-99	Feb-00	Jul-01	1	2,024	Yes	N/A
	Twinline Arrays	###	TBD	Compete/CPFF/OP	SSC-Charl	Apr-99	Oct-00	Apr-02	1	2,046	Yes	N/A
	Twinline Arrays	99	Raytheon, Portsmouth, RI	SS/CPFF/OP	SPAWAR	Nov-97	Jan-99	May-00	1	4,124	Yes	N/A
	TRU/Common Tow Cable	###	Digital System Resources	CPFF/OP	SPAWAR	Feb-99	Oct-99	Jul-00	1	450	Yes	N/A
		###	Digital System Resources	CPFF/OP	SPAWAR	Feb-99	Oct-00	Jul-01	1	393	Yes	N/A
	Twinline SWATH Modification	###	IOSC, Little Creek, VA	WR	SPAWAR	Oct-99	Oct-99	Jul-00	3	137	Yes	N/A
	LFA Trainer-IOSC/Dam Neck, V	###	Digital System Resources	CPFF/OP	SPAWAR	Feb-99	Oct-99	Jul-00	1	1,264	Yes	N/A
	LFA Mitigation Sonar	###	Scientific Solutions Inc	CPFF/OP	NUSC RI	Jul-00	Oct-99	Jul-00	1	1,100	Yes	N/A
	LFA Trainer-Whidbey	###	Digital System Resources	CPFF/OP	SPAWAR	Feb-99	Oct-00	Jul-01	1	1,264	Yes	N/A
VG010	ELECTRONICS UPGRADE											
	Ship Electronics	99	Digital System Resources	CPFF	SPAWAR	Feb-99	Sep-99	Jul-00	2	2,020	Yes	N/A

D. REMARKS: VG006 JAOS Ship Mission Equipment is funded in FY98-99. JAOS Arrays are funded in FY00-01. Competitive contract for JAOS arrays is expected to be awarded in FEB 00.

Feb-00

MODIFICATION TITLE: Block Upgrade (JAOS)
COST CODE VG006
MODELS OF SYSTEMS AFFEC SURTASS T-AGOS Ships and Shore Facilities
DESCRIPTION/JUSTIFICATION: Block Upgrade (JAOS) provides Next Evolution Processing and Display suite for JAOS ships, one system in FY98 and one system procured in FY99. One A180R twinline array will be procured in FY00 and one will be procured in FY01.
OPN data shown is US cost share.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment			1	2.7	1	2.73	1	2.02	1	2.05											4	9.50
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*					1	0.20	1	0.17	1	0.14	1	0.12									4	0.63
FY97 EQUIP																						
FY98 EQUIP					1	0.20															1	0.20
FY99 EQUIP							1	0.17													1	0.17
FY00 EQUIP									1	0.14											1	0.14
FY01 EQUIP											1	0.12									1	0.12
FY 02 EQUIP																						
FY03 EQUIP																						
FY04 EQUIP																						
FY05 EQUIP																						
FY TC EQUIP																						
TOTAL INSTALLATION COST	0.0	0.0	0.0		0.20		0.17		0.14		0.12		0.00		0.00		0.00		0.00		0.63	
TOTAL PROCUREMENT COST	0.0	0.0	2.7		2.93		2.19		2.19		0.12		0.00		0.00		0.00		0.00		10.13	

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIM Shore/Ship-3 Months PRODUCTION LEADTIME: Ship Electronics-11 Months Arrays-17 Months

CONTRACT DATES: FY 1999: Oct FY2000: Feb 00 FY200 Oct-00 FY2002:

DELIVERY DATES: FY199 Apr 0(FY2000: Jul 01 FY200 Mar-02 FY2002:

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

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

Feb-00

MODIFICATION TITLE: Twinline Array
COST CODE: VG006
MODELS OF SYSTEMS AFFEC SURTASS T-AGOS Ships and Shore Facilities
DESCRIPTION/JUSTIFICATION The Twinline array is a shallow water variant of the long line A180R array. The array consists of two short array lengths and is designed for increased surveillance capabilty in high clutter environments and littoral a

The A180R Twinline inventory objective is two arrays. The inventory objective for the TB-29 Common Twinline Array is eight arrays, with procurement beginning in FY02.
The addition of VHF apertures will occur in FY04 and FY05. The last two TB-29 arrays are planned for procurement in FY06.

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

	PY			FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$		Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																							
PROCUREMENT:																							
Kit Quantity																							
Installation Kits																							
Installation Kits Nonrecurring																							
Equipment	1	4.2				1	4.12					2	8.49			2	9.64	2	10.68	2	10.20	10	47.33
Equipment Nonrecurring																							
Engineering Change Orders																							
Data																							
Training Equipment																							
Support Equipment																							
Other																							
Interm Contractor Support																							
Installation of Hardware*								1	0.03					2	0.14	2	0.29	2	0.34	2	0.15	9	0.65
FY97 EQUIP																							
FY98 EQUIP																							
FY99 EQUIP								1	0.03													1	0.03
FY00 EQUIP																							
FY01 EQUIP																							
FY 02 EQUIP														2	0.14							2	0.14
FY03 EQUIP																							
FY04 EQUIP																2	0.29	2	0.34			4	0.62
FY05 EQUIP																							
FY TC EQUIP																				2	0.15	2	0.15
TOTAL INSTALLATION COST		0.0		0.0		0.0	0.00		0.03		0.00		0.00		0.14		0.29		0.34		0.15		0.65
TOTAL PROCUREMENT COST		4.2		0.0		0.0	4.12		0.03		0.00		8.49		0.14		9.93		11.02		10.35		47.99

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTI 3 Months PRODUCTION LEADTIME: 17 Months

CONTRACT DATES: FY199 Jan-99 FY2000 FY2001: FY200 ####

DELIVERY DATES: FY199 May-00 FY2000 FY2001: FY200 ####

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

INSTALLATION SCHEDULE:	FY02 1	2	3	4	FY03 1	2	3	4	FY04 1	2	3	4	FY05 1	2	3	4	TC	TOTAL
INPUT							2								2		4	10
OUTPUT							2								2		4	10

Feb-00

MODIFICATION/TITLE: Telemetry Receive Unit (TRU)/ Common Tow Cable
COST CODE: VG006
MODELS OF SYSTEMS AFFECT SURTASS T-AGOS Ships and Shore Facilities
DESCRIPTION/JUSTIFICATION: TRU/Common Tow Cable provides capability on SWATH ships with RDA arrays to be configured with a coax tow cable in the event a failure of the fiber optic tow cable occurs.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment							1	0.45	1	0.39											2	0.84
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*							1	0.03	1	0.04											2	0.07
FY97 EQUIP																						
FY98 EQUIP																						
FY99 EQUIP																						
FY00 EQUIP							1	0.03													1	0.03
FY01 EQUIP									1	0.04											1	0.04
FY 02 EQUIP																						
FY03 EQUIP																						
FY04 EQUIP																						
FY05 EQUIP																						
FY TC EQUIP																						
TOTAL INSTALLATION COST	0.0	0.0	0.0	0.00			0.03		0.04		0.00		0.00		0.00		0.00		0.00		0.07	
TOTAL PROCUREMENT COST	0.0	0.0	0.0	0.00			0.48		0.43		0.00		0.00		0.00		0.00		0.00		0.91	

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIM 3 Months PRODUCTION LEADTIME: 10 Months

CONTRACT DATES: FY1999: FY200(##### FY200. #####

DELIVERY DATES: FY1999: FY200(Jul-00 FY200. Jul-01

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

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

Feb-00

MODIFICATION/TITLE: Twinline SWATH Modification
COST CODE VG006
MODELS OF SYSTEMS AFFECT SURTASS T-AGOS Ships
DESCRIPTION/JUSTIFICATION: The Twinline installation on a SWATH platform requires a machinery upgrade to the rear stinger assembly to permit twinline operation.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment							3	0.41													3	0.41
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*																						
FY97 EQUIP																						
FY98 EQUIP																						
FY99 EQUIP																						
FY00 EQUIP																						
FY01 EQUIP																						
FY 02 EQUIP																						
FY03 EQUIP																						
FY04 EQUIP																						
FY05 EQUIP																						
FY TC EQUIP																						
TOTAL INSTALLATION COST	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL PROCUREMENT COST	0.0	0.0	0.0	0.00	0.00	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIM 3 Months PRODUCTION LEADTIME: 10 Months

CONTRACT DATES: FY1999: FY 2000: Oct-99 FY2001: FY2002:

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

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

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

Feb-00

MODIFICATION/TITLE: LFA Trainer-IOSC/Dam Neck
COST CODE VG006
MODELS OF SYSTEMS AFFECT SURTASS T-AGOS Ships and Shore Facilities
DESCRIPTION/JUSTIFICATION: Low Frequency Active capability on SWATH ships will be IOC in FY01. The LFA trainer will provide operational and maintenance training for ship operators and/or MILDET personnel at IOSC. This trainer will provide processor strings, stim and TCG for passive or active training and/or post mission analysis.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment																								
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment									1	1.26													1	1.26
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware*									1	0.05													1	0.05
FY97 EQUIP																								
FY98 EQUIP																								
FY99 EQUIP																								
FY00 EQUIP									1	0.05													1	0.05
FY01 EQUIP																								
FY 02 EQUIP																								
FY03 EQUIP																								
FY04 EQUIP																								
FY05 EQUIP																								
FY TC EQUIP																								
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.00		0.05		0.00		0.00		0.00		0.00		0.00		0.00		0.05
TOTAL PROCUREMENT COST		0.0		0.0		0.0		0.00		1.32		0.00		0.00		0.00		0.00		0.00		0.00		1.31

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIM 3 Months PRODUCTION LEADTIME: 10 Months

CONTRACT DATES: FY1999: FY200 ##### FY2001: FY2002:

DELIVERY DATES: FY1999: FY200 Jul-00 FY2001: FY2002:

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

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

Feb-00

MODIFICATION TITLE: LFA Trainer-Whidbey
COST CODE: VG006
MODELS OF SYSTEMS AFFECT SURTASS T-AGOS Ships and Shore Facilities
DESCRIPTION/JUSTIFICATION Low Frequency Active capability on SWATH Ships will be IOC in FY01. The LFA trainer will provide operational and maintenance training for ship operators and/or MILDET personnel. This trainer will provide processor strings, stim and TCG for passive or active training and/or post mission analysis.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment																						
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment									1	1.26											1	1.26
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*									1	0.07											1	0.07
FY97 EQUIP																						
FY98 EQUIP																						
FY99 EQUIP																						
FY00 EQUIP																						
FY01 EQUIP									1	0.07											1	0.07
FY 02 EQUIP																						
FY03 EQUIP																						
FY04 EQUIP																						
FY05 EQUIP																						
FY TC EQUIP																						
TOTAL INSTALLATION COST		0.0		0.0	0.0	0.00	0.00		0.07		0.00		0.00		0.00		0.00		0.00			0.07
TOTAL PROCUREMENT COST		0.0		0.0	0.0	0.00	0.00		1.33		0.00		0.00		0.00		0.00		0.00			1.33

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIM 3 Months PRODUCTION LEADTIME: 10 Months

CONTRACT DATES: FY 1999 FY2000 FY200 ##### FY2002

DELIVERY DATES: FY1999: FY2000 FY200 Jul-01 FY2002

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

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

Feb-00

MODIFICATION TITLE: LFA Mitigation SONAR
COST CODE: VG006
MODELS OF SYSTEMS AFFECT SURTASS T-AGOS Ships and Shore Facilities
DESCRIPTION/JUSTIFICATION: LFA Mitigation Sonar is to be installed on the LFA Active ship in FY00 to provide warning of mammals in the immediate vicinity to prevent environmental impact during LFA operations.

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

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

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIM 3 Months PRODUCTION LEADTIME: 10 Months

CONTRACT DATES: FY1999: FY200 ##### FY2001:

DELIVERY DATES: FY1999: FY200 Jul-00 FY2001:

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

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

*Installations are turnkey.

Feb-00

MODIFICATION TITLE: Field Changes/Modifications
COST CODE: VG007
MODELS OF SYSTEMS AFFECT SURTASS T-AGOS Ships and Shore Facilities
DESCRIPTION/JUSTIFICATION: Field Changes/Modifications for correction of deficiencies identified by Fleet use, communications equipment, and replacement of aging/unsupportable shipboard equipment.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment			2	1.29	4	0.58	16	1.14	16	1.28	9	0.67	5	0.89	4	0.91	15	0.75			71	7.51
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*			2	0.20	4	0.50	16	0.56	16	0.28	9	0.17	5	0.25	4	0.18	15	0.09			71	2.22
FY97 EQUIP																						
FY98 EQUIP			2	0.20																	2	0.20
FY99 EQUIP					4	0.50															4	0.50
FY00 EQUIP							16	0.56													16	0.56
FY01 EQUIP									16	0.28											16	0.28
FY 02 EQUIP											9	0.17									9	0.17
FY03 EQUIP													5	0.25							5	0.25
FY04 EQUIP															4	0.18					4	0.18
FY05 EQUIP																	15	0.09			15	0.09
FY TC EQUIP																						
TOTAL INSTALLATION COST		0.0		0.2		0.50		0.56		0.28		0.17		0.25		0.18		0.09		0.00		2.22
TOTAL PROCUREMENT COST		0.0		1.49		1.08		1.70		1.56		0.84		1.14		1.09		0.84		0.00		9.73

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIM 3 Months PRODUCTION LEADTIME: 10 Months

CONTRACT DATES: FY1999: Oct 9 FY2000: Oct 99 FY2001: Oct 00 FY2002: Oct 01

DELIVERY DATES: FY1999: Jul 9 FY2000: Jul 00 FY2001: Jul 01 FY2002: Jul 02

INSTALLATION SCHEDULE:	PY	FY99 1	FY99 2	FY99 3	FY99 4	FY00 1	FY00 2	FY00 3	FY00 4	FY01 1	FY01 2	FY01 3	FY01 4
INPUT	2				4				16				16
OUTPUT	2				4				16				16

INSTALLATION SCHEDULE:	FY02 1	FY02 2	FY02 3	FY02 4	FY03 1	FY03 2	FY03 3	FY03 4	FY04 1	FY04 2	FY04 3	FY04 4	FY05 1	FY05 2	FY05 3	FY05 4	TC	TOTAL
INPUT				9				5				4				15		71
OUTPUT				9				5				4				15		71

Feb-00

MODIFICATION TITLE: SHIP ELECTRONICS UPGRADE
COST CODE: VG010
MODELS OF SYSTEMS AFFECT SURTASS T-AGOS Ships and Shore Facilities
DESCRIPTION/JUSTIFICATION: FY99 procures upgrade of ship electronics to Next Evolution processing for twinline arrays. ICAP equipment upgrade procurement will begin in FY02 with an inventory target of 8 ship systems.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment							2	4.04					2	4.42	2	4.53	1	2.31	1	2.36	2	4.81	10	22.48
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware*							2	0.28					2	0.28	2	0.28	1	0.14	1	0.14	2	0.28	10	1.40
FY 97 EQUIP																								
FY98 EQUIP																								
FY99 EQUIP							2	0.28															2	0.28
FY00 EQUIP																								
FY01 EQUIP																								
FY 02 EQUIP													2	0.28									2	0.28
FY03 EQUIP															2	0.28							2	0.28
FY04 EQUIP																	1	0.14					1	0.14
FY05 EQUIP																			1	0.14			1	0.14
FY TC EQUIP																					2	0.28	2	0.28
TOTAL INSTALLATION COST		0.0		0.0	0.0		0.28		0.00		0.00		0.28		0.28		0.14		0.14		0.28			1.40
TOTAL PROCUREMENT COST		0.0		0.0	0.0		4.32		0.00		0.00		4.70		4.81		2.45		2.50		5.09			23.88

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIM 6 months PRODUCTION LEADTIME: 10 Months

CONTRACT DATES: FY199 Jul-99 FY2002: Oct 01 FY2003: Oct 02 FY2004: Oct 03

DELIVERY DATES: FY199 Jul-00 FY2002: Jul 02 FY2003: Jul 03 FY2004: Jul 04

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

INSTALLATION SCHEDULE:	FY02 1	2	3	4	FY03 1	2	3	4	FY04 1	2	3	4	FY05 1	2	3	4	TC	TOTAL
INPUT				2				2				1				1	2	10
OUTPUT				2				2				1				1	2	10

UNCLASSIFIED
CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February 2000

APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: Surveillance Towed Array Sensor (SURTASS) 52VG

SUBHEAD NO.: 52VG

COST CODE	ITEM/MANUFACTURER	FY	SERV	PROC QTY	ACCEP PRIOR TO #####	BAL DUE AS OF #####	FISCAL YEAR 98												FISCAL YEAR 99												FISCAL YEAR 00											
							PY97			CALENDAR YEAR 98									CALENDAR YEAR 99												CALENDAR YEAR 00											
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
VG006	Block Upgrade (JAOS)																																							
	Raytheon Systems Company	1999		1		1												A																		1				
VG006	Block Upgrade (JAOS) Array																																							
	TBD	2000		1		1																													A					
VG006	Block Upgrade (JAOS) Array																																							
	TBD	2001		1		1																																		
VG006	Twinline Arrays																																							
	Raytheon Systems Company	1999		1		1																A															1			
VG006	TRU/Common Tow Cable																																							
	Digital System Resources	2000		1		1																														A				1	
VG006	Twinline SWATH Mod																																							
	IOSC, Little Creek, VA	2000		3		3																														A				3	
VG006	LFA Trainer IOSC/Dam Neck																																							
	Digital System Resources	2000		1		1																														A				1	
VG006	LFA Mitigation Sonar																																							
	Scientific Solutions Inc.	2000		1		1																														A				1	
VG010	Ship Electronics																																							
	Digital System Resources	1999		2		2																															A				2	
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP

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

NAVMAT FORM 7110/4 (REVISED 11/77)

UNCLASSIFIED
CLASSIFICATION

PRODUCTION SCHEDULE (DOD EXHIBIT P-21A)

DATE February 2000

APPROPRIATION/BUDGET ACTIVITY
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE
Surveillance Towed Array Sensor (SURTASS) 52VG

SUBHEAD NO.
52VG

COST CODE	ITEM/MANUFACTURER/ PROCUREMENT YEAR	FISCAL YEAR	CARRY OVER	FISCAL YEAR 01												FISCAL YEAR 02												FISCAL YEAR 03												LATER
				CY00			CALENDAR YEAR 01												CALENDAR YEAR 02												CALENDAR YEAR 03											
				OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
VG006	Block Upgrade (JAOS) Array																																					0
	TBD	FY00											1																									
VG006	Block Upgrade (JAOS) Array																																					0
	TBD	FY01		A																		1																
VG006	LFA Trainer Whidbey																																					0
	Digital System Resources	FY01		A									1																									
VG006	TRU/Common Tow Cable																																					0
	Digital System Resources	FY01		A									1																									
																																						0
																																					0
																																					0
																																					0
																																					0
																																					0
																																					0
																																					0

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

NAVMAT FORM 7110/4 (REVISED 11/77)

BUDGET ITEM JUSTIFICATION SHEET

DATE February 2000

APPROPRIATION/BUDGET ACTIVITY
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE
Tactical Support Centers (#2246)

SUBHEAD
52WH

	PY	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY											
COST (in millions)			**$2.6**	**$4.4**	**$6.2**	**$6.1**	**$5.6**	**$5.8**	**$5.9**	**Continuing**	**Continuing**

Narrative Description/Justification: The Tactical Support Center (TSC) program provides evolutionary systems and ancillary equipment upgrades to support the Maritime Sector Commanders (Ashore) with the capability to plan, direct and control the tactical operations of Joint and Naval Expeditionary Forces and other assigned units within their respective area of responsibility. These operations include littoral, open ocean, and over land all sensor (i.e. EO, IR, ISAR, etc.) surveillance, anti-surface warfare, over-the-horizon targeting, counter-drug operations, power projection, antisubmarine warfare, mining, search and rescue, and special operations.

The Tactical Support Center (TSC) program includes fixed site TSCs and Mobile Operations Control Centers (MOCCs). TSC's provide C4I capability, air-ground, satellite and point-to-point communications systems; sensor analysis capabilities; avionics and weapons system interfaces and facilities equipment. MOCC is a scalable and mobile version of the TSC for contingency operations and for support of operations from airfields that do not have a TSC.

WH046. Upgrade Equipment. This cost code contains TSC sensor analysis capabilities, avionics and weapons system interfaces, computer upgrades and associated software for interfacing analysis and processing equipment to the supported weapons systems (aircraft).

WH050. Facilities Equipment. This Cost Code contains the Facilities Equipment necessary to power and support the processing equipment and interfaces.

The FY99 Budget Request Procures: 1. TSC Upgrade Equipment; 2. Installation of Equipment.
The FY00 Budget Request Procures: 1. TSC Upgrade Equipment; 2. Facilities Equipment; and 3. Installation of Equipment.
The FY01 Budget Request Procures: 1. TSC Upgrade Equipment; 2. Facilities Equipment; and 3. Installation of Equipment.

INSTALLATION DATA: 15 TSC systems at 13 operational sites in FY99 and 14 TSC systems at 12 operational sites in FY00 (located at Keflavik, Iceland; Brunswick, ME; Jacksonville, FL; Sigonella, Italy; Rota, Spain; Kaneohe Bay, HI; Whidbey Island, WA; Kadena, Japan; Misawa, Japan; North Island, CA; Diego Garcia, Indian Ocean; Roosevelt Roads, Puerto Rico, and Masirah, Oman); 1 training site at Fleet Combat Training Center (FCTC) Dam Neck, Va and 1 ISEA site at SSC CHARLESTON DET Patuxent River.
8 MOCCs (Homeported at Brunswick, ME; Jacksonville, FL; Sigonella, Italy; Barbers Point/Kaneohe Bay, HI; Misawa, Japan; Whidbey Island, WA; Willow Grove, PA; and Point Mugu, CA.
Mobile Systems C2 Engineering Development, Software Support Facility (SSC CHARLESTON).

COST ANALYSIS												**DATE** February 2000					
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT						**P-1 ITEM NOMENCLATURE** Tactical Support Centers (#2246)									**SUBHEAD** 52WH		
			TOTAL COST IN THOUSANDS OF DOLLARS														
				PY		**FY 1998**			**FY 1999**			**FY 2000**			**FY 2001**		
COST CODE	**ELEMENT OF COST**	**ID CODE**	**QTY**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**
WHO46	ANALYSIS INTERFACE EQUIP	A								1,716			3,296			4,654
WHO5O	FACILITIES EQUIP	A								0			327			331
WH776	NON-FMP INSTALLATION	A								888			786			1,228
	TOTAL CONTROL									**2,604**			**4,409**			**6,213**

Remarks:

February-00

MODIFICATION TITLE: TACTICAL SUPPORT CENTERS (TSC) SUBHEAD/COST CODE: 52WH/WH046
COST CODE WHO46
MODELS OF SYSTEMS AFFECTED: N/A
DESCRIPTION/JUSTIFICATION: This cost code contains TSC sensor analysis capabilities, avionics and weapons system interfaces, computer upgrades and associated software for interfacing analysis and processing equipment to the supported weapons systems (aircraft).

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

FINANCIAL PLAN: ($ in millions)

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	VAR	36.4	VAR	2.9	VAR	1.7	VAR	3.3	VAR	4.7	VAR	5.0	VAR	4.6	VAR	4.8	VAR	5.0	CONT	CONT	VAR	68.4
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	92	9.3	34	1.9	18	0.9	22	0.7	22	1.1	22	1.1	22	1.0	20	1.0	19	0.9	CONT	CONT	VAR	17.9
PRIOR YR EQUIP	92	9.3																			92	9.3
FY 97 EQUIP																					0	0.0
FY 98 EQUIP			34	1.9	14	0.6															48	2.5
FY 99 EQUIP					4	0.3															4	0.3
FY 00 EQUIP							22	0.7													22	0.7
FY 01 EQUIP									22	1.1											22	1.1
FY 02 EQUIP											22	1.1									22	1.1
FY 03 EQUIP													22	1.0							22	1.0
FY 04 EQUIP															20	1.0					20	1.0
FY 05 EQUIP																	19	0.9			19	0.9
FY TC EQUIP																			CONT	CONT	VAR	CONT
TOTAL INSTALLATION COST		9.3		1.9		0.9		0.7		1.1		1.1		1.0		1.0		0.9		CONT		17.9
TOTAL PROCUREMENT COST		45.7		4.8		2.6		4.0		5.8		6.1		5.6		5.8		5.9		CONT		86.3

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: VAR PRODUCTION LEADTIME: VAR

CONTRACT DATES: FY 1999: VAR FY 2000: VAR FY 2001: VAR

DELIVERY DATES: FY 1999: VAR FY 2000: VAR FY 2001: VAR

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				FY 02			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT	126	5	7	6		4	9	9		4	10	8		4	10	8	
OUTPUT	126		5	7	6		4	9	9		4	10	8		4	10	8

INSTALLATION SCHEDULE:	FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT	4	10	8		4	9	7		4	9	6		CONT	CONT
OUTPUT		4	10	8		4	9	7		4	9	6	CONT	CONT

Notes/Comments
* P-5 contains various quantities of equipment procured. P-3A contains "Shore Sites installed" as measures of quantity
* Equipment cost includes initial training.

February-00

MODIFICATION TITLE: TACTICAL SUPPORT CENTERS (TSC) SUBHEAD/COST CODE: 52WH/WH050
COST CODE WHO50
MODELS OF SYSTEMS AFFECTED: N/A
DESCRIPTION/JUSTIFICATION: This Cost Code contains the Facilities Equipment necessary to power and support the processing equipment and interfaces.

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

FINANCIAL PLAN: ($ in millions)

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	VAR	5.7	VAR	0.2	VAR	0.0	VAR	0.3	VAR	0.3	VAR	0.0	VAR	0.0	VAR	0.0	VAR	0.0	CONT	CONT	VAR	6.5
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	11	1.8	3	0.1	0	0.0	3	0.1	3	0.1	0	0.0	0	0.0	0	0.0	0	0.0	CONT	CONT	20	2.1
PRIOR YR EQUIP	11	1.8																			11	1.8
FY 97 EQUIP																					0	0.0
FY 98 EQUIP			3	0.1																	3	0.1
FY 99 EQUIP																					0	0.0
FY 00 EQUIP							3	0.1													3	0.1
FY 01 EQUIP									3	0.1											3	0.1
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		1.8		0.1		0.0		0.1		0.1		0.0		0.0		0.0		0.0		CONT		2.1
TOTAL PROCUREMENT COST		7.5		0.3		0.0		0.4		0.4		0.0		0.0		0.0		0.0		CONT		8.6

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: VAR PRODUCTION LEADTIME: VAR

CONTRACT DATES: FY 1999: VAR FY 2000: VAR FY 2001: VAR

DELIVERY DATES: FY 1999: VAR FY 2000: VAR FY 2001: VAR

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				FY 02			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT	14							3				3					
OUTPUT	14								3				3				

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

Notes/Comments

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

* Equipment cost includes initial training.

BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: February 2000	
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY: BA2 Communications and Electronic Equipment**							P-1 ITEM NOMENCLATURE **Carrier ASW Module BLI: 224700 SBHD: C2SB**					
Program Element for Code B Items:							Other Related Program Elements					
	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)				**$0.4**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.4**
SPARES COST (In Millions)												**$0.0**

Starting with the FY 2000 budget, this program was consolidated into the Undersea Warfare Support Equipment line - 217600.

BUDGET ITEM JUSTIFICATION SHEET FOR AGGREGATED ITEMS P-40a										DATE: February 2000		
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY: BA 2 Communications and Electronics Equipment**							P-1 ITEM NOMENCLATURE **Carrier ASW Module BLI: 224700 BLI: C2SB**					
Procurement Items	ID Code	Prior Years	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
												$0.0
FY 1999												**$0.0**
CV-ASWMEC-1 (3)				155								**$155.0**
Real Time Sensor Data Link (1)				144								**$144.0**
												$0.0
												$0.0
												$0.0
												$0.0
												$0.0
												$0.0
												$0.0
												$0.0
												$0.0
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												$0.0
												$0.0
												$0.0
												$0.0
												$0.0

BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: February 2000	
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY 2-COMMUNICATIONS AND ELECTRONIC EQUIPMENT**							P-1 ITEM NOMENCLATURE **AN/SLQ-32(V)/2312**					
Program Element for Code B Items:							Other Related Program Elements					
	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)				**$1.5**	**$1.9**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$3.4**
SPARES COST (In Millions)				**$0.6**	**$0.1**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.7**

PROGRAM DESCRIPTION/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 Navy. The equipments consist of five configurations.
The (V)1 and (V)2 are computer controlled Electronic Support Measures (ESM) Systems that detect, sort, classify, identify and continuously display signals within frequency ranges. The (V)3 and (V)4 provide the capabilities of the passive system plus an integrated active electronic countermeasures response for all signals as a threat. THe (V)5 provides for an ECM capability on smaller class ships.

FY 98 thru FY 00: FMP - Installation of equipment for the Fleet Modernization Program (FMP).

FY 98 thru FY 00: Non-FMP - Installation of training equipment at shore facilities/activities.

WEAPONS SYSTEM COST ANALYSIS **P-5**	Weapon System		DATE: **February 2000**
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **AN/SLQ-32(V)/2312**	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years				FY 1999			FY 2000			FY 2001		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
TC5IN	FMP INSTALLATION								1,454			1,907			
TC6IN	NON-FMP INSTALLATION								0			0			
			0			**0**			**1,454**			**1,907**			**0**

BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: February 2000	
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY: BA 2 Communications and Electronic Equipment**							P-1 ITEM NOMENCLATURE **WLR-1H BLI: 232000 SBHD: 82LA**					
Program Element for Code B Items:							Other Related Program Elements					
	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)			**$0.0**	**$1.8**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$1.8**
SPARES COST (In Millions)			**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**

Starting with the FY 00 budget, this program was consolidated into the Submarine Support Equipment line: 256000.

Exhibit P-40a, Budget Item Justification for Aggregated Items							Date Feb 00						
Appropriation/Budget Activity OPN/2/23400/234006							Communications and Electronic Equipment						
Procurement Items	ID Code	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Comp	Total
Production Spt (Var)	A	9.250	2.200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	11.450
IW/CW Equipment	A	0.000	0.000	(5) 0.400	(2) 0.350	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.700
EA Equipment	A	0.000	0.000	(4) 2.200	(4) 1.686	(3) 1.700	(2) 1.350	(2) 1.100	(2) 1.100	(2) 1.500	(2) 1.600	Cont	Cont
PSYOP Equipment	A	0.000	0.000	(1) 0.794	(0) 0.000	(1) 0.727	(1) 0.755	(1) 0.425	(0) 0.000	(0) 0.000	(0) 0.000	0.000	2.791
PSYOP Software	A	0.000	0.000	0.000	(1) 0.300	(1) 0.350	(1) 0.350	(0) 0.000	(0) 0.000	(0) 0.000	(0) 0.000	0.000	1.000
TD Equipment	A	0.000	0.000	(1) 0.298	(1) 0.400	(1) 0.500	(1) 0.500	(1) 0.300	(3) 0.868	(1) 0.409	(1) 0.406	Cont	Cont
IMPACTS Equipment	A	0.000	0.000	0.000	(4) 0.100	(6) 0.150	(6) 0.175	(6) 0.180	(8) 0.300	(9) 0.800	(9) 0.850	Cont	Cont
IMPACTS Software	A	0.000	0.000	0.000	(4) 0.250	(6) 0.250	(4) 0.280	(2) 0.150	(3) 0.225	(3) 0.200	(3) 0.200	Cont	Cont
IMPACTS Training	A	0.000	0.000	0.000	0.70	0.200	0.251	0.104	0.200	0.200	0.200	Cont	Cont
Installation FMP	A	0.000	0.000	(0) 0.000	(8) 0.242	(11) 0.221	(9) 0.240	(9) 0.240	(8) 0.155	(6) 0.244	(5) 0.214	Cont	Cont
Total Quantity		Var	Var	11	16	18	15	12	16	15	15		
Total Cost	A	9.250	2.200	3.692	3.398	4.098	3.901	2.549	2.848	3.353	3.470	Cont	Cont

P-1 Shopping List - Item No 54-1 of 54-1

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

BUDGET ITEM JUSTIFICATION SHEET P-40									DATE: February 2000			
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY/BA2, Comms and Electronics Equip**							P-1 ITEM NOMENCLATURE **C3 COUNTERMEASURES/234600**					
Program Element for Code B Items:							Other Related Program Elements					
		ID Code		FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)				**$10.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**N/A**	**$10.0**
SPARES COST (In Millions)	N/A											

JUSTIFICATION: (U) C3 Countermeasures program provides funds for various equipment, devices, subsystems, and systems which provide the capability to degrade the effectiveness of enemy weapons by performing countermeasure functions against his command, control, and communications (C3) and weapons targeting systems. The funds remaining in this program are provided to install previously procured Outlaw Bandidt passive countermeasure systems on surface combatant ships.

BUDGET ITEM JUSTIFICATION SHEET

DATE: February 2000

APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	SUBHEAD
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	SHIPBOARD IW EXPLOIT SYSTEMS 2360	521U

	PY	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY										
COST (in millions)		**40.1**	**50.9**	**61.5**	**62.3**	**64.3**	**103.5**	**101.4**	**Continuing**	**Continuing**

JUSTIFICATION OF BUDGET YEAR REQUIREMENTS: This budget line is a consolidation of several shipboard Information Warfare (IW) exploit systems procurement lines (COMBAT DF (NARM 2419), OUTBOARD (NARM 2430), EW Support (SSEE) (NARM 2343), BGPHES (NARM 2434)). These lines are being consolidated for efficiency of management and also as a reflection of greater commonality in the systems. This latter point reflects the continuing effort to collapse "stovepipes" in order to achieve a scaleable, modular open architecture cryptologic system made up of common hardware components and running common operator interface software. This consolidation aligns the procurement budget structure to coincide with the R&D and O&MN structures which were consolidated previously into common Shipboard IW Exploit Systems lines.

(U) This line procures the following:

(U) Automated Digital Acquisition Subsystem (ADAS) hardware and associated installation and production support. ADAS is an upgrade to the Combat DF (AN/SRS-1) system. Combat DF is an information warfare exploitation and direction finding system with the capability to detect, locate and identify hostile targets at long-range and input this information into the ship's tactical data system. The ADAS upgrade provides the foundation for exploitation of unconventional and Low Probability of Intercept (LPI) signal types.

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

(U) Ships Signal Exploitation Equipment (SSEE) Phase 2 - procures permanently installed equipment which replaces obsolete equipment with Non-Developmental Items (NDI) and provides an open scaleable architecture for achieving commonality among surface cryptologic systems. SSEE provides the afloat cryptologist with a major portion of threat identification, analysis of Communications Intelligence (COMINT) as well as indications to radio direction finding assets. Equipment includes Receivers, RF Management Systems Recorders, Audio Distribution Systems, computers, radio direction finding systems, antennas, and ancillary hardware. SSEE PHASE 2 INCREMENT D: Procures equipment that will completely digitizes the system, adds signal analysis/processing capability and provides an open architecture that accommodates additional functional capabilities. The SSEE Increment D open system distributed client server architecture will use Digital Signal Processing (DSP), Versa Module Europa (VME) and VME Extensions for Instrumentation (VXI) components. Applications such as Desperado and Short Swing will be integrated into the Increment D system.

BUDGET ITEM JUSTIFICATION SHEET		DATE: February 2000
APPROPRIATION/BUDGET ACTIVITY	**P-1 ITEM NOMENCLATURE**	**SUBHEAD**
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	SHIPBOARD IW EXPLOIT SYSTEMS 2360	521U

JUSTIFICATION OF BUDGET YEAR REQUIREMENTS: (continued)

(U) The Transportable Radio Direction Finding (T-RDF) and associated deck and/or mast antenna is a complete communication band shipboard Direction Finding system for bearing computation for surface combatants ai designed to operate in the harsh shipboard environment.

(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. BGPHES-SYGATE allows for real time airborne payload connection/control using over-the horizon satellite communications as the link and allows the ship to conduct operations without a line of sight dedicated asset. BGPHES -ST PROFORMA will convert BGPHES-ST (V.1) system to (V.2) system , thus allowing for insertion of ELINT and Proforma subsystems. BGPHES-ST is interoperable with the USAF Direction Finding/Communication Intelligence (DF/COMINT) and can be expanded to provide Electronic Intelligence (ELINT) coverage. BGPHES will become the Navy's Signals Intelligence (SIGINT) component of the Distributed Common Ground Station (DCGS) and be multi-service interoperable and Joint SIGINT Avionics Family (JSAF) compliant. 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. BGPHES-ST is a fully digital, open architecture system residing on the SCI-GCSS LAN. It utilizes full Cryptologic Ur Digital Special Signals Processor, Desperado and GCP-8 ELINT processors will be added to the surface terminal to complement the Airborne receive and the Local VME (Versa Module Europa) Extended for Instrumentation (VUI) receive subsystems.

(U) The Common High Bandwidth Data Link - Shipboard Terminal (CHBDL - ST) will provide a wideband data link between Navy/Joint airborne sensor systems and the shipboard processors of national second tactical reconnaissance programs. It is designed to communicate with the BGPHES, the Joint Services Imagery Processing System - Navy (JSIPS-N), the Aircraft Carrier Tactical Support Center (CV-TSC), and the Joint Surveill Target Attack Radar System (Joint STARS). CHBDL - ST benefits the fleet by providing a horizon extension for line-of-sight sensor systems for use in battle damage assessment or mission planning and is interoperable with the USAF U2 aircraft. Test support equipment has been budgeted for FY2000 to procure Programmable Ground/Support Equipment (PGSE) for for CHBDL CDL, Common Data Link, interoperability tests with UAV fli tests and and manned aircraft flight tests.
Installations are accomplished by Alteration Installation Teams (AIT) during ship pier side availability.

((U) Installation Agent(s): Installations are accomplished by formal shipalt by Alteration Installation Team (AIT).

Code B Item: COBLU, RDT&E, DW, Program Element 0305885G, Milestone III, Feb 2000.
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COST ANALYSIS													**DATE:** February 2000
APPROPRIATION ACTIVITY					**P-1 ITEM NOMENCLATURE**								**SUBHEAD**
OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT					SHIPBOARD IW EXPLOIT SYSTEMS 2360								521U
			TOTAL COST IN THOUSANDS OF DOLLARS										
				PY	**FY 1999**			**FY 2000**			**FY 2001**		
COST CODE	**ELEMENT OF COST**	**ID CODE**	**QTY**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**
1U001	ADAS	A			5	2,200	11,000	4	1,788	7,150			
1U013	ECP/OBSOLECENCE INTEGRATION	A					3,062						
1U015	ADAS TSTAR MOD KITS	A						6	395	2,370			
1U004	COBLU PHASE I	B			1	13,682	13,682	3	6,900	20,700	3	7,037	21,111
1U008	SSEE PHASE 2 INCREMENT D	A			7	872	6,104	7	959	6,713	4	960	3,840
1U009	T-RDF SYSTEMS	A			3	435	1,305	2	471	942	2	486	972
1U010	T-RDF ANTENNAS	A			9	80	720	4	155	620	5	170	850
XU001	BGPHES - ST	A			5	1,685	8,425						
1U019	BGPHES-ST	A						3	1,738	5,214	2	1,765	3,530
1U024	SYGATE UPGRADE KITS	A						7	160	1,120	6	160	960
1U026	PROFORMA UPGRADE KITS	A						2	200	400	4	200	800
XU003	CHBDL - ST	A			5	6,842	34,210	3	6,462	19,386			
1U027	CHBDL - ST	A									2	6,727	13,454
XU007	DSM/ATM BACKFIT KITS	A					0	6	749	4,494			
1U028	DSM/ATM BACKFIT KITS	A									3	755	2,265
XU008	TEST EQUIPMENT	A					0	1	2,341	2,341			
XU009	DUAL BAND BACKFIT KITS	A			1	1,348	1,348	1	1,375	1,375			
							0						
1U555	**PRODUCTION SUPPORT**						**3,493**			**4,845**			**3,058**
1U012	PRODUCTION SUPPORT	A					1,371						
1U555	PRODUCTION SUPPORT	A								2,451			3,058
XU005	PRODUCTION SUPPORT	A					2,122						
XU555	PRODUCTION SUPPORT									2,394			
1U777	**INSTALLATION**						**12,309**			**9,953**			**10,684**
1U777	INSTALL-FMP						2,184			2,004			8,988
1U777	DSA						382			1,108			750
XU777	INSTALL-FMP						8,376			5,739			
XU777	DSA						1,011			732			
1U776	INSTALLATION-NON FMP(Shipboard IW)	A					254			78			946
XU776	INSTALLATION NON - FMP(CHBDL)	A					102			292			
1U777	INSTALLATION-NON FMP												
	TOTALS						**95,658**			**87,623**			**61,524**
	TOTAL BLI 2360						**40,064**			**50,870**			
	TOTAL BLI 2434						**55,594**			**36,753**			

Cost Code: 1U004, FY99 includes the procurement of 1 EDM upgrade and non-recurring engineering costs.

Cost Code: 1U001, FY 00 unit cost decrease reflects the procurement of 2 ADAS COLT trainers. The 2 systems are not full up ADAS systems.

Cost Code: 1U008/1U010: Unit cost varies as a result of the different configuration required for different hulls.

Cost Code: 1U013, FY 99 reflects non-recurring engineering costs associated with the ADAS TSTAR Mod Kits and Combat DF/BGPHES LHD integration.

This program now includes OPN P-1 Line Item Common High Bandwidth Data Link (BLI 2434) beginning in FY01. FY99 & FY00 detail information is provided for budget comparability.

DD FORM 2446, JUN 86

PROCUREMENT HISTORY AND PLANNING

DATE: February 2000

B. APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

C. P-1 ITEM NOMENCLATURE: SHIPBOARD IW EXPLOIT SYSTEMS 2360

SUBHEAD: 521U

COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
1N006	ADAS	98	SANDERS/NH	OPTION	OSP	NA	Jan-98	Aug-99	2	2,456	YES	N/A
1U001	ADAS	99	SANDERS/NH	OPTION	OSP	N/A	Feb-99	Dec-00	5	2,200	YES	N/A
		00	SANDERS/NH	OPTION	OSP	N/A	Jan-00	Jul-01	4	1,788	YES	N/A
1U015	ADAS T-STAR MOD KITS	00	SANDERS/NH	OPTION	OSP	N/A	Mar-00	Mar-01	6	395	YES	N/A
1U004	COBLU PHASE 1 SYSTEM	99	VARIOUS	VARIOUS	OSP/SSC	N/A	Nov-98	Oct-00	1	13,682	YES	N/A
		00	SANDERS/NH	SS	OSP	Sep-99	Feb-00	Oct-01	3	6,900	YES	N/A
		01	SANDERS/NH	OPTION	OSP	N/A	Jan-01	Jul-02	3	7,037	YES	N/A
1U008	SSEE PHASE 2 INCREMENT D	99	VARIOUS	COTS	SSC/SC	N/A	Feb-99	Jun-99	7	872	YES	N/A
		00	VARIOUS	COTS	SSC/SC	N/A	Jan-00	May-00	7	959	YES	N/A
		01	VARIOUS	COTS	SSC/SC	N/A	Jan-01	May-01	4	960	YES	N/A

D. REMARKS

1U004: FY99 reflects non-recurring engineering costs and the procurement of 1 EDM upgrade.

1U008: Unit cost varies as a result of the different configuration required for different hulls.

DD FORM 2446, JUN 87

PROCUREMENT HISTORY AND PLANNING

DATE: February 2000

B. APPROPRIATION/BUDGET ACTIVITY
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

C. P-1 ITEM NOMENCLATURE
SHIPBOARD IW EXPLOIT SYSTEMS 2360

SUBHEAD
521U

COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
1U009	T-RDF SYSTEMS	99	SWRI SA, TEXAS	OPTION	OSP	N/A	Feb-99	Jul-99	3	435	YES	N/A
		00	SWRI SA, TEXAS	FFP	SSC/SC	N/A	Jan-00	Jun-00	2	471	YES	N/A
		01	SWRI SA, TEXAS	OPTION	OSP	N/A	Jan-01	Jun-01	2	486	YES	N/A
1U010	T-RDF ANTENNAS	99	SWRI SA, TEXAS	OPTION	OSP	N/A	Feb-99	Jul-99	9	80	YES	N/A
		00	SWRI SA, TEXAS	FFP	SSC/SC	N/A	Jan-00	Jun-00	4	155	YES	N/A
		01	SWRI SA, TEXAS	OPTION	OSP	N/A	Jan-01	Jun-01	5	170	YES	N/A
XU001	BGPHES - ST	99	VARIOUS	COTS	SSC/SC	N/A	Feb-99	Feb-00	5	1,685	YES	N/A
1U019	BGPHES - ST	00	VARIOUS	COTS	SSC/SC	N/A	Dec-99	Dec-00	3	1,738	YES	N/A
		01	VARIOUS	COTS	SSC/SC	N/A	Dec-00	Dec-01	2	1,765	YES	N/A
1U024	SYGATE UPGRADE KITS	00	VARIOUS	COTS	SSC/SC	N/A	Feb-00	Jun-00	7	160	YES	N/A
		01	VARIOUS	COTS	SSC/SC	N/A	Dec-00	Apr-01	6	160	YES	N/A
1U026	PROFORMA UPGRADE KITS	00	VARIOUS	COTS	SSC/SC	N/A	Feb-00	Jun-00	2	200	YES	NA
		01	VARIOUS	COTS	SSC/SC	N/A	Dec-00	Apr-01	4	200	YES	N/A

D. REMARKS

COTS - Commercial off-the-shelf hardware procurements from various vendors.
1U010 - Unit cost varies as a result of the different configuration required for different hulls.

DD FORM 2446, JUN 87

PROCUREMENT HISTORY AND PLANNING

DATE: February 2000

B. APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

C. P-1 ITEM NOMENCLATURE: SHIPBOARD IW EXPLOIT SYSTEMS 2360

SUBHEAD: 521U

COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
XU003	CHBDL - ST	99	L3 COMMUNICATIONS	OPTION	SPAWAR	Jul-97	Nov-98	Mar-00	5	6,842	YES	N/A
XU003		00	L3 COMMUNICATIONS	OPTION	SPAWAR	N/A	Dec-99	Mar-01	3	6,462	YES	N/A
1U027		01	L3 COMMUNICATIONS	OPTION	SPAWAR	N/A	Dec-00	Mar-02	2	6,727	YES	N/A
XU007	DSM/ATM BACKFIT KITS	00	L3 COMMUNICATIONS	OPTION	SPAWAR	N/A	Feb-00	May-01	6	749	YES	N/A
1U028		01	L3 COMMUNICATIONS	OPTION	SPAWAR	N/A	Dec-00	Mar-02	3	755	YES	N/A
XU008	TEST EQUIPMENT	00	L3 COMMUNICATIONS	OPTION	SPAWAR	N/A	Feb-00	Jun-01	1	2,341	YES	N/A
XU009	DUAL BAND BACKFIT KIT	99	L3 COMMUNICATIONS	OPTION	SPAWAR	N/A	Jan-99	Apr-00	1	1,348	YES	N/A
XU009		00	L3 COMMUNICATIONS	OPTION	SPAWAR	N/A	Feb-00	May-01	1	1,375	YES	N/A

D. REMARKS

DD FORM 2446, JUN 87

February 2000

MODIFICATION TITLE: ADAS-SHIP
COST CODE 1U001/1U777
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: (U) Automated Digital Acquisition Subsystem (ADAS) hardware and associated installation and production support. ADAS is an upgrade to the Combat DF (AN/SRS-1) system. The ADAS upgrade provides the foundation for exploitation of unconventional and Low Probability of Intercept (LPI) signal types.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	3	8.0	1	2.5	5	11.0	1	1.8													10	23.3
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.0	1	0.2	2	0.5	1	0.3	5	1.2	1	0.3	0	0.0	0	0.0	0	0.0			10	2.5
PRIOR YR EQUIP			1	0.2																	1	0.2
FY 97 EQUIP					2	0.5															2	0.5
FY 98 EQUIP							1	0.3													1	0.3
FY 99 EQUIP									5	1.2											5	1.2
FY 00 EQUIP											1	0.3									1	0.3
FY 01 EQUIP																					0	0.0
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		0.0		0.2		0.5		0.3		1.2		0.3		0.0		0.0		0.0		0.0		2.5
TOTAL PROCUREMENT COST		8.0		2.7		11.5		2.1		1.2		0.3		0.0		0.0		0.0		0.0		25.8

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 MOS PRODUCTION LEADTIME: 18 MOS

CONTRACT DATES: FY 1999: Feb-99 FY 2000: Jan-00 FY 2001:

DELIVERY DATES: FY 1999: Dec-00 FY 2000: Jul-01 FY 2001:

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

INSTALLATION SCHEDULE:	FY 02 1	2	3	4	FY 03 1	2	3	4	FY 04 1	2	3	4	FY 05 1	2	3	4	TC	TOTAL
INPUT	1																	10
OUTPUT	1																	10

Notes/Comments

February 2000

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

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	1	2.6	1	2.5	0	0.0	3	5.4													5	10.5
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.0	1	0.2	1	0.3	0	0.0	2	0.2	1	0.3	0	0.0	0	0.0	0	0.0			5	1.0
PRIOR YR EQUIP																					0	0.0
FY 97 EQUIP			1	0.2																	1	0.2
FY 98 EQUIP					1	0.3															1	0.3
FY 99 EQUIP																					0	0.0
FY 00 EQUIP									2	0.2	1	0.3									3	0.5
FY 01 EQUIP																					0	0.0
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		0.0		0.2		0.3		0.0		0.2		0.3		0.0		0.0		0.0		0.0		1.0
TOTAL PROCUREMENT COST		2.6		2.7		0.3		5.4		0.2		0.3		0.0		0.0		0.0		0.0		11.5

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 MOS PRODUCTION LEADTIME: 18 MOS

CONTRACT DATES: FY 1999: Feb-99 FY 2000: Jan-00 FY 2001:

DELIVERY DATES: FY 1999: Dec-00 FY 2000: Jul-01 FY 2001:

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

INSTALLATION SCHEDULE:	FY 02 1	2	3	4	FY 03 1	2	3	4	FY 04 1	2	3	4	FY 05 1	2	3	4	TC	TOTAL
INPUT		1																5
OUTPUT		1																5

Notes/Comments

February 2000

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

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment							6	2.4													6	2.4
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.0	0	0.0	0	0.0	0	0.0	6	0.1	0	0.0	0	0.0	0	0.0	0	0.0			6	0.1
PRIOR YR EQUIP																					0	0.0
FY 97 EQUIP																					0	0.0
FY 98 EQUIP																					0	0.0
FY 99 EQUIP																					0	0.0
FY 00 EQUIP									6	0.1											6	0.1
FY 01 EQUIP																					0	0.0
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		0.1		0.0		0.0		0.0		0.0				0.1
TOTAL PROCUREMENT COST		0.0		0.0		0.0		2.4		0.1		0.0		0.0		0.0		0.0				2.5

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 MOS PRODUCTION LEADTIME: 12 MOS

CONTRACT DATES: FY 1999: FY 2000: Jan-00 FY 2001:

DELIVERY DATES: FY 1999: FY 2000: Jan-01 FY 2001:

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

INSTALLATION SCHEDULE:	FY 02 1	2	3	4	FY 03 1	2	3	4	FY 04 1	2	3	4	FY 05 1	2	3	4	TC	TOTAL
INPUT																		6
OUTPUT																		6

Notes/Comments

February 2000

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

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment					1	2.4	2	13.8	3	21.1	2	14.1	3	21.4	2	14.4					13	87.2
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	2.3	3	1.8	3	1.8	2	1.2	0.0	0.0	12	7.1
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											2	1.2									2	1.2
FY 01 EQUIP											2	1.1	1	0.6							3	1.7
FY 02 EQUIP													2	1.2							2	1.2
FY 03 EQUIP															3	1.8					3	1.8
FY 04 EQUIP																	2	1.2			2	1.2
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		0.0		2.3		1.8		1.8		1.2		0.0		7.1
TOTAL PROCUREMENT COST		0.0		0.0		2.4		13.8		21.1		16.4		23.2		16.2		1.2		0.0		94.3

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 MOS PRODUCTION LEADTIME: 20 MOS

CONTRACT DATES: FY 1999: Nov-98 FY 2000: Jan-00 FY 2001: Jan-01

DELIVERY DATES: FY 1999: Oct-00 FY 2000: Sep-01 FY 2001: Jul-02

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

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

Notes/Comments: FY99 hardware buy is EDM upgrade. Install is not priced seperately because it is a turnkey installation.

February 2000

MODIFICATION TITLE: COBLU-SHORE
COST CODE 1U004/1U776
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: (U) 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)

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment							1	6.9			1	7.0	1	7.1							3	21.0
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.6	1	0.6	1	0.6	0	0.0	0.0	0.0	3	1.8
PRIOR YR EQUIP																					0	0.0
FY 97 EQUIP																					0	0.0
FY 98 EQUIP																					0	0.0
FY 99 EQUIP																					0	0.0
FY 00 EQUIP											1	0.6									1	0.6
FY 01 EQUIP																					0	0.0
FY 02 EQUIP													1	0.6							1	0.6
FY 03 EQUIP															1	0.6					1	0.6
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		0.0		0.6		0.6		0.6		0.0		0.0		1.8
TOTAL PROCUREMENT COST		0.0		0.0		0.0		6.9		0.0		7.6		7.7		0.6		0.0		0.0		22.8

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 MOS PRODUCTION LEADTIME: 20 MOS

CONTRACT DATES: FY 1999: FY 2000: Jan-00 FY 2001:

DELIVERY DATES: FY 1999: FY 2000: Sep-01 FY 2001:

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

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

Notes/Comments: Total reflects inventory objective.

February 2000

MODIFICATION TITLE: SSEE INCREMENT D- SHIP
COST CODE 1U008/1U777
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: (U) The SSEE Program will provide the battle group the capability to exploit Signals Of Interest (SOI) by providing a state-of-the-art system which detects, acquires, and collects data on any potential threat to the battle group. This information, in conjunction with Combat/EW Systems and C3I elements, supports the tactical combat decision making process and the national or strategic collection objective

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment					7	6.1	6	5.7	4	3.8	3	2.9	4	4.1							24	22.6
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.0	0	0.0	7	1.2	6	1.1	4	0.5	3	0.5	4	0.7	0	0.0	0	0.0			24	4.0
PRIOR YR EQUIP																					0	0.0
FY 97 EQUIP																					0	0.0
FY 98 EQUIP																					0	0.0
FY 99 EQUIP					7	1.2															7	1.2
FY 00 EQUIP							6	1.1													6	1.1
FY 01 EQUIP									4	0.5											4	0.5
FY 02 EQUIP											3	0.5									3	0.5
FY 03 EQUIP													4	0.7							4	0.7
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		0.0		0.0		1.2		1.1		0.5		0.5		0.7		0.0		0.0		0.0		4.0
TOTAL PROCUREMENT COST		0.0		0.0		7.3		6.8		4.3		3.4		4.8		0.0		0.0		0.0		26.6

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 MOS PRODUCTION LEADTIME: 5 MOS

CONTRACT DATES: FY 1999: Feb-99 FY 2000: Jan-00 FY 2000: Jan-01

DELIVERY DATES: FY 1999: Jun-99 FY 2000: May-00 FY 2001: May-01

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4
INPUT				2	5			2	4			2	2
OUTPUT				2	5			1	4	1		1	3

INSTALLATION SCHEDULE:	FY 02 1	FY 02 2	FY 02 3	FY 02 4	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT			2	1			2	2										24
OUTPUT				3			1	3										24

Notes/Comments

February 2000

MODIFICATION TITLE: SSEE INCREMENT D- SHORE
COST CODE 1U008/1U776
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: (U) The SSEE Program will provide the battle group the capability to exploit Signals Of Interest (SOI) by providing a state-of-the-art system which detects, acquires, and collects data on any potential threat to the battle group. This information, in conjunction with Combat/EW Systems and C3I elements, supports the tactical combat decision making process and the national or strategic collection objective

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment							1	1.0													1	1.0
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0			1	0.1
PRIOR YR EQUIP																					0	0.0
FY 97 EQUIP																					0	0.0
FY 98 EQUIP																					0	0.0
FY 99 EQUIP																					0	0.0
FY 00 EQUIP							1	0.1													1	0.1
FY 01 EQUIP																					0	0.0
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.1		0.0		0.0		0.0		0.0		0.0		0.0		0.1
TOTAL PROCUREMENT COST		0.0		0.0		0.0		1.1		0.0		0.0		0.0		0.0		0.0		0.0		1.1

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 MOS PRODUCTION LEADTIME: 4 MOS

CONTRACT DATES: FY 1999: FY 2000: Jan-00 FY 2001:

DELIVERY DATES: FY 1999: FY 2000: May-00 FY 2001:

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

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

Notes/Comments

February 2000

MODIFICATION TITLE: T-RDF ANTENNAS-SHIP
COST CODE 1U010 / 1U777
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: (U) Transportable Radio Direction Finding (T-RDF) is a complets communication band shipboard T-RDF system for signal acquisition and bearing computation for surface combantants and is designed to opertate in the harsh shipboard enviornment

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	0	0.0		0.0	9	0.7	4	0.6	5	0.9	4	0.7	1	0.2							23	3.1
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.0	0	0.0	4	0.5	4	0.6	5	0.7	4	0.6	1	0.1	0	0.0	0	0.0			18	2.5
PRIOR YR EQUIP																					0	0.0
FY 97 EQUIP																					0	0.0
FY 98 EQUIP																					0	0.0
FY 99 EQUIP					4	0.5															4	0.5
FY 00 EQUIP							4	0.6													4	0.6
FY 01 EQUIP									5	0.7											5	0.7
FY 02 EQUIP											4	0.6									4	0.6
FY 03 EQUIP													1	0.1							1	0.1
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.5		0.6		0.7		0.6		0.1		0.0		0.0		0.0		2.5
TOTAL PROCUREMENT COST		0.0		0.0		1.2		1.2		1.6		1.3		0.3		0.0		0.0		0.0		5.6

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 MOS PRODUCTION LEADTIME: 5 MOS

CONTRACT DATES: FY 1999: Feb-99 FY 2000: Jan-00 FY 2001: Jan-01

DELIVERY DATES: FY 1999: Jul-99 FY 2000: Jun-00 FY 2001: Jun-01

INSTALLATION SCHEDULE:	PY	FY 99 1	2	3	4	FY 00 1	2	3	4	FY 01 1	2	3	4
INPUT	0				9				4				5
OUTPUT	0				6	3			4				5

INSTALLATION SCHEDULE:	FY 02 1	2	3	4	FY 03 1	2	3	4	FY 04 1	2	3	4	FY 05 1	2	3	4	TC	TOTAL
INPUT				4				1										23
OUTPUT				4				1										23

Notes/Comments: *FY 99 reflects the procurement of individual antennas vice a suite of antennas which is reflected in the procurement quantities FY 00-FY 03.
Each installed suite includes 1 mast and 6 deck edge antennas. These installs are required to utilize the T-RDF systems as carry-on hardware during critical missions .

February 2000

MODIFICATION TITLE: Battle Group Passive Horizon Extension System Surface Terminal (BGPHES-ST) (XU001/XU776) - Shore
COST CODE XU001/XU776
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION:

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		FY 05		TC		Total	
	Qty	$	Qty	$		$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment			2	2.4	1	1.7																	3	4.1
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware*	0	0.0	0	0.0	2	0.1	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	0.4
PRIOR YR EQUIP																							0	0.0
FY 97 EQUIP																							0	0.0
FY 98 EQUIP					2	0.1																	2	0.1
FY 99 EQUIP							1	0.3															1	0.3
FY 00 EQUIP																							0	0.0
FY 01 EQUIP																							0	0.0
FY 02 EQUIP																							0	0.0
FY 03 EQUIP																							0	0.0
FY 04 EQUIP																							0	0.0
FY 05 EQUIP																							0	0.0
FY TC EQUIP																							0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.1		0.3		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.4
TOTAL PROCUREMENT COST		0.0		2.4		1.8		0.3		0.0		0.0		0.0		0.0		0.0		0.0		0.0		4.5

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 MOS PRODUCTION LEADTIME: 12 MOS

CONTRACT DATES: FY 1999: Feb-99 FY 2000: FY 2001:

DELIVERY DATES: FY 1999: Feb-00 FY 2000: FY 2001:

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

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

Notes/Comments

February 2000

MODIFICATION TITLE: BGPHES-SHIP
COST CODE XU001/1U019/XU777/1U777
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: (U) The Battle Group Passive Horizon Extension System (BGPHES) extends the Battle Groups line-of-sight radio horizon by controlling remote receivers in an aircraft sensor payload. BGPHES provides the ability for cryptologic operators to monitor, record, and analyze selected signal of interest. Reports can be prepared and information disseminated from BGPHES via the Tactical Intelligence Information Exchange System (TACINTEL) or directly to the host ship's C4I network.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	3	4.3	4	4.9	4	6.7	3	5.2	2	3.5	1	1.8	2	3.3	5	9.3	4	7.5			28	46.5
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.0	3	2.4	4	3.4	4	2.1	3	1.5	2	1.1	1	0.5	2	1.1	5	2.8	4	2.5	28	17.4
PRIOR YR EQUIP																					0	0.0
FY 97 EQUIP			3	2.4																	3	2.4
FY 98 EQUIP					4	3.4															4	3.4
FY 99 EQUIP							4	2.1													4	2.1
FY 00 EQUIP									3	1.5											3	1.5
FY 01 EQUIP											2	1.1									2	1.1
FY 02 EQUIP													1	0.5							1	0.5
FY 03 EQUIP															2	1.1					2	1.1
FY 04 EQUIP																	5	2.8			5	2.8
FY 05 EQUIP																					0	0.0
FY TC EQUIP																			4	2.5	4	2.5
TOTAL INSTALLATION COST		0.0		2.4		3.4		2.1		1.5		1.1		0.5		1.1		2.8		2.5		17.4
TOTAL PROCUREMENT COST		4.3		7.3		10.1		7.3		5.0		2.9		3.8		10.4		10.3		2.5		63.9

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 MOS PRODUCTION LEADTIME: 12 MOS

CONTRACT DATES: FY 1999: Feb-99 FY 2000: Dec-99 FY 2001: Dec-00

DELIVERY DATES: FY 1999: Feb-00 FY 2000: Dec-00 FY 2001: Dec-01

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

INSTALLATION SCHEDULE:	FY 02 1	2	3	4	FY 03 1	2	3	4	FY 04 1	2	3	4	FY 05 1	2	3	4	TC	TOTAL
INPUT		1	1			1				1	1			2	1	2	4	28
OUTPUT		1	1			1				1	1			1	2	1	5	28

Notes/Comments

February 2000

MODIFICATION TITLE: BGPHES-ST SYGATE Upgrade Kits - Ship
COST CODE 1U024/1U777
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: BGPHES-ST SYGATE allows for real time airborne payload connection/control using over-the horizon satelite communications as the link and allows the ship to conduct operations without a line of sight, dedicated asset.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$		$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits Nonrecurring																						
Equipment							7	1.1	6	1.0											13	2.1
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.0	0	0.0	0	0.0	7	0.3	6	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	13	0.5
PRIOR YR EQUIP																					0	0.0
FY 97 EQUIP																					0	0.0
FY 98 EQUIP																					0	0.0
FY 99 EQUIP																					0	0.0
FY 00 EQUIP							7	0.3													7	0.3
FY 01 EQUIP									6	0.2											6	0.2
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.3		0.2		0.0		0.0		0.0		0.0		0.0	0	0.5
TOTAL PROCUREMENT COST		0.0		0.0		0.0		1.4		1.2		0.0		0.0		0.0		0.0		0.0	0	2.6

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 Month PRODUCTION LEADTIME: 4 Months

CONTRACT DATES: FY 1999: FY 2000: Feb-00 FY 2001: Dec-00

DELIVERY DATES: FY 1999: FY 2000: Jun-00 FY 2001: Apr-01

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4
									7			4	2
INPUT	0												
									7			2	4
OUTPUT	0												

INSTALLATION SCHEDULE:	FY 02 1	FY 02 2	FY 02 3	FY 02 4	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
																		13
INPUT																		
																		13
OUTPUT																		

Notes/Comments: Total reflects Inventory objective

February 2000

MODIFICATION TITLE: BGPHES-ST PROFORMA Upgrade Kits - Ship
COST CODE 1U026 /1U777
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: BGHES -ST PROFORMA will convert BGHES-ST (V.1) system to (V.2) system , thus allowing for insertion of ELINT and Proforma subsystems.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$		$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits Nonrecurring																						
Equipment							2	0.4	4	0.8									0	0.0	6	1.2
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.0	0	0.0	0	0.0	2	0.1	4	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	6	0.3
PRIOR YR EQUIP																					0	0.0
FY 97 EQUIP																					0	0.0
FY 98 EQUIP																					0	0.0
FY 99 EQUIP																					0	0.0
FY 00 EQUIP							2	0.1													2	0.1
FY 01 EQUIP									4	0.2											4	0.2
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																			0	0.0	0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.1		0.2		0.0		0.0		0.0		0.0		0.0		0.3
TOTAL PROCUREMENT COST		0.0		0.0		0.0		0.5		1.0		0.0		0.0		0.0		0.0		0.0		1.5

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 Months PRODUCTION LEADTIME: 4 Months

CONTRACT DATES: FY 1999: FY 2000: Feb-00 FY 2001: Dec-00

DELIVERY DATES: FY 1999: FY 2000: Jun-00 FY 2001: Apr-01

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

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT																		6
OUTPUT																		6

Notes/Comments: Total reflects inventory objective.

February 2000

MODIFICATION TITLE: Common High Bandwidth Data Link (Surface Terminal) (CHBDL-ST) - Ship
COST CODE XU003/1U027/XU777/1U777
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION:

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05				TC		Total	
	Qty	$	Qty	$		$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment	3	25.6	4	25.3	4	30.4	3	19.4	2	13.5	2	13.7	2	13.9	4	28.1	3	21.4					27	191.3
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware*	0	0.0	3	3.7	4	5.0	3	3.4	4	4.3	2	2.2	2	2.3	2	2.3	4	4.7	0	0.0	3	3.9	27	31.8
PRIOR YR EQUIP																							0	0.0
FY 97 EQUIP			3	3.7																			3	3.7
FY 98 EQUIP					4	5.0																	4	5.0
FY 99 EQUIP							3	3.4	1	1.1													4	4.5
FY 00 EQUIP									3	3.2													3	3.2
FY 01 EQUIP											2	2.2											2	2.2
FY 02 EQUIP													2	2.3									2	2.3
FY 03 EQUIP															2	2.3							2	2.3
FY 04 EQUIP																	4	4.7					4	4.7
FY 05 EQUIP																					3	3.9	3	3.9
FY TC EQUIP																							0	0.0
TOTAL INSTALLATION COST		0.0		3.7		5.0		3.4		4.3		2.2		2.3		2.3		4.7		0.0		3.9		31.8
TOTAL PROCUREMENT COST		25.6		29.0		35.4		22.8		17.8		15.9		16.2		30.4		26.1		0.0		3.9		223.1

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 MOS PRODUCTION LEADTIME: 15 MOS

CONTRACT DATES: FY 1999: Nov-98 FY 2000: Dec-99 FY 2001: Dec-00

DELIVERY DATES: FY 1999: Mar-00 FY 2000: Mar-01 FY 2001: Mar-02

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

INSTALLATION SCHEDULE:	FY 02 1	FY 02 2	FY 02 3	FY 02 4	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT		1	1			1	1			1	1			1	1	2	3	27
OUTPUT			1	1			1	1			1	1			2	1	4	27

Notes/Comments

February 2000

MODIFICATION TITLE: Common High Bandwidth Data Link - Surface Terminal (CHBDL-ST) - Shore
COST CODE XU003/1U027/XU776/1U776
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION:

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$		$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment					1	3.8															1	3.8
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.0	0	0.0	0	0.0	0	0.0	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.8
PRIOR YR EQUIP																					0	0.0
FY 97 EQUIP																					0	0.0
FY 98 EQUIP																					0	0.0
FY 99 EQUIP									1	0.8											1	0.8
FY 00 EQUIP																					0	0.0
FY 01 EQUIP																					0	0.0
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		0.8		0.0		0.0		0.0		0.0		0.0		0.8
TOTAL PROCUREMENT COST		0.0		0.0		3.8		0.0		0.8		0.0		0.0		0.0		0.0		0.0		4.6

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 MOS PRODUCTION LEADTIME: 15 MOS

CONTRACT DATES: FY 1999: Nov-98 FY 2000: FY 2001:

DELIVERY DATES: FY 1999: Mar-01 FY 2000: FY 2001:

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

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

Notes/Comments

February 2000

MODIFICATION TITLE: CHBDL-ST DSM/ATM Backfit Kits - Ship
COST CODE XU007/1U028/XU777/1U777
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION:

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05				TC		Total	
	Qty	$	Qty	$		$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment							6	4.5	3	2.3	2	1.5	2	1.5	2	1.5							15	11.3
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware*	0	0.0	0	0.0	0	0.0	0	0.0	6	0.1	3	0.07	2	0.05	2	0.05	2	0.05	0	0.0	0	0.0	15	0.32
PRIOR YR EQUIP																							0	0.00
FY 97 EQUIP																							0	0.00
FY 98 EQUIP																							0	0.00
FY 99 EQUIP																							0	0.00
FY 00 EQUIP									6	0.1													6	0.10
FY 01 EQUIP											3	0.07											3	0.07
FY 02 EQUIP													2	0.05									2	0.05
FY 03 EQUIP															2	0.05							2	0.05
FY 04 EQUIP																	2	0.05					2	0.05
FY 05 EQUIP																							0	0.00
FY TC EQUIP																							0	0.00
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		0.1		0.07		0.05		0.05		0.05		0.0		0.0		0.32
TOTAL PROCUREMENT COST		0.0		0.0		0.0		4.5		2.4		1.57		1.55		1.55		0.05		0.0		0.0		11.62

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 MOS PRODUCTION LEADTIME: 15 MOS

CONTRACT DATES: FY 1999: FY 2000: Jan-00 FY 2001: Dec-00

DELIVERY DATES: FY 1999: FY 2000: Apr-01 FY 2001: Mar-02

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

INSTALLATION SCHEDULE:	FY 02 1	FY 02 2	FY 02 3	FY 02 4	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT			2	1			1	1			1	1			1	1	0	15
OUTPUT	2		1	2			1	1			1	1			1	1	0	15

Notes/Comments

February 2000

MODIFICATION TITLE: CHBDL-ST DSM/ATM Backfit Kit - Shore
COST CODE XU007/1U028/XU776/1U776
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION:

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$		$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment											1	0.8									1	0.8
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	0.03	0	0.0	0	0.0	0	0.0	1	0.03
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													1	0.03							1	0.03
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																			0	0.0	0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0
TOTAL PROCUREMENT COST		0.0		0.0		0.0		0.0		0.0		0.8		0.03		0.0		0.0		0.0		0.83

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 MOS PRODUCTION LEADTIME: 15 MOS

CONTRACT DATES: FY 1999: FY 2000: FY 2001:

DELIVERY DATES: FY 1999: FY 2000: FY 2001:

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

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

Notes/Comments

February 2000

MODIFICATION TITLE: CHBDL - ST - Dual Band Backfit Kit - Ship
COST CODE XU009/XU777 /1U777
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION:

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	1	NOTE 1			1	1.3	1	1.4													3	2.7
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.0	0	0.0	0	0.0	2	0.2	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	0.3
PRIOR YR EQUIP																					0	0.0
FY 95 EQUIP																					0	0.0
FY 96 EQUIP																					0	0.0
FY 97 EQUIP							1	0.1													1	0.1
FY 98 EQUIP																					0	0.0
FY 99 EQUIP							1	0.1													1	0.1
FY 00 EQUIP									1	0.1											1	0.1
FY 01 EQUIP																					0	0.0
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.2		0.1		0.0		0.0		0.0		0.0		0.0		0.3
TOTAL PROCUREMENT COST		0.0		0.0		1.3		1.6		0.1		0.0		0.0		0.0		0.0		0.0		3.0

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 MOS PRODUCTION LEADTIME: 15 MOS

CONTRACT DATES: FY 1999: Jan-99 FY 2000: Jan-00 FY 2001:

DELIVERY DATES: FY 1999: Apr-00 FY 2000: Apr-00 FY 2001:

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

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

Notes/Comments
1. ONE DUAL BAND BACK FIT KIT WAS PROCURED IN FY97 BUT WAS NOT SEPARATELY PRICED. AWARDED AS PART OF CHBDL SYSTEM CLIN, LATE DELIVERY AS OF A RESULT OF VENDOR BEING BEHIND IN ITS PRODUCTION SCHEDULE.

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE February 2000

APPROPRIATION/BUDGET ACTIVITY
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE
SHIPBOARD IW EXPLOIT SYSTEMS 2360

SUBHEAD NO. 521U

COST CODE	ITEM / MANUFACTURER	FY	PROC QTY	ACCEP PRIOR TO 1-Oct	BAL DUE AS OF 1-Oct	FISCAL YEAR 98												FISCAL YEAR 99												FISCAL YEAR 00											
						PY97			CALENDAR YEAR 98											CALENDAR YEAR 99												CALENDAR YEAR 00											
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1N006	ADAS	98	2		2				A																		1				1								
1U001	ADAS	99	5		5																A																		
		00	4		4																											A								
1U015	ADAS T-STAR MOD KITS	00	6		6																												A							
1U004	COBLU PHASE 1 SYSTEM	99	1		1													A																					
1U004	COBLU PHASE 1 SYSTEM	00	3		3																												A							
1U004	COBLU PHASE 1 SYSTEM	01	3		3																																			
1U008	SSEE PHASE 2 INCREMENT D	99	7		7																A					2	2	2	1											
1U008	SSEE PHASE 2 INCREMENT D	00	7		7																												A					2	2	1	1	1
1U008	SSEE PHASE 2 INCREMENT D	01	4		4																																			
1U009	T-RDF SYSTEMS	99	3		3																A						1	2											
1U009	T-RDF SYSTEMS	00	2		2																												A						1	1		
1U009	T-RDF SYSTEMS	01	2		2																																			
1U010	T-RDF ANTENNAS	99	9		9																A						3	3	3										
1U010	T-RDF ANTENNAS	00	4		4																												A						2	2		
1U010	T-RDF ANTENNAS	01	5		5																																			
XU001	BGPHES - ST	99	5		5																A													2		1	1	1			
1U019	BGPHES - ST	00	3		3																																				A
1U019	BGPHES - ST	01	2		2																																			
1U024	SYGATE Upgrade Kits	00	7		7																													A				3	2	2	
1U024	SYGATE Upgrade Kits	01	6		6																																			
1U026	PROFORMA Upgrade Kits	00	2		2																													A				1	1		
1U026	PROFORMA Upgrade Kits	01	4		4																																			

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

NAVMAT FORM 7110/4 (REVISED 11/77)

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February 2000

APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: SHIPBOARD IW EXPLOIT SYSTEMS 2360

SUBHEAD NO.: 521U

COST CODE	ITEM/MANUFACTURER/ PROCUREMENTY YEAR	FISCAL YEAR	CARRY OVER	FISCAL YEAR 01														FISCAL YEAR 02												FISCAL YEAR 03												LAT ER
				CY00			CALENDAR YEAR 01															CALENDAR YEAR 02												CALENDAR YEAR 03											
				OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1U001	ADAS	99	5			1	1		1	1		1																											0
1U001	ADAS	00	4										1	1		1		1																					0
1U015	ADAS T-STAR MOD KITS	00	6						1	1	1	1	1	1																									0
1U004	COBLU PHASE 1 SYSTEM	99	1	1																																			0
1U004	COBLU PHASE 1 SYSTEM	00	3													1		1		1																			
1U004	COBLU PHASE 1 SYSTEM	01	3				A																		1	1	1												
1U008	SSEE PHASE 2 INCREMENT D	01	4				A				2	2																											
1U009	T-RDF SYSTEMS	01	2				A					1	1																											
1U010	T-RDF ANTENNAS	01	5				A					3	2																											
1U019	BGPHES - ST	00	3			1			1			1																											0
1U019	BGPHES - ST	01	2			A												1			1																		
1U024	SYGATE Upgrade Kits	01	6			A				2	2	2																											
1U026	PROFORMA Upgrade Kits	01	4			A				2	2																											

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

NAVMAT FORM 7110/4 (REVISED 11/77)

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February 2000

APPROPRIATION/BUDGET ACTIVITY: #REF!

P-1 ITEM NOMENCLATURE: SHIPBOARD IW EXPLOIT SYSTEMS 2360

SUBHEAD NO.: 521U

COST CODE	ITEM/MANUFACTURER	FY	SERV	PROC QTY	ACCEP PRIOR TO 1-Oct	BAL DUE AS OF 1-Oct	FISCAL YEAR 98												FISCAL YEAR 99												FISCAL YEAR 00									
							PY			CALENDAR YEAR 98												CALENDAR YEAR 99												CALENDAR YEAR 00								
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
XU003	CHBDL	99		5		5														A															1		1		1		1
XU003	CHBDL	00		3		3																										A									
1U027	CHBDL	01		2		2																																			
XU007	DSM/ATM KITS	00		6		6																													A						
1U028	DSM/ATM KITS	01		3		3																																			
XU008	TEST EQUIPMENT	00		1		1																													A						
XU009	DUAL BAND BACKFIT KITS	99		1		1																A														1				
XU009	DUAL BAND BACKFIT KITS	00		1		1																													A						

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

NAVMAT FORM 7110/4 (REVISED 11/77)

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February 2000

APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: SHIPBOARD IW EXPLOIT SYSTEMS 2360

SUBHEAD NO.: 521U

COST CODE	ITEM/MANUFACTURER/ PROCUREMENTY YEAR	FISCAL YEAR	CARRY OVER	FISCAL YEAR 01														FISCAL YEAR 02												FISCAL YEAR 03												LAST ER
				CY00			CALENDAR YEAR 01												CALENDAR YEAR 02												CALENDAR YEAR 03												
				OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
XU003	CHBDL-ST	99	1		1																																		0
XU003	CHBDL	00	3						1		1		1																											0
1U027	CHBDL	01	2			A															1		1																0
																																							0
																																							0
XU007	DSM/ATM KITS	00	6								2	2		2																										0
1U028	DSM/ATM KITS	01	3			A															1		1		1														0
																																							0
XU008	TEST EQUIPMENT	00	1									1																												0
																																							0
XU009	DUAL BAND BACKFIT KITS	00	1								1																													0
																																							0
																																							0
																																							0
																																							0
																																							0
																																							0
				OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

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

NAVMAT FORM 7110/4 (REVISED 11/77)

BUDGET ITEM JUSTIFICATION SHEET									DATE: February 2000	
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						P-1 ITEM NOMENCLATURE Common High Bandwidth Data Link 2434			SUBHEAD 52XU	
	PY	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY										
COST (in millions)		$55.6	$36.8							

Note: Common High Bandwidth Data Link transfers to the SHIPBOARD IW EXPLOIT SYSTEMS BLI 2360 in FY 01. Detail budget justification material for PY through FY00 is included in the SHIPBOARD IW EXPLOIT SYSTEMS for budget comparability.

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

JUSTIFICATION OF BUDGET YEAR REQUIREMENTS:
(U) The 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. BGPHES-ST is a fully digital, open architecture system residing on the SCI-GCSS LAN. It utilizes full Cryptologic Unified Digital Special Signals Processor, Desperado and GCP-8 ELINT processors will be added to the surface terminal to complement the Airborne receive and the Local VME (Versa Module Europa) Extended for Instrumentation (VUI) receive subsystems. Beginning in FY 00, the BGPHES-ST portion of this budget has been consolidated into the Shipboard IW Exploit budget (NARM 2360).

(U) The Common High Bandwidth Data Link - Shipboard Terminal (CHBDL - ST) will provide a wideband data link between Navy/Joint airborne sensor systems and the shipboard processors of national second tactical reconnaissance programs. It is designed to communicate with the BGPHES, the Joint Services Imagery Processing System - Navy (JSIPS-N), the Aircraft Carrier Tactical Support Center (CV-TSC), and the Joint Surveillance Target Attack Radar System (Joint STARS). CHBDL - ST benefits the fleet by providing a horizon extension for line-of-sight sensor systems for use in battle damage assessment or mission planning and is interoperable with the USAF U2
ircraft. Test support equipment has been budgeted for FY2000 to procure Programmable Ground/Support Equipment (PGSE) for for CHBDL CDL, Common Data Link, interoperability tests with UAV flight tests and and manned aircraft flight tests.

(U) FY 99 procures 5 BGPHES - ST systems, 5 CHBDL - ST systems, 1 Dual Band backfit kit, production support, and installation.

(U) FY 00 procures 3 CHBDL - ST systems, 6 Dual Simultaneous Mission (DSM)/Asynchronous Transfer Mode (ATM) backfit kits, 1 Dual Band backfit kit, 1 CHBDL test support equipment, production support, and installation.

(U) FY 01 procures 2 CHBDL - ST systems, 3 Dual Simultaneous Mission (DSM)/Asynchronous Transfer Mode (ATM) backfit kits, production support, and installation.

(U) Installation Agent(s): Installations are accomplished by formal shipalt by Alteration Installation Team (AIT).

BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: February 2000	
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY: BA 2 Communications and Electronic Equipment**							P-1 ITEM NOMENCLATURE **AN/WLQ-4 BLI: 251600 SBHD: H2Q4**					
Program Element for Code B Items:							Other Related Program Elements					
	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)				**$2.8**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$2.8**
SPARES COST (In Millions)				**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**

Starting with the FY 00 budget, this program was consolidated into the Submarine Support Equipment line: 256000.

BUDGET ITEM JUSTIFICATION SHEET P-40												DATE: FEBRUARY 2000
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY/BA-2**							P-1 ITEM NOMENCLATURE **SUBMARINE SUPPORT EQUIPMENT/256000/256005**					
Program Element for Code B Items:							Other Related Program Elements					
	Prior Years	ID Code		FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)				**$3.9**	**$38.2**	**$17.3**	**$31.0**	**$46.8**	**$30.0**	**$50.6**	**$0.0**	**$217.9**
SPARES COST (In Millions)												**$0.0**

This program consolidates the following programs in FY2000:

From: 251600 AN/WLQ-4
218000/05 Sonar Support Equipment
232000/05 AN/WLR-1

To: 256000/05 Submarine Support Equipment Program

SSEP:

(U) The Submarine Support Equipment Program was established to develop and support systems which provide the capability to exploit signal intercepts and imagery for tactical support and early warning of threat sensors. The AN/WLR-8(V)2 is a tactical Electronic Warfare Support Measure (ESM) Receiver for the SSN 688 Class Submarines providing intercept, surveillance, and signal parameter analysis of electromagnetic signals for threat warning. Funds buy unique equipment in limited quantities that are maintained in a pool and rotated among attack submarines as dictated by scheduled operations and to provide specific capability improvements to major SSN sensor systems. This also procures support equipment for shore based acoustic iintelligence analysis centers. This program also procuresAN/WLR-8 (V)2 threat detection with an Instantaneous Frequency Monitoring (IFM) signal intercept capability that provides near 100% probability of intercept throughout the SHF frequency band. This improvement significantly increases the systems' capability to detect short duration and wideband threat emissions and will maintain the AN/WLR-8 as a viable ESM System beyond FY-2000. AN/WLR-8(V)2 Extremely High Frequency (EHF) Field Change Kits extend the receiver frequency range of the AN/WLR-8(V)2. This improvement upgrades the tactical threat warning capability to intercept the threat radar signals operating in the EHF frequency band. This also procures R&M and operational improvement field change kits and special mission support equipment.

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.

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: FEBRUARY 2000
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-2	P-1 ITEM NOMENCLATURE SUBMARINE SUPPORT EQUIPMENT/256000/256005

C. ML005 - Procures AN/BRD-7 Reliability and Maintainability (R&M) Field Change Kits; bearing calculator improvement to enhance the direction finding capability of the AN/BRD-7 system; printers to replace existing obsolete printers in the AN/BRD-7 System.

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 Intermediate Maintenance Activity (IMAs).

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. ML017 - AN/BLQ-10 (V) FCKs

K. ML018 - AN/BLQ (V) IEM FCKs

L. ML5IN - Provides for the Installation of Equipment including Fleet Modernization Program Installations for Training Equipment and Installation of Equipment in Other Shore Facilities. Installations will be performed by Alteration installation Teams (AITs).

M. MLDSA - The budget reflects the transfer of design services into the appropriate equipment P1 line item in accordance with full funding policy FY98 and out.

N. ML6IN - Non FMP Installation funding for the HPI Field Change Kit.

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: FEBRUARY 2000
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-2	P-1 ITEM NOMENCLATURE SUBMARINE SUPPORT EQUIPMENT/256000/256005

AN/WLQ-4

(U) This line procures upgrades to the AN/WLQ-4(V)1 and modification kits resulting from redesign of obsolescent subassemblies of the AN/WLQ-4(V) Submarine ESM Systems. It procures spares and repair parts for the Mini-N-Suite. It supports training curricula updates for the WLQ-4(V)1 System. It procures upgrades to the AN/WLQ-4(V)/(V)1 software support and maintenance support equipment. Funding also procures Test Program Sets (TPS) which provide technical and workload capability to test all analog, digital, radio frequency, and hybrid spare units of the AN/WLQ-4(V)/(V)1 systems. TPSs are used with existing Automatic Test Equipment (ATE) located at the Repair Depot, NRAD, San Diego. The Repair/Test Stations inlude ATE, TPS, test fixture special repair tools, test equipment and documentation. The AN/WLQ-4 and AN/WLQ-4(V)1 Systems use many of the same modules. The description of each building block line item is as follows:

A. ML019 - Reliability & Maintainability Mod Kits provides various AN/WLQ-4(V)1 upgrades, AN/WLQ-4(V)/(V)1 obsolescence replacement kits,, R&M Kits and Software Support Activity (SSA) equipment upgrades.

B. ML020 - Mini-N-Suite - The funds provided in FY-98 thru FY-05 will be used to purchase repair parts for the Mini-N-Suite.

C. ML021 - AN/WLQ-4(V)1 Trainer - The funds provided in FY-98 thru FY-05 will be used to procure curriculum updates associated with system upgrades and various R&M Mod Kits.

D. ML022 - AN/WLQ-4(V)1 Depot Upgrade - The funds provided in FY-98 thru FY-05 will be used to provide various upgrades to system TPS as well as upgrades to Depot Test Support Equipment.

E. ML023 - AN/WLQ-4(V)1 HPI (High Probability Intercept) Kits - The one (1) HPI Kit identified in FY-97 will be used as a Configuration Control Model (CCM) and the two identified by FY-98 will be used on ship installations.

F. ML024 - AN/WLQ-4(V)1 Intermediate Maintenance Activity (IMA) Support.

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: FEBRUARY 2000
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-2	P-1 ITEM NOMENCLATURE SUBMARINE SUPPORT EQUIPMENT/256000/256005

SONAR SUPPORT EQUIPMENT

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 casualities. 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:

A. ML025* - Procures planned improvements for ancillary sonars, including their support equipment and materials

Procurement of the AN/BQS-15 Remote Ahead Profiling (RAP) improvement began in FY96. RAP provides a major display improvement for under-ice and mine avoidance operations. The total objective is 29 kits. One kit was procured in FY96; ten in FY97 and six in FY98. Twelve (12) will be procured in later years.

Procurement of nineteen (19) AN/UNQ-9 (IDARs replacement) systems in FY 98 and 39 iin FY 99 for all FAST ATTACK Submarines. These will be a COTS modified system.

Procurement of thirty-two (32) COTS AN/BQN-17 UPGRADES, which is the primary depth sounder on SSN 688 Class Submarines, is planned FY-00.

Procurement of the AN/BQS-15 EC-19 Precision Bottom Mapping Upgrade is planned to start in FY02. This upgrade assists the ship in making decisions on how to safely exit the minefield. The total objective is twenty (20) kits. Nine (9) kits are planned for FY 02; five (5) kits are planned for FY03 and six (6) are planned for FY 05.

B. ML026 - Provides engineering upgrades for the Signal Data Converter Storer (SDCS) Interface Units. Upgrades incorporate combat system updates, interfaces and new functionality.

C. ML830 - Funds production engineering services that support procurement and installation of these systems.

D. ML900 - Funds consulting services that support procurement and installation of these systems.

E. ML5IN - Funds actual hardware installation during shipyard availabilities.

*ML025 (AN/BQN-17) FY00 Total cost includes contractor first article costs.

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: FEBRUARY 2000
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-2	P-1 ITEM NOMENCLATURE SUBMARINE SUPPORT EQUIPMENT/256000/256005

AN/WLR-1G AIR - N88

A. ML027 - FY00-FY05 funding is for the procurement of modification kits . These modification kits are required to replace obsolete and high maintenance components and to extend the life cycle of the system on CV/CVNs. Requirements include the installation of COTS/NDI equipment and the installation and support of the upgraded equipment.

B. ML5IN: FY00-FY05 funding is for the installation of modification kits. These modification kits are required to replace obsolete and high maintenance components and to extend the life cycle of the system on CV/CVNs. Requirements include the installation of COTS/NDI equipment and the installation and support of the upgraded equipment.

AN/WLR-1 SURFACE - N86

SURFACE WARFARE (N86):

A. ML028 - FY00-FY04 funding is for the procurement of modification kits. These modification kits are required to replace obsolete and high maintenance components and to extend the life cycle of the system on WHEC Class Cutters. Requirements include the installatin of COTS/NDI equipment and the installation and support of the upgraded equipment.

B. ML5IN: FY00-FY04 funding is for the installation of modification kits. These modification kits are required to replace obsolete and high maintenance components and to extend the life cycle of the system on WHEC Class Cutters. Requirements include the installation of COTS/NDI equipment and the installation and support of the upgraded equipment.on WHEC Class Cutters. Requirements include the installatin of COTS/NDI equipment and the installation and support of the upgraded equipment.

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System		DATE: **FEBRUARY 2000**
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy** **BA2: COMMUNICATION & ELECTRONIC EQUIPMENT**	ID Code **A**	P-1 ITEM NOMENCLATURE/SUBHEAD **SUBMARINE SUPPORT EQUIPMENT/H2ML/256000**	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years				FY 1999			FY 2000			FY 2001		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	SUBMARINE WARFARE (N87)														
ML003	SSEP Special Support Equipment								283			306			277
ML005	AN/BRD-7 FCKs								919			758			928
ML010	AN/WLR-8 Display Obsolescence	A							0			0			0
ML011	AN/WLR-8 R&M FCKs	A							482			768			1,049
ML013	ESM IMA Support	A							118			165			168
ML015	AN/BLQ-10(V) SSN ESM Backfit System	A							0	4	3,430	13,718	2	3,725	7,450
ML016	HPI R&M FCKs	A							0			0			0
ML017	AN/BLQ-10(V) FCKs	A							0			0			0
ML018	AN/BLQ-10(V) IEM FCKs	A							0			0			0
ML019	R&M Kits: Mod Kits, ERTS/CRTS Upg., SSA, ADP & GFE	A							0			656			139
ML020	Mini-N-Suite	A							0			73			68
ML021	AN/WLQ(V) Trainer	A							0			334			340
ML022	AN/WLQ-4(V)1 Depot Upgrade	A							0			20			20
			0			**0**			**1,802**			**16,798**			**10,439**

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System		DATE: **FEBRUARY 2000**
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy/BA-2** **BA2: COMMUNICATION & ELECTRONIC EQUIPMENT**	ID Code **A**	P-1 ITEM NOMENCLATURE/SUBHEAD **SUBMARINE SUPPORT EQUIPMENT/H2ML/256000**	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years				FY 1999			FY 2000			FY 2001		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	SUBMARINE WARFARE (N87)														
ML024	AN/WLQ-4(V)1 IMA Support	A							0			139			25
ML025	Ancillary Sonar Improvement	A													
	AN/BQS-15 EC-18(RAP)								0	8	268	2,144			0
	AN/UNQ-9 (IDARS Replacement)								0			0			0
	AN/BQN-17								0	32	334	10,700			0
ML026	ADAP Engineering Upgrades	A							0	33	21	702	33	22	712
ML027	Air AN/WLR-1H(V)7 Mod Kits - N88	A							0	2	495	990	1	500	500
ML028	Surface AN/WLR-1H(V)7 Mod Kits - N86	A							0	3	495	1,485	1	517	517
ML830	Sonar Production Support	A							0			3,094			2,424
ML900	Sonar Consulting Services	A							0			495			495
ML5IN	FMP Installation of Equipment														
	EHF Extension FCK	A							1,163			0			0
	EHF DSA	A							493			0			0
	AN/BLQ-10 (V)	A							0			0			770
	AN/BLQ-10 (V) DSA	A							0			94			193
	AN/BQS-15 EC-18 (RAP)	A							0			0			600
	AN/UNQ-9 (IDARS Replacement)	A							0			217			211
	AN/BQS-15 EC-17	A							0			0			0
ML6IN	Non-FMP Installation	A							440						
			0			**0**			**2,096**			**20,060**			**6,447**

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System		DATE: **FEBRUARY 2000**
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, NavyBA-2** **BA2: COMMUNICATION & ELECTRONIC EQUIPMENT**	ID Code **A**	P-1 ITEM NOMENCLATURE/SUBHEAD **SUBMARINE SUPPORT EQUIPMENT/H2ML/256000**	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years	FY 1998			FY 1999			FY 2000			FY 2001		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
ML5IN	FMP Installation of Equipment (Con't)														
	AN/BQN-17	A				0			0			0			103
	AN/BQN-17 DSA	A				0			0			57			0
	Air AN/WLR-1H(V)7 - N88	A				0			0			622			126
	Surface AN/WLR-1H(V)7 - N86											650			201
			0			**0**			**0**			**1,329**			**430**

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE FEBRUARY 2000
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-2	C. P-1 ITEM NOMENCLATURE SUBMARINE SUPPORT EQUIPMENT/256000/05	SUBHEAD H2ML

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FY-00										
ML015- AN/BLQ-10	**4**	**3429.5**	**NASD**	**10/99**	SS/FFP	Lockheed Martin Syracuse, NY	2/00	8/01	YES	N/A
ML026 SDCS ENG. UPG.	**33**	**21.3**	**NAVSEA**		C/FP	NUWC Newport, RI	5/00	6/00	YES	N/A
ML025 AN/BQN-17	**32**	**334.4**	**NUWC**	**10/99**	C/FP	Unknown	3/00	9/00	YES	N/A
ML025 AN/BQS-15 EC-18 (R	**8**	**268.0**	**DCMC**		SS/FP	Raytheon, RTSC	2/00	8/00	YES	N/A
ML027Air WLR-1H(V)5 Mod	**2**	**495.0**			CONTRACT	COTS/NDI / TBD	12/99	6/00	YES	N/A
ML028 Sur. WLR-1H(V)5 Mo	3	495.0			CONTRACT	COTS/NDI / TBD	12/99	6/00	YES	N/A
FY-01										
ML015- AN/BLQ-10	2	3725	NASD	10/00	SS/FFP	Lockheed Martin Syracuse, NY	3/01	9/02	YES	N/A
ML026 SDCS ENG. UPG.	33	21.58	NAVSEA		C/FP	NUWC, Newport, R.I.	5/01	6/01	YES	N/A
ML027Air WLR-1H(V)5 Mod.	1	500.0			CONTRACT	COTS/NDI / TBD	12/00	6/01	YES	N/A
ML028 Sur. WLR-1H(V)5 Mo	1	517.0			CONTRACT	COTS/NDI / TBD	12/01	6/02	YES	N/A

D. REMARKS

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: (SHF Field Change Kits/ML001) TYPE MODIFICATION: _____ MODIFICATION TITLE: _____

DESCRIPTION/JUSTIFICATION:

Provides intercept, surveillance, and signal parameter analysis.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: _____

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.0
PROCUREMENT																						
INSTALLATION KITS																					0	0.0
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT	45	23.9																			45	23.9
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT	3	1.4																			3	1.4
SUPPORT EQUIPMENT	6	2.8																			6	2.8
OTHER	6	2.6																			6	2.6
OTHER																						0.0
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST	28	4.3	16	2.9	7	1.4															51	8.6
TOTAL PROCUREMENT	60	30.6		2.9		1.4		0.0		0.0		0.0		0.0		0.0		0.0			60	34.9

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

MODELS OF SYSTEMS AFFECTED: SHF Field Chg Kit/ML001 MODIFICATION TITLE: _____

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: _____
ADMINISTRATIVE LEADTIME: _____ PRODUCTION LEADTIME: _____ Months
CONTRACT DATES: FY 1999: _____ FY 2000: _____ FY 2001: _____
DELIVERY DATE: FY 1999: _____ FY 2000: _____ FY 2001: _____

($ in Millions)

Cost:	Prior Years		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS	**28**	**2**	16	4.5	7	1.9		0.0		0.0		0.0		0.0		0.0		0.0			51	6.4
FY 1998 EQUIPMENT				0.0		0.0		0.0		0.0						0.0		0.0			0	0.0
FY 1999 EQUIPMENT																					0	0.0
FY 2000 EQUIPMENT																					0	0.0
FY 2001 EQUIPMENT																					0	0.0
FY 2002 EQUIPMENT																					0	0.0
FY 2003 EQUIPMENT																					0	0.0
FY 2004 EQUIPMENT																					0	0.0
FY 2005 EQUIPMENT																					0	0.0
TO COMPLETE																						

INSTALLATION SCHEDULE:

	FY 1998	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		TOTAL
In	44	1	2	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51
Out	44	1	2	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

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

DESCRIPTION/JUSTIFICATION:

Provides intercept surveillance and signal parameter analysis in order to resolve obsolescent equipment problems.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.0
PROCUREMENT																						
INSTALLATION KITS																					0	0.0
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT							4	13.7	2	7.5	3	12.2	7	26.1	5	20.1	5	20.7			26	100.2
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT											1	4.0									1	4.0
SUPPORT EQUIPMENT																						0.0
OTHER: CCM													1	3.7							1	3.7
OTHER																						0.0
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST								0.1	1	1.0	3	2.5	2	1.3	4	2.2	6	4.3	10	5.9	26	17.2
TOTAL PROCUREMENT	0	0.0	0	0.0	0	0.0	4	13.7	2	7.5	4	16.2	8	29.8	5	20.1	5	20.7	0	0	28	108.0

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

MODELS OF SYSTEMS AFFECTED: SSN ESM Backfit System (Ml MODIFICATION TITLE: AN/BLQ-10(V)

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AITs
ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 18 Months
CONTRACT DATES: FY 1999: FY 2000: Feb-00 FY 2001: Mar-01
DELIVERY DATE: FY 1999: FY 2000: Aug-01 FY 2001: Sep-02

($ in Millions)

Cost:	Prior Years		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																					0	0.0
FY 1998 EQUIPMENT																					0	0.0
FY 1999 EQUIPMENT																					0	0.0
FY 2000 EQUIPMENT								0.1	1	1.0	3	2.5									4	3.6
FY 2001 EQUIPMENT													2	1.3							2	1.3
FY 2002 EQUIPMENT															3	1.6					3	1.6
FY 2003 EQUIPMENT															1	0.5	6	4.3			7	4.9
FY 2004 EQUIPMENT																			5	3	5	2.9
FY 2005 EQUIPMENT																			5	3	5	2.9
TO COMPLETE																						

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	0	0	2	0	0	0	2	1	1	0	2	2	2	10	26
Out	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	0	0	2	0	0	0	2	1	1	0	2	2	2	10	26

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AN/BQS-15 TYPE MODIFICATION: MODIFICATION TITLE: Remote Ahead Profiling Upgrade ML025

DESCRIPTION/JUSTIFICATION:

Provides enhanced display features for mine detection for SSN 688 Class Submarines.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.0
PROCUREMENT																						
INSTALLATION KITS																					0	0.0
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT							8	2.1											4	3.4	12	5.6
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT																					0	0.0
SUPPORT EQUIPMENT																						0.0
OTHER:																					0	0.0
OTHER																						0.0
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST								0.0	8	0.6									4	0.5	12	1.1
TOTAL PROCUREMENT	0	0.0	0	0.0	0	0.0	8	2.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	4	3	12	5.6

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

MODELS OF SYSTEMS AFFECTED: AN/BSQ-15 MODIFICATION TITLE: Remote Ahead Profiling Upgrade/ML025

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AITs
ADMINISTRATIVE LEADTIME: 1 Month PRODUCTION LEADTIME: 5 Months
CONTRACT DATES: FY 1999: N/A FY 2000: Feb-00 FY 2001: N/A
DELIVERY DATE: FY 1999: N/A FY 2000: Aug-00 FY 2001: N/A

($ in Millions)

Cost:	Prior Years		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																					0	0.0
FY 1998 EQUIPMENT																					0	0.0
FY 1999 EQUIPMENT																					0	0.0
FY 2000 EQUIPMENT									8	0.6											8	0.6
FY 2001 EQUIPMENT																					0	0.0
FY 2002 EQUIPMENT																					0	0.0
FY 2003 EQUIPMENT																					0	0.0
FY 2004 EQUIPMENT																					0	0.0
FY 2005 EQUIPMENT																					0	0.0
TO COMPLETE																						

INSTALLATION SCHEDULE:

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

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AN/BQS-15 EC-19 TYPE MODIFICATION: MODIFICATION TITLE: Bottom Mapping ML025

DESCRIPTION/JUSTIFICATION:

Provides ship capability to map littoral areas.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.0
PROCUREMENT																						
INSTALLATION KITS																					0	0.0
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT											9	3.0	5	1.7			6	2.1			20	6.8
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT																					0	0.0
SUPPORT EQUIPMENT																						0.0
OTHER:																					0	0.0
OTHER																						0.0
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST								0.0			9	0.5	5	0.3			6	0.4			20	1.2
TOTAL PROCUREMENT	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	9	3.0	5	1.7	0	0.0	6	2.1	0	0	20	6.8

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

MODELS OF SYSTEMS AFFECTED: AN/BSQ-15 EC19 MODIFICATION TITLE: Bottom Mapping ML025

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AITs
ADMINISTRATIVE LEADTIME: 1 Month PRODUCTION LEADTIME:
CONTRACT DATES: FY 1999: N/A FY 2000: FY 2001:
DELIVERY DATE: FY 1999: N/A FY 2000: FY 2001:

($ in Millions)

Cost:	Prior Years		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																					0	0.0
FY 1998 EQUIPMENT																					0	0.0
FY 1999 EQUIPMENT																					0	0.0
FY 2000 EQUIPMENT																					0	0.0
FY 2001 EQUIPMENT																					0	0.0
FY 2002 EQUIPMENT											9	0.5									9	0.5
FY 2003 EQUIPMENT													5	0.3							5	0.3
FY 2004 EQUIPMENT																					0	0.0
FY 2005 EQUIPMENT																	6	0.4			6	0.4
TO COMPLETE																						

INSTALLATION SCHEDULE:

	FY 1998	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		TOTAL
In	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3	0	2	2	1	0	0	0	0	0	1	2	1	2	0	20
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3	0	2	2	1	0	0	0	0	0	1	2	1	2	0	20

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AN/BQN-17 TYPE MODIFICATION: MODIFICATION TITLE: AN/BQN-17 ML025

DESCRIPTION/JUSTIFICATION:

This is a COTS Upgrade.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.0
PROCUREMENT																						
INSTALLATION KITS																					0	0.0
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT							27	9.1											12	8.0	39	17.1
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT							1	0.3													1	0.3
SUPPORT EQUIPMENT							1	0.3														0.3
OTHER: SPARES							3	1.0													3	1.0
OTHER																						0.0
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST							0	0.1	3	0.1	8	0.3	10	0.3	6	0.2					27	1.0
TOTAL PROCUREMENT	0	0.0	0	0.0	0	0.0	32	10.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	12	8	43	18.8

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

MODELS OF SYSTEMS AFFECTED: AN/BQN-17 MODIFICATION TITLE:

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AITs
ADMINISTRATIVE LEADTIME: 1 Month PRODUCTION LEADTIME: 5 Months
CONTRACT DATES: FY 1999: N/A FY 2000: Mar-00 FY 2001: Feb-00
DELIVERY DATE: FY 1999: N/A FY 2000: Sep-00 FY 2001: Aug-01

($ in Millions)

Cost:	Prior Years		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																					0	0.0
FY 1998 EQUIPMENT																					0	0.0
FY 1999 EQUIPMENT																					0	0.0
FY 2000 EQUIPMENT									3	0.1	8	0.3	10	0.3	6	0.2					27	0.9
FY 2001 EQUIPMENT																					0	0.0
FY 2002 EQUIPMENT																					0	0.0
FY 2003 EQUIPMENT																					0	0.0
FY 2004 EQUIPMENT																					0	0.0
FY 2005 EQUIPMENT																					0	0.0
TO COMPLETE																						

INSTALLATION SCHEDULE:

	FY 1998	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	
	& Prior	1	2	3	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		TOTAL
In	0	0	0	0	0	0	0	0	0	0	1	1	1	0	2	2	2	2	3	2	3	2	2	2	2	0	0	0	0	0	0	27
Out	0	0	0	0	0	0	0	0	0	0	1	1	1	0	2	2	2	2	3	2	3	2	2	2	2	0	0	0	0	0	0	27

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AN/UNQ-9 TYPE MODIFICATION: MODIFICATION TITLE: AN/UNQ (IDARS) ML025

DESCRIPTION/JUSTIFICATION:

IDARS is a COTS Recorder. This change will provide a common recorder across the entire SSN-688 Class.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.0
PROCUREMENT																						
INSTALLATION KITS																					0	0.0
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT																					0	0.0
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT																					0	0.0
SUPPORT EQUIPMENT																						0.0
OTHER:																					0	0.0
OTHER																						0.0
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST							14	0.2	12	0.2	13	0.2	6	0.1							45	0.7
TOTAL PROCUREMENT	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0	0	0.0

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

MODELS OF SYSTEMS AFFECTED: AN/UNQ-9 MODIFICATION TITLE: AN/UNQ-9 (IDARS)

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AITs
ADMINISTRATIVE LEADTIME: 1 Month PRODUCTION LEADTIME: 2 Months
CONTRACT DATES: FY 1999: Feb-99 FY 2000: FY 2001: Feb-00
DELIVERY DATE: FY 1999: June 99 FY 2000: FY 2001: Aug-01

($ in Millions)

Cost:	Prior Years		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																					0	0.0
FY 1998 EQUIPMENT							8	0.0													8	0.0
FY 1999 EQUIPMENT							6	0.1	12	0.2	13	0.2	6	0.1							37	0.6
FY 2000 EQUIPMENT																					0	0.0
FY 2001 EQUIPMENT																					0	0.0
FY 2002 EQUIPMENT																					0	0.0
FY 2003 EQUIPMENT																					0	0.0
FY 2004 EQUIPMENT																					0	0.0
FY 2005 EQUIPMENT																					0	0.0
TO COMPLETE																						

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999					FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	6	5	2	1	3	2	3	4	2	5	3	3	2	0	0	4	0	0	0	0	0	0	0	0	0	45
Out	0	0	0	0	0	0	6	5	2	1	3	2	3	4	2	5	3	3	2	0	0	4	0	0	0	0	0	0	0	0	0	45

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AN/WLR-1H(V)7 TYPE MODIFICATION: MODIFICATION TITLE: AN/WLR-1H(V)7 MOD KITS ML028

DESCRIPTION/JUSTIFICATION:

For FY-00 thru FY05 funding is for the procurement of modifications kits. These modification kits are required to replace obsolete and high maintenance components to extend the life cycle of the system until installation of AIEWS Increment 1 aboard CV/CVNs (N88) and to replace existing systems on WHEC Class Cutters (N86). Requirement includes the procurement of COTS/NDI equipment and the installation and support of the upgraded equipment.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.0
PROCUREMENT																						
INSTALLATION KITS																					0	0.0
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT					3	1.4	5	2.5	2	1.0	4	1.9	4	2.0	3	1.4	1	0.5			22	10.7
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT																					0	0.0
SUPPORT EQUIPMENT																						0.0
OTHER:																					0	0.0
OTHER																						0.0
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST							8	1.3	2	0.3	4	0.8	4	0.6	3	0.5	1	0.1			22	3.6
TOTAL PROCUREMENT	0	0.0	0	0.0	3	1.4	5	2.5	2	1.0	4	1.9	4	2.0	3	1.4	1	0.5	0	0	22	10.7

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

MODELS OF SYSTEMS AFFECTED: AN/WLR-1H(V)7 MODIFICATION TITLE: AN/WLR-1H(V)7 Mod Kits ML025

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION:
ADMINISTRATIVE LEADTIME: 2 Months PRODUCTION LEADTIME: 6 Months
CONTRACT DATES: FY 1999: Dec-98 FY 2000: Dec-99 FY 2001: Dec-00
DELIVERY DATE: FY 1999: June 99 FY 2000: Jun-00 FY 2001: Jun-01

($ in Millions)

Cost:	Prior Years		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																					0	0.0
FY 1998 EQUIPMENT																					0	0.0
FY 1999 EQUIPMENT							3	0.5													3	0.5
FY 2000 EQUIPMENT							5	0.8													5	0.8
FY 2001 EQUIPMENT									2	0.3											2	0.3
FY 2002 EQUIPMENT											4	0.8									4	0.8
FY 2003 EQUIPMENT													4	0.6							4	0.6
FY 2004 EQUIPMENT															3	0.5					3	0.5
FY 2005 EQUIPMENT																	1	0.1			1	0.1
TO COMPLETE																						

INSTALLATION SCHEDULE:

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

BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: February 2000	
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY** **BA-2: COMMUNICATIONS AND ELECTRONICS EQUIPMENT**							P-1 ITEM NOMENCLATURE **NAVY TACTICAL DATA SYSTEM (NTDS)/260500** (ADVANCED COMBAT DIRECTION SYSTEM (ACDS))					
Program Element for Code B Items:							Other Related Program Elements **RDT&E PROGRAM ELEMENT: 0604518N**					
	Prior Years	ID Code		FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY	**N/A**	**A**										
COST (In Millions)				**$12.1**	**$22.4**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**N/A**	**$34.5**
SPARES COST (In Millions)				**$0.2**	**$0.1**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**N/A**	**$0.3**

PROGRAM DESCRIPTION/JUSTIFICATION:

The Navy Tactical Data System Program provides for the Advanced Combat Direction System as a general purpose Combat Direction System (CDS) in major warships, which permits rapid integration of ship sensor information, analysis and display of tactical information, and designation of weapon systems to force threats. ACDS consists of three major subsystems, namely, the Data Processing, Data Display and Data Link Subsystems. Data Processing and Data Display Subsystems are assigned to the Program Executive Office, Theater Surface Combatants and the Data Links are assigned to the Space and Naval Warfare Systems Command. The Advanced Combat Direction System (ACDS) is an upgrade to the NTDS Data Processing and Data Display subsystems and associated computer programs and documentation.

FY99 Funds are for:
(LU059) LHA ACDS - Funding is for the upgrade of the Integrated Tactical Amphibious Warfare Data System (ITAWDS) to an ACDS Block 0 in LHA 1 configuration during her FY 99 Complex Overhaul. ITAWDS is no longer supportable and interoperability with other units is severely limited.

(LU06I) Shore Site Emulation Equipment - Funding is for the procurement of display emulator systems/equipment and for upgrade of existing display emulator systems/equipment for shore sites.

FY-00 Funds are for:

(LU059) LHA ACDS - Funding is for upgrade of the LHA combat display consoles to AN/UYQ-70(v) window/Intel processor-based shipboard display emulators to replace obsolescent, maintenance intensive AN/UYA-4(v) display consoles.

(LU06I) Shore Site Emulation Equipment - Funding is for the procurement of display emulator systems/equipment and for upgrade of existing display emulator systems/equipment for shore sites.

WEAPONS SYSTEM COST ANALYSIS **P-5**	Weapon System		DATE: **February 2000**
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **NAVY TACTICAL DATA SYSTEM (NTDS)/260500** (ADVANCED COMBAT DIRECTION SYSTEM (ACDS))/A2LU	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
							FY 1999			FY 2000			FY 2001		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	Surface Ships (N86)														
LU047	**CV/CVN ACDS**	**A**													
LU059	**LHA/ACDS**	**A**							**(4,100)**						
	Engineering Changes														
	LHA-1 ITAWDS Upgrade						**1**	**4,100**	**4,100**						
	LHA Shipboard Display Emulators									**3**	**6,630**	**19,889**			
LU005	**Field Change Kits (Multi-Class)**	**A**													
LU055	**Computer Programs, Docmentation**														
	System Engineerin;g, Testing, ILS														
LU056	**Initial Training**														
LU061	**Shore Site Emulation Equipment**	**A**							**7,967**	**1**	**2,486**	**2,486**			
LU830	**Production Engineering**														
LU900	**Consulting Services**														
LU5IN	**Installation of Equipment - FMP**														
LU6IN	**Installation of Equipment - NON-FMP**														
									12,067			**22,375**			**0**

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE: February 2000
B. APPROPRIATION/BUDGET ACTIVITY: Other Procurement, Navy; BA-2: COMMUNICATIONS AND ELECTRONICS EQUIPMENT	C. P-1 ITEM NOMENCLATURE: NAVY TACTICAL DATA SYSTEM (NTDS)/260500 (ADVANCED COMBAT DIRECTION SYSTEM (ACDS))	SUBHEAD: A2LU

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
-										
FISCALYEAR 99										
LU059 LHA ACDS										
LHA1 ITAWDS Upgrade	**1**	**4100**	**NSWC PHD**	**(R1)**	**(R2)**	**NSWC PHD DN, VA**	**4/99**	**6/99**	**YES**	
LU06I Shore Site Emulation Equipment	**VAR**	**VAR**	**NSWC IHD**	**(R1)**	**FFP**	**DRS Technologics Parsippany, NJ**	**7/99**	**1/00**	**YES**	
FISCAL YEAR 00										
LU059 LHA ACDS										
LHA Shipboard Display Emmulators	**3**	**6630**	**NAVSEA**	**(R1)**	**FFP**	**Lockheed/Martin Bethesda, Md**	**7/00**	**11/00**	**YES**	
						DRS Technologics Parsippany, NJ				
LU06I Shore Site Emulation Equipment	**1**	**2486**	**NSWC IHD**	**(R1)**	**FFP**	**DRS Technologics Parsippany, NJ**	**5/00**	**11/00**	**YES**	

D. REMARKS:

(1) Contracts in place; procurement will be accomplished by placing delivery order on contract.

(2) NSWC PHD Dam Neck is responsible for the procurement of material, reconfiguration and assembly of equipment, installation, test, embedded computer programs and documentation.

BUDGET ITEM JUSTIFICATION SHEET P-40												DATE: February 2000
APPROPRIATION/BUDGET ACTIVITY: **OTHER PROCUREMENT, NAVY/BA-2**							P-1 ITEM NOMENCLATURE: **Cooperative Engagement Capability (CEC)/260600**					
Program Element for Code B Items: **0603755N (FY 1994-97); 0603658N (FY 1998-05)**							Other Related Program Elements: **N/A**					
	Prior Years	ID Code		FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY	**5**			**9**	**3**	**0**	**11**	**15**	**8**	**11**	**58**	**120**
COST (In Millions)	**$70.9**			**$81.7**	**$60.2**	**$15.9**	**$117.3**	**$147.3**	**$115.2**	**$137.9**	**$616.8**	**$1,363.1**
SPARES COST (In Millions)				**$2.8**	**$5.5**	**$4.0**	**$1.9**	**$6.3**	**$2.6**	**$2.5**	**Cont.**	**Cont.**

A. (U) Mission Description and Budget Item Justification: 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 capable of 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. Each CU independently employs high capacity, parallel processing and advanced algorithms to combine all distributed sensor data into a fire control quality track picture which is the same for all CUs. CEC data is presented as a superset of the best AAW sensor capabilities from each CU, all of which are integrated into a single input to each CU's combat weapons system. CEC will significantly improve our Battle Force defense in depth, including both local area and ship defense capabilities against current and future AAW threats. Moreover, CEC will provide critical connectivity and integration of over-land air defense systems capable of countering emerging air threats, including land attack cruise missiles, in a complex littoral environment.

(U) CEC consists of the Data Distribution System (DDS), the Cooperative Engagement Processor (CEP), and Combat System modifications. The DDS encodes and distributes ownship sensor and engagement data, is a high capacity, jam resistant, directive system providing a precision gridlocking and high throughput of data. The CEP is a high capacity distributed processor which is able to process force levels of data in a timely manner that allows its output to be considered real-time fire control data. This data is passed to the ship's combat system as high quality data for which the ship can cue its onboard sensors or use the data to engage targets without actually tracking them.

CEC is planned for shipboard installations at various Naval and commercial shipyards aboard CG, DDG 51, CV/CVN, LHD, LHA and LSD 41 ship classes, and at land based test sites during scheduled ship availability periods.

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) were purchased under the development contract.

Estimates include projected procurement savings from development of the Low Cost Planar Array (LCPA) under the CEC RDT&E,N progra

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System		DATE: **February 2000**
APPROPRIATION/BUDGET ACTIVITY	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD	
OTHER PROCUREMENT, NAVY/BA-2	**B**	**Cooperative Engagement Capability (CEC)/A2UC**	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years				FY 1999			FY 2000			FY 2001		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
UC001	Coop. Eng. Transmitting/Proc. Sys. (CETPS) (AN/USG-2)	B	40,273				9*	7,352.00	66,168	3	8,683.00	26,049	3	*	*
UC002	AN/UYQ-70 Display	A	11,859				30	321.17	9,635						
UC830	Production Engr. Support	A	13,343						3,677			4,338			0
UC004	ECP/Kit Procurement	A	30						749			6,988			3,652
UC005	Non-recurring Depot Cost		1,000						0			3,700			
UC006	VISTA Training		700						0						
UC007	CETPS (AN/USG-3) (Airborne)*	B	0												
UC008	Supply Support		0									8,477			992
	INSTALLATION:														
UC51N	FMP		1,724						508			2,206			8,040
UC61N	Non-FMP		1,979						993			8,399			3,169
	70,908								**81,730**			**60,157**			**15,853**

* Aircraft Procurement sets previously budgeted in FY 1999 are being funded by a FY 2000 Congressional add into APN, BA5. Since only six USG-2 (shipboard) systems were planned in FY 1999, the balance of FY 1999 funds are being applied to sustain the FY 2001 procurement of three systems.

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE: February 2000
B. APPROPRIATION/BUDGET ACTIVITY: OTHER PROCUREMENT, NAVY/BA-2	C. P-1 ITEM NOMENCLATURE: Cooperative Engagement Capability (CEC)/260600	SUBHEAD: A2UC

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FY 1999										
AN/USG-2	6	7,352	Arlington, VA	Jan-99	SS/CPAF	Raytheon Sys. Co., St. Petersburg, FL	Sep-99	Mar-01	Yes	N/A
AN/USG-2 *	3	7,352	Arlington, VA	Jan-00	SS/CPAF	Raytheon Sys. Co., St. Petersburg, FL	Apr-00	Oct-01	Yes	N/A
AN/UYQ-70	30	321	Arlington, VA	Jan-99	CP	Lockheed-Martin Tactical Defense Sys.	Sep-99	Mar-01	Yes	N/A
FY 2000										
AN/USG-2	3	8,683	Arlington, VA	Jan-00	SS/CPAF	Raytheon Sys. Co., St. Petersburg, FL	Apr-00	Oct-01	Yes	N/A
FY 2002										
AN/USG-2	11	6,572	Arlington, VA	Dec-01	SS/CPAF	Raytheon Sys. Co., St. Petersburg, FL	Dec-01	Jun-03	Yes	N/A
AN/UYQ-70	44	516	Arlington, VA	Dec-01	CP	Lockheed-Martin Tactical Defense Sys.	Dec-01	Jun-03	Yes	N/A

D. REMARKS

AN/UYQ-70 cost includes ADS MKVI display consoles and associated peripherals.

* Aircraft Procurement sets previously budgeted in FY 1999 are being funded by a FY 2000 Congressional add into APN, BA5. Since only six USG-2 (shipboard) systems were planned in FY 1999, the balance of FY 1999 funds are being applied to sustain the FY 2001 procurement of three systems.

CLASSIFICATION: UNCLASSIFIED

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AN/USG-2/3 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 III (1Q FY 2002) TDP AVAIL (Sep 98**

	FY 1998 & Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E	21	1187.9			1	189.6		189.9		119.3		49.1		48.8		46.9		47.0		Cont.	22	1878.5
PROCUREMENT																						
INSTALLATION KITS																						0.0
INSTALLATION KITS - UNIT COST																						0.0
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT (AN/USG-2)	1	8.1			6	44.0	3	26.0	0	0.0	11	72.3	15	92.1	8	47.1	11	63.2	58	261.9	113	614.7
EQUIPMENT (AN/USG-3)																					0	0.0
ENGINEERING CHANGE ORDERS																						0.0
SUPPLY SUPPORT								8.5		1.0												9.5
TRAINING EQUIPMENT (AN/USG-2)	4	32.2			3	22.1															7	54.3
SUPPORT EQ. (VISTA Trng)		0.7				0.0																0.7
OTHER (N/R Depot Standup)		1.0				0.0		3.7														4.7
OTHER (ECP/Kit Procurement)						0.8		7.0		3.7		6.2		6.6		7.2		5.8				37.3
OTHER (Production Engr. Support)		13.3				3.7		4.3		0.0		4.2		4.3		4.4		4.5		18.6		57.3
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST *		3.5				1.2		9.7		9.0		9.8		17.9		27.6		25.7		169.8		274.2
TOTAL PROCUREMENT	5	58.8	0	0.0	9	71.8	3	59.2	0	13.7	11	92.5	15	120.9	8	86.3	11	99.2	58	450.3	120	1052.7

* Includes FMP and Non-FMP

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

MODELS OF SYSTEMS AFFECTED: AN/USG-2/3 MODIFICATION TITLE: CETPS

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION:
ADMINISTRATIVE LEADTIME: 12 Months PRODUCTION LEADTIME: 18 Months
CONTRACT DATES: FY 1999: July 1999 FY 2000: April 2000 FY 2001:
DELIVERY DATE: FY 1999: January 2001 FY 2000: October 2001 FY 2001:

($ in Millions)

Cost:	Prior Years		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0			0	0.0
FY 1998 EQUIPMENT		1.4						0.3	1	0.8									1	2.5
FY 1998 EQUIPMENT		* 1.4		* 0.6	4	* 5.2													4	7.2
FY 1999 EQUIPMENT				0.3			3	3.4											3	3.7
FY 1999 EQUIPMENT		* 0.7		* 0.3		* 3.2	3	* 4.6	3	3.8									6	12.6
FY 1999 EQUIPMENT																			0	0.0
FY 2000 EQUIPMENT						1.3		0.5	1	2.6	2	3.1							3	7.5
FY 2000 EQUIPMENT																			0	0.0
FY 2001 EQUIPMENT																			0	0.0
FY 2001 EQUIPMENT																			0	0.0
FY 2002 EQUIPMENT								0.2		2.3	4	10.7	7	10.7					11	23.9
FY 2003 EQUIPMENT										0.3		4.1	3	16.0	12	17.7			15	38.1
FY 2004 EQUIPMENT														0.9		6.6	8	13.4	8	20.9
FY 2005 EQUIPMENT																1.4	11	17.0	11	18.4
TO COMPLETE																	58	139.4	58	139.4
TOTALS		3.5	0	1.2	4	9.7	6	9.0	5	9.8	6	17.9	10	27.6	12	25.7	77	169.8	120	274.2

* Non-FMP Installatior

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999 1	2	3	4	FY 2000 1	2	3	4	FY 2001 1	2	3	4	FY 2002 1	2	3	4	FY 2003 1	2	3	4	FY 2004 1	2	3	4	FY 2005 1	2	3	4	TC	TOTAL
In	0	0	0	0	0	1	1	2	0	0	1	0	5	1	0	2	2	2	0	2	2	2	3	2	3	1	3	3	5	77	120
Out	0	0	0	0	0	1	1	2	0	0	1	0	5	1	0	2	2	2	0	2	2	2	3	2	3	1	3	3	5	77	120

P-3A

CLASSIFICATION: UNCLASSIFIED

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AN/UYQ-70 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 III (1Q FY 2002) TDP AVAIL (Sep 98**

	FY 1998 & Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E	21	1187.9			1	189.6		189.9		119.3		49.1		48.8		46.9		47.0		Cont.	22	1878.5
PROCUREMENT																				
INSTALLATION KITS																				0.0
INSTALLATION KITS - UNIT COST																				0.0
INSTALLATION KITS NONRECURRING																				0.0
EQUIPMENT (AN/UYQ-70)	17	11.8			30	9.6					44	22.7	38	22.1	41	25.3	43	31.8	219	143.8	432	267.1
EQUIPMENT																				0.0
ENGINEERING CHANGE ORDERS																				0.0
DATA																				0.0
TRAINING EQUIPMENT (AN/UYQ-70)																				0.0
SUPPORT EQ.																				0.0
OTHER																				0.0
OTHER																				0.0
OTHER																				0.0
INTERIM CONTRACTOR SUPPORT																				0.0
INSTALL COST		0.2		0.0		0.3		0.9		2.2		2.1		4.2		3.5		6.9		22.7		43.0
TOTAL PROCUREMENT	17	12.0	0	0.0	30	9.9	0	0.9	0	2.2	44	24.8	38	26.3	41	28.8	43	38.7	219	166.5	432	310.1

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

MODELS OF SYSTEMS AFFECTED: AN/UYQ-70 MODIFICATION TITLE:

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION:
ADMINISTRATIVE LEADTIME: 12 Months PRODUCTION LEADTIME: 18 Months
CONTRACT DATES: FY 1999: September 1999 FY 2000: April 2000 FY 2001:
DELIVERY DATE: FY 1999: March 2001 FY 2000: October 2000 FY 2001:

($ in Millions)

Cost:	Prior Years				FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	$	Qty		Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS		0.0				##		0.0		0.0		0.0		0.0		0.0		0.0			0	0.0
FY 1998 EQUIPMENT		0.2				##	17	0.5													17	1.0
FY 1999 EQUIPMENT								0.4	30	2.2											30	2.6
FY 2000 EQUIPMENT																					0	0.0
FY 2001 EQUIPMENT																					0	0.0
FY 2002 EQUIPMENT												1.9	16	3.6	28	2.9					44	8.4
FY 2003 EQUIPMENT												0.2		0.6	8	0.6	30	5.5			38	6.9
FY 2004 EQUIPMENT																		1.4	41	10.0	41	11.4
FY 2005 EQUIPMENT																			43	9.4	43	9.4
TO COMPLETE																			219	3.3	219	3.3
TOTALS		0.2			0	##	17	0.9	30	0	2.2	0	0	2.1	16	4.2	36	3.5	30	6.9	303	22.7	432	43.0

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	4	4	9	0	0	3	12	15	0	0	0	0	4	0	6	6	8	10	9	9	4	7	8	11	303	432
Out	0	0	0	0	0	4	4	9	0	0	3	12	15	0	0	0	0	4	0	6	6	8	10	9	9	4	7	8	11	303	432

P-3A

									DATE February 2000	
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				**P-1 ITEM NOMENCLATURE** GCCS-M (#2608)					**SUBHEAD** 52JG	
	PY	**FY 1999**	**FY 2000**	**FY 2001**	**FY 2002**	**FY 2003**	**FY 2004**	**FY 2005**	**To COMP**	**TOTAL**
QUANTITY										
COST **(in millions)**		**$41.1**	**$24.9**	**$37.4**	**$36.8**	**$40.0**	**$41.9**	**$60.8**	**Continuing**	**Continuing**

PROGRAM COVERAGE/JUSTIFICATION FOR BUDGET YEAR REQUIREMENTS:

This budget line is a consolidation of several GCCS-M procurement lines: GCCS-M Afloat (BLI 2608), GCCS-M Ashore (BLI 2804), JMCIS OED (2805), GCCS-M Support Equipment (BLI 3350), and GCCS-M Tactical Mobile (BLI 2906).

GCCS-M (Overall Description):
Global Command and Control System-Maritime (GCCS-M) is the Navy's fielded Command and Control system, a key component of the Copernicus ... Forward C4ISR strategy, and is the Navy's tactical implementation of the Joint Services Global Command and Control System (GCCS). GCCS-M has aggressively pursued an Evolutionary Acquisition strategy in rapidly developing and fielding new Command, Control, Computers and Intelligence (C3I) capabilities for Navy users. GCCS-M's latest phase includes migration to DISA's Defense Information Infrastructure (DII) Common Operating Environment (COE), incorporation of Fleet requirements for merging tactical and non-tactical networks, support for the IT-21 / Network Centric Warfare initiative and utilization of PC, WEB and other COTS Information Technology. System upgrades are required to support the evolutionary nature of the GCCS-M software releases in order to meet Fleet / mission requirements. GCCS-M Y2K system upgrades will be completed in FY99 and the remaining JMCIS'98 (NT) installations will occur during FY00-FY01. Major hardware and software Version Upgrades will occur during FY02-FY05.

JG010: GCCS-M Afloat (formerly referred to as Navy Tactical Command System-Afloat (NTCS-A) and Joint Maritime Command Information System (JMCIS) Afloat) provides Tactical C3I systems tailored to meet platform missions and functions to ensure joint interoperability among Numbered Fleet Commanders (NFC), Commander, Joint Task Force (CJTF), Joint Force Air Component Commander (JFACC), Office in Tactical Command (OTC), Composite Warfare Commander (CWC), Subordinate Warfare Commanders (SWC), Commander Amphibious Task Forces (CATF), Commander, Landing Forces (CLF) and Commanding Officer/Tactical Action Officer (CO/TAO). GCCS-M Afloat provides both General Service (GENSER) and Sensitive Compartmented Information (SCI) 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 environmen information. GCCS-M Afloat provides tactical commanders with an accurate, reliable and survivable Common Operational Picture (COP) which includes complete all-source information management, display and dissemination, rapid access to organic/theater/national intelligence and databases, and multi-source data fusion and imagery exploitation.

GCCS-M Afloat provides C3I capability to 28 Force Level Ships (i.e., CV/CVN, LCC, LHA, LHD, MCS and AGF), 192 Unit Level Ships (i.e., AO/AOE/AE/ARS, CG, DD/DDG, FFG, MHC/MCM, LPD/LSD/LST), 66 Submarines (i.e., SSN/SSBN), 17 training sites, the Software Support Activity (SSA), and the In-Service Engineering Activity (ISEA). GCCS-M Afloat consists of the following tactical systems: GCCS-M, Shipboard Video Distribution System (SVDS), Contingency Theater Automated Planning Systems (CTAPS) / Theater Battle Management Core Systems (TBMCS) and Radiant Mercury.

BUDGET ITEM JUSTIFICATION SHEET		DATE February 2000
APPROPRIATION/BUDGET ACTIVITY	**P-1 ITEM NOMENCLATURE**	**SUBHEAD**
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	GCCS-M (#2608)	52JG

Force Level ships receive a GCCS-M GENSER system (UNIX and NT), a GCCS-M SCI system (UNIX and NT), a Shipboard Video Distribution System, a CTAPS / TBMCS system and a Radiant Mercury system.
Unit Level ships receive a GCCS-M GENSER system (UNIX and NT).
Submarines receive a GCCS-M GENSER system (UNIX and NT).
Training Sites, the SSA and ISEA receive a GCCS-M GENSER system (UNIX and NT), a GCCS-M SCI system (UNIX and NT), a Shipboard Video Distribution System, a CTAPS / TBMCS system and a Radiant Mercury system.

JG020: GCCS-M Ashore. Provides evolutionary systems and ancillary equipment upgrades to support CNO, Fleet Commanders in Chief, Unified Commanders, Type Commanders, Force Anti-Submarine Warfare (ASW) Commanders, and Submarine Operating Authorities worldwide. The GCCS-M Ashore provides a single system to receive, process, display, maintain and/or assess unit characteristics, employment scheduling, material condition, combat readiness, warfighting capabilities, and positional information of own, allied, and hostile forces. GCCS-M Ashore provides the tools necessary for operational commanders to execute plans, transmit tasking, and provide tactical information to subordinate forces.

JG030: JMCIS OED. 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 near-real-time all-source fusion, correlation and analysis tools for the analysis of multi-source intelligence to produce comprehensive tactical threat warnings, decision making support, and support of Over-the-Horizon-Targeting.

JG040: GCCS (Joint). Is an operational multi-service/agency C4I program encompassing both strategic and tactical C4I functions. GCCS (Joint) supports the National Command Authority and the CINCs by providing C4I data processing capabilities, including status of forces and support requirements for use in national security decision making, force preparation and operational planning execution.

JG050: GCCS-M Tactical/Mobile program provides evolutionary systems and ancillary equipment upgrades to support the Unified, Fleet, and Navy Component Commanders, the Maritime Sector, Theater, and the Naval Liaison Element Commanders (Ashore) with the capability to plan, direct and control the tactical operations of Joint and Naval Expeditionary Forces and other assigned units within their respective area of responsibility. These operations include littoral, open ocean, and over land all sensor (i.e. EO, IR, ISAR, etc.) surveillance, anti-surface warfare, over-the-horizon targeting, counter-drug operations, power projection, antisubmarine warfare, mining, search and rescue, and special operations. The Command and Control services provided include core GCCS-M capabilities, analysis and correlation of diverse sensor information; data management support, command decision aids; access to rapid data communication, mission planning and evaluation; dissemination of ocean surveillance positional data and threat alerts to operational users ashore and afloat. The GCCS-M Tactical/Mobile System includes the fixed site Tactical Support Centers (TSCs) and the Mobile Operations Control Centers (MOCCs) which is a mobile version of the TSC for contingency operations, the highly portable Mobile Ashore Support Terminals (MASTs) and the more robust Mobile Integrated Command Facilities (MICFACs). Beginning in FY01, the MAST and MICFAC systems will begin to transition into a single system called the Joint Mobile Ashore Support terminal (JMAST). This budget also includes funds for the MIUW Van Upgrades.

PROCUREMENT DATA:

The FY 99 Budget Procured: 1. GCCS-M Ashore Command Center Equipment; 2. GCCS Intelligent Workstations, Servers LAN hardware and software, communications equipment; 3. JMCIS OED upgrades; 4. TSC Upgrade Equipment; 5. MAST/MICFAC Equipment; 6. MIUW Van upgrades; 7. GCCS-M Afloat UNIX and JMCIS'98 (NT) C3I upgrade systems and Y2K software upgrades; and installation of Equipment, production engineering support and initial training.

BUDGET ITEM JUSTIFICATION SHEET		DATE February 2000
APPROPRIATION/BUDGET ACTIVITY	**P-1 ITEM NOMENCLATURE**	**SUBHEAD**
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	GCCS-M (#2608)	52JG

The FY 00 Budget Procured: 1. GCCS-M Ashore Command Center Equipment; 2. JMCIS OED upgrades; 3. GCCS (JOINT) Workstations, Servers, LAN hardware and software, communications equipment; 4. TSC Upgrade Equipment; 5. MAST/MICFAC Equipment; 6. GCCS-M Afloat C3I systems; and installation of Equipment, production engineering support and initial training.

The FY 01 Budget Request Procures: 1. GCCS-M Ashore Command Center Equipment; 2. JMCIS OED upgrades; 3. GCCS (JOINT) Workstations, Servers, LAN hardware and software, communications equipment; 4. TSC Upgrade Equipment; 5. MAST/MICFAC Equipment; 6. GCCS-M Afloat C3I systems; and installation of Equipment, production engineering support and initial training.

INSTALLATION DATA:

GCCS-M Afloat, in FY99, includes funds to procure and install equipment for 24 Force Level platforms, 109 Unit Level platforms; including 8 submarines, 1 Mine ship, 7 shore support sites. GCCS-M Afloat, in FY00, includes funds to procure and install equipment for 21 Force Level Ships, 67 Unit Level Ships (including 18 submarines), 1 mine ship and 6 shore support sites. GCCS-M Afloat, in FY01, includes fundsto procure and install equipment for 8 Force Level Ships, 78 Unit Level Ships (including 8 submarines)and 4 shore support sites.

GCCS-M Ashore equipment installation sites include the Navy Command Center Pentagon, Alternate National Command Center (Site R), USCINCPAC, CINCLANTFLT, CINCPACFLT, CINCUSNAVEUR (London UK and Naples IT); Software Support Activity SSC San Diego; 2 Training sites at Fleet Computer Training Centers sites Dam Neck and San Diego; 8 Submarine Operating Command Center sites: SUBLANT at Norfolk, SUBGRU8 at Naples, SUBPAC at Pearl Harbor, SUBGRU7 at Yokosuka, COMSUBGRU9 at Bangor, COMSUBGRU10 at Kings Bay, COMSUBLANT REP UK at Northwood UK; and SUBPACREP at San Diego; 4 ASW Command Center sites: CTF84 at Norfolk; CTF67 at Naples, CTF12 at Pearl Harbor, and CTF72 at Kamiseya, 6 TYCOM Command Center sites: SUBLANT, SURFLANT, and AIRLANT at Norfolk; SUBPAC at Pearl Harbor; SURFPAC and AIRPAC at San Diego; and 5 Integrated Underwater Surveillance System (IUSS) Command Center sites at NAVOCEANPROFACs at Whidbey Island and Dam Neck; JOINT MARITIME FACILITY at St. Mawgans UK, and sites 7900 and 5200; and 24 GCCS (Joint) collocated/remote sites. JMCIS OED equipment installation sites include ONI, JICPAC, JICPAC DETACHMENT, AIC, NMITC, and JAC MOLESWORTH.

GCCS (Joint) equipment is scheduled for installation at Navy supported sites: USACOM (4), USPACOM, and US FORCES JAPAN. GCCS-T equipment is installed at 1 Host Site and 8 Remote Sites: CINCPACFLT/GSF(Host), USACOM(Remote), COMSOCACOM(Remote), CTF-69(Remote), COMICEDEFOR(Remote), USCINCPAC(Remote), CINCLANTFLT(Remote), CINCUSNAVEUR(Remote), US Forces Japan(Remote).

JMCIS OED equipment installation sites include ONI, JICPAC, JICPAC DETACHMENT, AIC, NMITC, and JAC MOLESWORTH

GCCS-M Tactical/Mobile sites include 15 TSC systems (14 in FY 00) at 13 operational sites (12 in FY00) (located at Keflavik, Iceland; Brunswick, ME; Jacksonville, FL; Sigonella, Italy; Rota, Spain; Kaneohe Bay, HI; Whidbey Island, WA; Kadena, Japan; Misawa, Japan; North Island, CA; Diego Garcia, Indian Ocean; Roosevelt Roads, Puerto Rico, and Masirah, Oman); 1 training site at Fleet Combat Training Center (FCTC) Dam Neck, VA and 1 ISEA site at SSC CHARLESTON DET Patuxent River. 8 MOCCs (Homeported at Brunswick, ME; Jacksonville, FL; Sigonella, Italy; Barbers Point/Kaneohe Bay, HI; Misawa, Japan; Whidbey Island, WA; Willow Grove, PA; and Point Mugu, CA. C2 Engineering Development, Software Support Facility (SSC CHARLESTON). 5 MICFACs (homeported at Bahrain; Sigonella, Sicily; Pearl Harbor, HI; St. Juliens Creek, VA; and Corpus Christi, TX) 4 MASTS (homeported at Bahrain; Rota, Spain; Pearl Harbor, HI; and St. Juliens Creek, VA).

COST ANALYSIS												**DATE** February 2000
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT					**P-1 ITEM NOMENCLATURE** GCCS-M (#2608)							**SUBHEAD** 52JG
			TOTAL COST IN THOUSANDS OF DOLLARS									
				PY	**FY 1999**			**FY 2000**			**FY 2001**	
COST CODE	**ELEMENT OF COST**	**ID CODE**	**QTY**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**
	GCCS-M-Afloat						**20,276**			**18,990**			**16,892**
JG023	GCCS-M Shipboard Video Distrib. System (FY00)	N/A						2	700.00	1,400			
JG010	GCCS-M Shipboard Video Distrib. System (FY01)	N/A									2	700.00	1,400
JG028	GCCS-M Afloat Unit Level Upgrade (FY99/FY00)	A			109		11,011	67	148.82	9,971			
JG010	GCCS-M Afloat Unit Level Upgrade (FY01)	A									78	86.92	6,780
JG029	GCCS-M Aloat Force Level (FY99/FY00)	A			24		7,643	21	247.05	5,188			
JG010	GCCS-M Aloat Force Level (FY01)	A									8	461.00	3,688
JG030	GCCS-M Afloat Shore Site (FY99/FY00)	A			7		1,400	6	195.00	1,170			
JG010	GCCS-M Afloat Shore Site (FY01)	A									4	527.00	2,108
JG031	GCCS-M Afloat/MIW System Equip (FY99/FY00)	A			1	222.0	222	1	115.00	115			
JG041	TBMCS Afloat Force Level H/W (FY00)							1	606.00	606			
JG010	TBMCS Afloat Force Level H/W (FY01)										14	188.43	2,638
JG042	TBMCS Shore Site H/W (FY00)							2	270.00	540			
JG010	TBMCS Shore Site H/W (FY01)										1	278.00	278
	GCCS-M ASHORE						**3,620**			**6,239**			**3,474**
JH031	GCCS-M Ashore (FY99/FY00)	A			VAR	VAR	3,620	VAR	VAR	6,239			
JG020	GCCS-M Ashore (FY01)	A									VAR	VAR	3,474
	JMCIS OED	**A**					**903**			**438**			**990**
JJ011	JMCIS OED (FY99)	A			VAR		903						
JH011	JMCIS OED (FY00)	A						VAR	VAR	438			
JG030	JMCIS OED (FY01)	A									VAR	VAR	990
	GCCS (Joint) Support Equip	**A**					**1,706**			**1,138**			**1,031**
NW036	GCCS (Joint) Support Equipment (FY99)	A					1,706						
JH036	GCCS (Joint) Support Equipment (FY00)	A						15	N/A	1,138			
JG040	GCCS (Joint) Support Equipment (FY01)	A									15	N/A	1,031
	GCCS-M TACTICAL MOBILE						**23,149**			**13,035**			**6,302**
T4371	Upgrade Equipment TSC (FY99/FY00)	A					2,840			4,248			
JG050	Upgrade Equipment TSC (FY01)	A											4,144
T4500	MAST/MICFAC (FY99/FY00)	A					568			1,823			
JG050	MAST/MICFAC (FY01)	A											2,158
T4600	MIUW Van Upgrades (FY99/FY00)	A					19,741			6,964			

Remarks: This budget line now includes GCCS-M Afloat (BLI 2608), GCCS-M Ashore (BLI 2804), JMCIS OED (2805), GCCS-M Support Equipment (Bli 3350) and GCCS-M Tactical Mobile (BLI 2906). GCSS-M Afloat quantities do not reflect complete systems, rather the number of ships or shore sites supported.

COST ANALYSIS												**DATE** February 2000		
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT					**P-1 ITEM NOMENCLATURE** GCCS-M (#2608)							**SUBHEAD** 52JG		
			TOTAL COST IN THOUSANDS OF DOLLARS											
				PY	**FY 1999**			**FY 2000**				**FY 2001**		
COST CODE	**ELEMENT OF COST**	**ID CODE**	**QTY**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**
JG555	**Production Support**						**600**			**551**			**558**
JG666	**Training (Train the Trainers)**						**396**			**401**			**509**
	INSTALLATION						**22,418**			**7,521**			**7,671**
	Non FMP												
JG776	GCCS-M Afloat (FY99/FY00)						550			480			
JG777	GCCS-M Afloat (FY01)												1,235
JH776	GCCS-M Ashore (FY99/FY00)				VAR	VAR	366	VAR	VAR	1,572			
JG777	GCCS-M Ashore (FY01)										VAR	VAR	1,060
JJ776	JMCIS OED (FY99)						36						
NW776	GCCS (Joint) Support Equipment (FY99)				11	N/A	779						
T4776	GCCS-M Tactical Mobile (FY99/FY00)						1,422			964			
JG777	GCCS-M Tactical Mobile (FY01)												1,236
	FMP												
JG777	GCCS-M Afloat						17,031			4,055			3,721
JG777	GCCS-M Afloat - **DSA**						2,234			450			419
	TOTAL CONTROL						**73,068**			**48,313**			**37,427**
	TOTAL BLI 2608						41,087			24,927			37,427
	TOTAL BLI 2804						3,986			9,387			0
	TOTAL BLI 2805						939			0			0
	TOTAL BLI 3350						2,485			0			0
	TOTAL BLI 2906						24,571			13,999			0

PROCUREMENT HISTORY AND PLANNING

A. DATE: February 2000

B. APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

C. P-1 ITEM NOMENCLATURE: GCCS-M (#2608)

SUBHEAD: 52JG

COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
JG023	GCCS-M Afloat Shipboard Video Distribution System											
		00	Various	Option C/FFP	SPAWAR		Dec-99	Feb-00	2	700	YES	N/A
JG010	GCCS-M Afloat Shipboard Video Distribution System											
		01	Various	Option C/FFP	SPAWAR		Nov-00	Jan-01	2	700	YES	N/A
JG028	GCCS-M Afloat Unit Level Upgrade	00	SSC Charleston/San Diego	WX	SPAWAR		Oct-99	Jan-00	67	149	YES	N/A
JG010	GCCS-M Afloat Unit Level Upgrade	01	SSC Charleston/San Diego	WX	SPAWAR		Oct-00	Jan-01	78	87	YES	N/A
JG029	GCCS-M Afloat Unit Level	00	SSC Charleston/San Diego	WX	SPAWAR		Oct-99	Jan-00	21	247	YES	N/A
JG010	GCCS-M Afloat Unit Level	01	SSC Charleston/San Diego	WX	SPAWAR		Oct-00	Jan-01	8	461	YES	N/A
JG030	GCCS -M Afloat Shore Site	00	SSC Charleston/San Diego	WX	SPAWAR		Oct-99	Jan-00	6	195	YES	N/A
JG010	GCCS -M Afloat Shore Site	01	SSC Charleston/San Diego	WX	SPAWAR		Nov-00	Jan-99	4	527	YES	N/A
JG031	GCCS-M Afloat / MIW System Equip	00	Various	Option C/FFP	SPAWAR		Dec-99	Feb-00	1	115	YES	N/A
JG041	TBMCS Force Level	00	SSC Charleston/San Diego	WX	SPAWAR		Oct-99	Jan-00	1	606	YES	N/A
JG010	TBMCS Force Level	01	SSC Charleston/San Diego	WX	SPAWAR		Nov-00	Jan-01	14	188	YES	N/A
JG042	TBMCS Shore Site H/W	00	SSC Charleston/San Diego	WX	SPAWAR		Oct-99	Jan-00	2	270	YES	N/A
JG010	TBMCS Shore Site H/W	01	SSC Charleston/San Diego	WX	SPAWAR		Nov-00	Jan-01	1	278	YES	N/A

D. REMARKS

JG028/JG029/JG30/JG41/JG42: SSC Charleston/San Diego are integrating agents. There are multiple hardware contracts awarded under each cost code.

Feb-00

MODIFICATION TITLE: GCCS-M Afloat Shipboard Video Distribution System
COST CODE JG023/**JG010**
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: The GCCS-M Afloat Shipboard Video Distribution System upgrade for Force Level ships provides the ability to route video signals (up to 96 inputs and 96 outputs) throughout selected areas of the ship. The system will be upgraded to provide digital signal routing via the IT-21 LAN to configured command, control and mission planning spaces on force level combatants and off board ship via VIXIS. These systems are part of GCCS-M Afloat with installations continuing through FY05.

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

	PY		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
PROCUREMENT:																				
Kit Quantity																				
Installation Kits																				
Installation Kits Nonrecurring																				
Equipment	7	3.6	0.0	0.0	2	1.4	2	1.4	2	1.4	2	1.4	3	2.1	12	8.4	CONT		30	19.7
Equipment Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interm Contractor Support																				
Installation of Hardware*	7	3.6	0	0.0	2	0.3	2	0.4	2	0.4	2	0.4	3	1.2	12	4.0	0	0.0	30	10.0
PRIOR YR EQUIP	7	3.6																	7	3.6
FY 97 EQUIP																			0	0.0
FY 98 EQUIP																			0	0.0
FY 99 EQUIP			0.0	0.0															0	0.0
FY 00 EQUIP					2	0.3													2	0.3
FY 01 EQUIP							2	0.4											2	0.4
FY 02 EQUIP									2	0.4									2	0.4
FY 03 EQUIP											2	0.4							2	0.4
FY 04 EQUIP													3	1.2					3	1.2
FY 05 EQUIP															12	3.7			12	3.7
FY TC EQUIP																			0	0.0
TOTAL INSTALLATION COST		3.6		0.0		0.3		0.4		0.4		0.4		1.2		4.0		0.0		10.0
TOTAL PROCUREMENT COST		7.2		0.0		1.7		1.8		1.8		1.8		3.3		12.4		0.0		29.7

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 mos. PRODUCTION LEADTIME: 3 mos.

CONTRACT DATES: FY 1999: Various FY 2000: Dec-99 FY 2001:

DELIVERY DATES: FY 1999: Various FY 2000: Feb-00 FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99 1	2	3	4	FY 00 1	2	3	4	FY 01 1	2	3	4	FY 02 1	2	3	4
INPUT	7						1	1			1	1			1	1	
OUTPUT	7							1	1			1	1			1	1

INSTALLATION SCHEDULE:	FY 03 1	2	3	4	FY 04 1	2	3	4	FY 05 1	2	3	4	TC	TOTAL
INPUT		1	1			1	2			6	3	3		30
OUTPUT			1	1			1	2		6	3	3		30

Notes/Comments: Quantities refer to number of Force Level Ships. Currently, there are 28 Force Level Ships in the Fleet.
Prior year installations were for "analog 23TV systems". FY00 and outyear installations are for "GCCS-M Afloat Shipboard Video Distribution System".

Feb-00

MODIFICATION TITLE: GCCS-M Afloat Unit Level Upgrade
COST CODE JG028/**JG010**
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: The GCCS-M Afloat Unit Level system is the tactical C3I system for the BG / ARG Unit Level warfighting combatants and submarines and consists of both UNIX and NT servers and workstations running on a IT-21 LAN while providing the tactical commander with the COP, automated decision aids and an integrated tactical shipboard intelligence system that utilize joint organic, non-organic (remote sources) and environmental information/intelligence in the decision making and warfighting process. It also provides tactical commanders with an accurate, reliable and survivable Common Operational Picture (COP) which includes complete all-source information management, display and dissemination, rapid access to organic/theater/national intelligence and databases and multi-source data fusion and imagery exploitation.

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

	PY		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
PROCUREMENT:																				
Kit Quantity																				
Installation Kits																				
Installation Kits Nonrecurring																				
Equipment	104	3.9	109	11.0	67	10.0	78	6.8	54	5.6	57	9.0	55	8.8	61	12.5	CONT		585	67.6
Equipment Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interm Contractor Support																				
Installation of Hardware*	104	3.3	109	13.1	67	3.0	78	2.9	54	2.5	57	3.0	55	2.3	61	3.0	0	0.0	585	33.1
PRIOR YR EQUIP	104	3.3																	104	3.3
FY 97 EQUIP																			0	0.0
FY 98 EQUIP																			0	0.0
FY 99 EQUIP			109	13.1															109	13.1
FY 00 EQUIP					67	3.0													67	3.0
FY 01 EQUIP							78	2.9											78	2.9
FY 02 EQUIP									54	2.5									54	2.5
FY 03 EQUIP											57	3.0							57	3.0
FY 04 EQUIP													55	2.3					55	2.3
FY 05 EQUIP															61	3.0			61	3.0
FY TC EQUIP																			0	0.0
TOTAL INSTALLATION COST		3.3		13.1		3.0		2.9		2.5		3.0		2.3		3.0		0.0		33.1
TOTAL PROCUREMENT COST		7.2		24.1		13.0		9.7		8.1		12.0		11.1		15.5		0.0		100.7

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 mos. PRODUCTION LEADTIME: 3 mos.

CONTRACT DATES: FY 1999: Various FY 2000: Various FY 2001:

DELIVERY DATES: FY 1999: Various FY 2000: Various FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT	104		60	29	20		36	23	8		27	29	22		20	18	16
OUTPUT	104		60	29	20		20	22	25		27	29	22		20	15	19

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT		20	25	12		18	35	2		20	21	20		585
OUTPUT		20	28	9		5	25	25		20	20	21		585

Notes/Comments: Quantities refer to Unit Level ships and submarines. Currently, there are 192 Unit Level ships and 66 submarines in the Fleet.

Feb-00

MODIFICATION TITLE: GCCS-M Afloat Force Level Upgrade
COST CODE JG029/**JG010**
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: The GCCS-M Afloat Force Level system is the core battle group/force commander's warfighting system and consists of both UNIX and NT servers and workstations, color large screen displays, color large screen displays, remote displays and video switches running on a IT-21 LAN while providing the tactical commander with the COP, automated decision aids and an integrated tactical shipboard intelligence system that utilize joint organic, non-organic (remote sources) and environmental information/intelligence in the decision making and warfighting process. The Force Level system provides Tactical C3I systems tailored to meet platform missions and functions to ensure joint interoperability among various Fleet Commanders. It also provides both General Service (GENSER) and Sensitive Compartmented Information (SCI) 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. Lastly, it provides tactical commanders with an accurate, reliable and survivable Common Operational Picture (COP) which includes complete all-source information management, display and dissemination, rapid access to organic / theater / national intelligence and databases, and multi-source data fusion and imagery exploitation.

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

	PY		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
PROCUREMENT:																				
Kit Quantity																				
Installation Kits																				
Installation Kits Nonrecurring																				
Equipment	42	23.3	24	7.6	21	5.2	8	3.7	10	2.5	10	4.5	10	4.5	10	4.9	CONT		135	56.2
Equipment Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interm Contractor Support																				
Installation of Hardware*	42	3.8	24	3.8	21	0.6	8	0.5	10	1.4	10	1.5	10	1.5	10	1.4	0	0.0	135	34.0
PRIOR YR EQUIP	42	23.3																	42	23.3
FY 97 EQUIP																			0	0.0
FY 98 EQUIP																			0	0.0
FY 99 EQUIP			24	3.8															24	3.8
FY 00 EQUIP					21	0.6													21	0.6
FY 01 EQUIP							8	0.5											8	0.5
FY 02 EQUIP									10	1.4									10	1.4
FY 03 EQUIP											10	1.5							10	1.5
FY 04 EQUIP													10	1.5					10	1.5
FY 05 EQUIP															10	1.4			10	1.4
FY TC EQUIP																			0	0.0
		3.8		3.8		0.6		0.5		1.4		1.5		1.5		1.4		0.0		34.0
TOTAL PROCUREMENT COST		27.1		11.4		5.8		4.2		3.9		6.0		6.0		6.3		0.0		90.2

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 mos. PRODUCTION LEADTIME: 3 mos.

CONTRACT DATES: FY 1999: Various FY 2000: Various FY 2001:

DELIVERY DATES: FY 1999: Various FY 2000: Various FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				FY 02			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT	42		12	12			7	7	7		4	4			5	5	
OUTPUT	42			12	12		7	7	7			4	4			5	5

INSTALLATION SCHEDULE:	FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT		5	5			5	5			5	5			135
OUTPUT			5	5			5	5			5	5		135

Notes/Comments: Quantities refer to Force Level ships. Currently, there are 28 Force Level ships in the Fleet.

Feb-00

MODIFICATION TITLE: GCCS-M Afloat Shore Site Upgrade
COST CODE JG030/**JG010**
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: The GCCS-M Afloat Shore Site systems include 17 training sites, the Software Support Activity (SSA), and the In-Service Engineering Activity (ISEA). Shore site upgrades are required to support the evolutionary nature of the GCCS-M Afloat software releases in order to meet Fleet training / readiness requirements.

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

	PY		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
PROCUREMENT:																				
Kit Quantity																				
Installation Kits																				
Installation Kits Nonrecurring																				
Equipment	3	0.8	7	1.4	6	1.2	4	2.1	6	1.1	6	1.2	6	1.1	8	1.5	CONT		46	10.4
Equipment Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interm Contractor Support																				
Installation of Hardware*	3	0.8	7	0.6	6	0.5	4	1.2	6	0.5	6	0.5	6	0.5	8	0.7	0	0.0	46	5.3
PRIOR YR EQUIP	3	0.8																	3	0.8
FY 97 EQUIP																			0	0.0
FY 98 EQUIP																			0	0.0
FY 99 EQUIP			7	0.6															7	0.6
FY 00 EQUIP					6	0.5													6	0.5
FY 01 EQUIP							4	1.2											4	1.2
FY 02 EQUIP									6	0.5									6	0.5
FY 03 EQUIP											6	0.5							6	0.5
FY 04 EQUIP													6	0.5					6	0.5
FY 05 EQUIP															8	0.7			8	0.7
FY TC EQUIP																			0	0.0
TOTAL INSTALLATION COST		0.8		0.6		0.5		1.2		0.5		0.5		0.5		0.7		0.0		5.3
TOTAL PROCUREMENT COST		1.6		2.0		1.7		3.3		1.6		1.7		1.6		2.2				15.7

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 mos. PRODUCTION LEADTIME: 2 mos.

CONTRACT DATES: FY 1999: Various FY 2000: Various FY 2001:

DELIVERY DATES: FY 1999: Various FY 2000: Various FY 2001:

INSTALLATION SCHEDULE:		FY 99				FY 00				FY 01				FY 02			
	PY	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT																	
	3		4	3			3	3			2	2			3	3	
OUTPUT																	
	3			4	3			3	3			2	2			3	3

INSTALLATION SCHEDULE:	FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT		3	3			3	3			4	4			46
OUTPUT			3	3			3	3			4	4		46

Notes/Comments: Quantities refer to various GCCS-M Afloat Shore Sites

Feb-00

MODIFICATION TITLE: GCCS-M Afloat / MIW System Equip
COST CODE JG031/**JG010**
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: Supports the acquisition of hardware and software for mine warfare ships. This system supports the mine ship commanding Officer by providing a composite tactical picture, command and control.

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

	PY		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
PROCUREMENT:																				
Kit Quantity																				
Installation Kits																				
Installation Kits Nonrecurring																				
Equipment	24	5.7	1	0.2	1	0.1													26	6.0
Equipment Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interm Contractor Support																				
Installation of Hardware*	24	5.7	1	0.1	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	26	5.9
PRIOR YR EQUIP	24	5.7																	24	5.7
FY 97 EQUIP																			0	0.0
FY 98 EQUIP																			0	0.0
FY 99 EQUIP			1	0.1															1	0.1
FY 00 EQUIP					1	0.1													1	0.1
FY 01 EQUIP																			0	0.0
FY 02 EQUIP																			0	0.0
FY 03 EQUIP																			0	0.0
FY 04 EQUIP																			0	0.0
FY 05 EQUIP																			0	0.0
FY TC EQUIP																			0	0.0
TOTAL INSTALLATION COST		5.7		0.1		0.1		0.0		0.0		0.0		0.0		0.0		0.0		5.9
TOTAL PROCUREMENT COST		11.4		0.3		0.2		0.0		0.0		0.0		0.0		0.0		0.0		11.9

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 mos. PRODUCTION LEADTIME: 3 mos.

CONTRACT DATES: FY 1999: Various FY 2000: Dec-99 FY 2001:

DELIVERY DATES: FY 1999: Various FY 2000: Feb-00 FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT	24		1				1										
OUTPUT	24			1				1									

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

Notes/Comments: Quantities refer to various Mine Warfare ships.

Feb-00

MODIFICATION TITLE: GCCS-M Ashore
COST CODE JH031/**JG020**
MODELS OF SYSTEMS AFFECTED: N/A
DESCRIPTION/JUSTIFICATION: Provides the Fleet Command, Unified Command Centers, and the Navy Command Center with a common C3I capability. Incorporates the former Navy WWMCCS Software Standardization (NWSS) functionality and migrates/consolidates the functionality from component systems into a new environment using iterative hardware/software releases. Offers distributed briefing capabilities among commands using video and large screen displays.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment			VAR	3.60	VAR	3.60	VAR	6.24	VAR	3.47	VAR	4.57	VAR	5.51	VAR	6.59	VAR	9.31	Var.	CONT.	Var.	CONT.
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*			23	0.50	26	0.37	57	1.17	57	0.66	57	0.81	57	0.88	57	0.91	57	1.48	Var.	CONT.	Var.	CONT.
PRIOR YR EQUIP																					0	0.0
FY 97 EQUIP																					0	0.0
FY 98 EQUIP			23	0.50																	23	0.5
FY 99 EQUIP					26	0.37															26	0.4
FY 00 EQUIP							57	1.17													57	1.2
FY 01 EQUIP									57	0.67											57	0.7
FY 02 EQUIP											57	0.81									57	0.8
FY 03 EQUIP													57	0.89							57	0.9
FY 04 EQUIP															57	0.92					57	0.9
FY 05 EQUIP																	57	1.50			57	1.5
FY TC EQUIP																			Var.	CONT.	Var.	CONT.
TOTAL INSTALLATION COST				0.5		0.4		1.2		0.7		0.8		0.9		0.9		1.5		CONT.		CONT.
TOTAL PROCUREMENT COST				4.1		4.0		7.4		4.1		5.4		6.4		7.5		10.8		CONT.		CONT.

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 PRODUCTION LEADTIME: 3

CONTRACT DATES: FY 1999: VAR FY 2000: VAR FY 2001: VAR

DELIVERY DATES: FY 1999: VAR FY 2000: VAR FY 2001: VAR

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT	23		13	13			28	29			28	29			28	29	
OUTPUT	23		13	13			28	29			28	29			28	29	

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT		28	29			28	29			28	29		Cont.	Cont.
OUTPUT		28	29			28	29			28	29		Cont.	Cont.

Notes/Comments
**Quantities represent sites

Feb-00

MODIFICATION TITLE: JMCIS OED
COST CODE JJ011
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. In addition, it provides near-real-tir all-source fusion, correlation and analysis tools, directly feeding automated reporting capabilities. JMCIS OED provides positional data and operational intelligence to commanders at all levels.
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Development and Operational testing for major system upgrades 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 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment			VAR	0.75	VAR	0.90													CONT.	CONT.		
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.0	3	0.03	3	0.03													CONT.	CONT.		
PRIOR YR EQUIP	0	0.0																			0	0.0
FY 97 EQUIP																					0	0.0
FY 98 EQUIP			3	0.03																	3	0.0
FY 99 EQUIP					3	0.03															3	0.0
FY 900 EQUIP																					0	0.0
FY 01 EQUIP																					0	0.0
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																			CONT.	CONT.	CONT.	CONT.
TOTAL INSTALLATION COST		0.0		0.03		0.03		0.00		0.00		0.00		0.00		0.00		0.00				0.1
TOTAL PROCUREMENT COST				0.78		0.93		0.00		0.00		0.00		0.00		0.00		0.00				1.7

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 PRODUCTION LEADTIME: 3

CONTRACT DATES: FY 1999: VAR FY 2000: FY 2001:

DELIVERY DATES: FY 1999: VAR FY 2000: FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99 1	2	3	4	FY 00 1	2	3	4	FY 01 1	2	3	4	FY 02 1	2	3	4
INPUT	3			1	2												
OUTPUT	3			1	2												

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

Notes/Comments
**Quantities represent sites

Feb-00

MODIFICATION TITLE: JMCIS OED
COST CODE JH011/**JG030**
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. In addition, it provides near-real-time all-source fusion, correlation and analysis tools, directly feeding automated reporting capabilities. JMCIS OED provides positional data and operational intelligence to commanders at all levels.
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Development and Operational testing for major system upgrades 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 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment							VAR	0.44	VAR	0.99	VAR	0.98	VAR	0.98	VAR	1.07	VAR	1.08	Var.	CONT.	Var.	CONT.
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*							3	0.03	3	0.08	3	0.08	3	0.08	3	0.08	3	0.08	Var.	CONT.	Var.	CONT.
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 900 EQUIP							3	0.03													3	0.0
FY 01 EQUIP									3	0.08											3	0.1
FY 02 EQUIP											3	0.08									3	0.1
FY 03 EQUIP													3	0.08							3	0.1
FY 04 EQUIP															3	0.08					3	0.1
FY 05 EQUIP																	3	0.08			3	0.1
FY TC EQUIP																			Var.	CONT.	Var.	CONT.
TOTAL INSTALLATION COST		0.0		0.00	0.00			0.03		0.08		0.08		0.08		0.08		0.08		CONT.		CONT.
TOTAL PROCUREMENT COST								0.47		1.07		1.06		1.06		1.15		1.16		CONT.		CONT.

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 PRODUCTION LEADTIME: 3

CONTRACT DATES: FY 1999: FY 2000: VAR FY 2001: VAR

DELIVERY DATES: FY 1999: FY 2000: VAR FY 2001: VAR

INSTALLATION SCHEDULE:	PY	FY 99 1	2	3	4	FY 00 1	2	3	4	FY 01 1	2	3	4	FY 02 1	2	3	4
INPUT	0						2	1			1	2			2		1
OUTPUT	0						2	1			1	2			2		1

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

Notes/Comments
**Quantities represent sites

Feb-00

MODIFICATION TITLE: Global Command and Control System(GCCS) (Non-FMP)
COST CODE NW036/**JG040**
MODELS OF SYSTEMS AFFECTED: GCCS is an operational multi-service/agency program. GCCS supports the National Command Authority (NCA) and the CINC's by providing
DESCRIPTION/JUSTIFICATION: Command, Control and Communication (C3) data processing capabillities including status of forces and support requirements for use in security decision making, force preparation and operational planning execution. Equipment is Scheduled for installation at Navy supported GCCS shore sites, NAVCENTCOM, USACOM, CNO, COMUSJAPAN, and CINCUSNAVEUR. Procurements includes intelligent workstations, servers, LAN hardware and software, and communications equipment.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	Unable to define		Var.	1.2	Var.	1.7															Var.	2.9
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	Unable to define		6	0.6	11	0.8															Var.	1.4
PRIOR YR EQUIP																					0	0.0
FY 97 EQUIP																					0	0.0
FY 98 EQUIP			6	0.6																	6	0.6
FY 99 EQUIP					11	0.8															11	0.8
FY 00 EQUIP																					0	0.0
FY 01 EQUIP																					0	0.0
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																						
TOTAL INSTALLATION COST		0.0		0.6		0.8		0.0		0.0		0.0		0.0		0.0		0.0				1.4
TOTAL PROCUREMENT COST		0.0		1.8		2.5		0.0		0.0		0.0		0.0		0.0		0.0				2.9

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 1 Month PRODUCTION LEADTIME: 2 Months

CONTRACT DATES: FY 1999: Var. FY 2000: FY 2001:

DELIVERY DATES: FY 1999: Var. FY 2000: FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99 1	2	3	4	FY 00 1	2	3	4	FY 01 1	2	3	4	FY 02 1	2	3	4
INPUT	32		4	7													
OUTPUT	32		3	5	3												

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

Notes/Comments

UNCLASSIFIED

MODIFICATION TITLE: Global Command and Control System (GCCS) Feb-00
COST CODE JH036/**JG040**
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: GCCS is an operational multi-service/agency program. GCCS supports the National Command Authority (NCA) and the CINC's by providing Command, Control and Communication (C3) data processing capabillities including status of forces and support requirements for use in security decision making, force preparation and operational planning execution. Equipment is Scheduled for installation at Navy supported GCCS shore sites, NAVCENTCOM, USACOM, CNO, COMUSJAPAN, and CINCUSNAVEUR. Procurements includes intelligent workstations, servers, LAN hardware and software, and communications equipment.
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:
FINANCIAL PLAN: ($ in millions)

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment							Var.	1.1	Var.	1.0	Var.	1.2	Var.	1.0	Var.	1.2	Var.	1.6	Var.	CONT.	Var.	CONT.
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*							15	0.4	15	0.3	15	0.5	15	0.4	15	0.4	15	0.4	Var.	CONT.	Var.	CONT.
PRIOR YR EQUIP																					0	0.0
FY 99 EQUIP																					0	0.0
FY 00 EQUIP							15	0.4													15	0.4
FY 01 EQUIP									15	0.3											15	0.3
FY 02 EQUIP											15	0.5									15	0.5
FY 03 EQUIP													15	0.4							15	0.4
FY 04 EQUIP															15	0.4					15	0.4
FY 05 EQUIP																	15	0.4			15	0.4
FY TC EQUIP																			Var.	CONT.	Var.	CONT.
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.4		0.3		0.5		0.4		0.4		0.4		CONT.		CONT.
TOTAL PROCUREMENT COST								1.5		1.3		1.7		1.4		1.6		2.0		CONT.		CONT.

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 1 PRODUCTION LEADTIME: 2

CONTRACT DATES: FY 1999: FY 2000: Var. FY 2001: Var.

DELIVERY DATES: FY 1999: FY 2000: Var. FY 2001: Var.

INSTALLATION SCHEDULE:	PY	FY 99 1	2	3	4	FY 00 1	2	3	4	FY 01 1	2	3	4	FY 02 1	2	3	4
INPUT	0						6	9			6	9			6	9	
OUTPUT	0						4	7	4		4	7	4		4	7	4

INSTALLATION SCHEDULE:	FY 03 1	2	3	4	FY 04 1	2	3	4	FY 05 1	2	3	4	TC	TOTAL
INPUT		6	9			6	9			6	9		CONT.	CONT.
OUTPUT		4	7	4		4	7	4		4	7	4	CONT.	CONT.

Notes/Comments
**Quantities represent sites

Feb-00

MODIFICATION TITLE: GCCS-M Tactical/Mobile (JTM) Communications Replacement
COST CODE T4350/**JG050**
MODELS OF SYSTEMS AFFECTED: N/A
DESCRIPTION/JUSTIFICATION: This line procures communications equipment to replace obsolete systems at Tactical Support Centers. In FY99, this line is rolled into T4371

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring	Prior year can																					
Equipment	not be defined.		VAR	1.4																	VAR	1.4
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	20	0.8	8	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	28	1.1
PRIOR YR EQUIP	20	0.8																			20	0.8
FY 97 EQUIP			8	0.3																	8	0.3
FY 98 EQUIP																					0	0.0
FY 99 EQUIP																					0	0.0
FY 00 EQUIP																					0	0.0
FY 01 EQUIP																					0	0.0
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		0.8		0.3		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		1.1
TOTAL PROCUREMENT COST		0.8		1.7		0.0		0.0		0.0		0.0		0.0		0.0		0.0		CONT		2.5

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: PRODUCTION LEADTIME:

CONTRACT DATES: FY 1999: FY 2000: FY 2001:

DELIVERY DATES: FY 1999: FY 2000: FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99 1	2	3	4	FY 00 1	2	3	4	FY 01 1	2	3	4	FY 02 1	2	3	4
INPUT	28																
OUTPUT	28																

INSTALLATION SCHEDULE:	FY 03 1	2	3	4	FY 04 1	2	3	4	FY 05 1	2	3	4	TC	TOTAL
INPUT														28
OUTPUT														28

Notes/Comments

Feb-00

MODIFICATION TITLE: GCCS-M Tactical Mobile (#2906)
COST CODE T4371/**JG050**
MODELS OF SYSTEMS AFFECTED: N/A
DESCRIPTION/JUSTIFICATION: This line procures various types of C4I Equipment in order to provide a new or an increased capability to the present TSC and MOCC systems and to replace the equipment when it has reached the end of service life, assuring the existing system remains interoperable with updated aircraft, sensors, and weapons systems.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity	CANNOT BE																					
Installation Kits	DEFINED																					
Installation Kits Nonrecurring																						
Equipment	VAR	0.5	VAR	0.6	VAR	2.8	VAR	4.2	VAR	4.1	VAR	4.7	VAR	3.7	VAR	4.9	VAR	4.0	CONT	CONT	VAR	29.5
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	23	0.7	16	0.7	10	1.1	4	1.0	10	1.1	9	1.6	16	1.4	15	1.6	9	1.2	CONT	CONT	112	10.4
PRIOR YR EQUIP	23	0.7																			23	0.7
FY 97 EQUIP			8	0.3																	8	0.3
FY 98 EQUIP			8	0.4																	8	0.4
FY 99 EQUIP					10	1.1															10	1.1
FY 00 EQUIP							4	1.0	1	0.3											5	1.3
FY 01 EQUIP									9	0.8	1	0.5									10	1.3
FY 02 EQUIP											8	1.1	1	0.4							9	1.5
FY 03 EQUIP													15	1.0							15	1.0
FY 04 EQUIP															15	1.6					15	1.6
FY 05 EQUIP																	9	1.2			9	1.2
FY TC EQUIP																			CONT	CONT	CONT	CONT
TOTAL INSTALLATION COST		0.7		0.7		1.1		1.0		1.1		1.6		1.4		1.6		1.2		CONT		10.4
TOTAL PROCUREMENT COST		1.2		1.3		3.9		5.2		5.2		6.3		5.1		6.5		5.2		CONT		39.9

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: VAR PRODUCTION LEADTIME: VAR

CONTRACT DATES: FY 1999: VAR FY 2000: VAR FY 2001: VAR

DELIVERY DATES: FY 1999: VAR FY 2000: VAR FY 2001: VAR

INSTALLATION SCHEDULE:	PY	FY 99 1	2	3	4	FY 00 1	2	3	4	FY 01 1	2	3	4	FY 02 1	2	3	4
INPUT	31	3	3	3	1		2	2		3	3	4		3	3	3	
OUTPUT	31	3	3	2	2			2	2		3	3	4		3	3	3

INSTALLATION SCHEDULE:	FY 03 1	2	3	4	FY 04 1	2	3	4	FY 05 1	2	3	4	TC	TOTAL
INPUT	4	7	5		4	7	4		3	4	2		CONT	CONT
OUTPUT		4	7	5		4	7	4		3	4	2	CONT	CONT

Notes/Comments
* P5 contains VAR quantities of equipment procured; P-3A contains "Shore Sites installed" as measures of quantity.
* Equipment cost includes initial training.

MODIFICATION TITLE: GCCS-M Tactical Mobile (#2906) Feb-00
COST CODE T4500**/JG050**
MODELS OF SYSTEMS AFFECTED: N/A

DESCRIPTION/JUSTIFICATION: Mobile Ashore Support Terminal/Mobile Integrated Command Facility (MAST/MICFAC). This line procures various types of C4I equipment in order to provide a new or increased capability to the present MAST and MICFAC systems, and to replace the equipment when it has reached the end of service life, assuring interoperability with other C4I systems. These facilities were established and will be upgraded using the evolutionary acquisition approach.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: ($ in millions)

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits	CANNOT BE																					
Installation Kits Nonrecurring	DEFINED																					
Equipment		2.3	VAR	0.6	VAR	0.6	VAR	1.8	VAR	2.2	VAR	3.2	VAR	1.4	VAR	0.1	VAR	2.1	CONT	CONT	VAR	14.3
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.0	6	0.3	5	0.3	0	0.0	1	0.1	2	0.1	3	0.1	2	0.1	2	0.1	CONT	CONT	21	1.1
PRIOR YR EQUIP																					0	0.0
FY 97 EQUIP																					0	0.0
FY 98 EQUIP			6	0.3																	6	0.3
FY 99 EQUIP					5	0.3															5	0.3
FY 00 EQUIP							0	0.0													0	0.0
FY 01 EQUIP									1	0.1											1	0.1
FY 02 EQUIP											2	0.1									2	0.1
FY 03 EQUIP													3	0.1							3	0.1
FY 04 EQUIP															2	0.1					2	0.1
FY 05 EQUIP																	2	0.1			2	0.1
FY TC EQUIP																			CONT	CONT	CONT	CONT
TOTAL INSTALLATION COST		0.0		0.3		0.3		0.0		0.1		0.1		0.1		0.1		0.1		CONT		1.1
TOTAL PROCUREMENT COST		2.3		0.9		0.9		1.8		2.3		3.3		1.5		0.2		2.2		CONT		15.4

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: VAR PRODUCTION LEADTIME: VAR

CONTRACT DATES: FY 1999: VAR FY 2000: VAR FY 2001: VAR

DELIVERY DATES: FY 1999: VAR FY 2000: VAR FY 2001: VAR

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT	6	2	2	1							1				1	1	
OUTPUT	6	1	3		1							1				1	1

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

Notes/Comments

* P5 contains VAR quantities of equipment procured; P-3A contains "Shore Sites installed" as measures of quantity.
* Equipment cost includes initial training.

P-1 Shopping List-Item No 62-19 of 62-19

Exhibit P-3a, Individual Modification Program

								DATE	February 2000	
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT				P-1 ITEM NOMENCLATURE 261100 Naval Tactical Command Support System					SUBHEAD 52DY	
	PY	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY										
COST	$144.7	$79.2	$58.2	$46.7	$51.7	$54.6	$29.6	$44.6	CONTINUING	CONTINUING

Narrative Description/Justification:

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. 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).

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).

SNAP is an automated information system that supports organizational level maintenance, supply, financial and administrative functions on afloat units, at Marine Aviation Logistics Squadrons (MALS) and at associated shore activities. Due to the age and obsolescence of SNAP I and SNAP II, 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: improvement in the accuracy of maintenance, supply, financial and related support data maintained and reported by the ship; and acceleration of management report preparation and data transmission. The scope of SNAP includes approximately 300 sites.

NALCOMIS is an automated, real time, interactive, management information system that provides a modern management tool for day-to-day management of aircraft maintenance at the organizational and intermediate levels. NALCOMIS automates management of the aviation repairables inventory, providing nose-to-tail tracking through the repair and operations cycles. The scope of NALCOMIS includes 66 aviation intermediate maintenance activities located afloat (CV/LHA/LHD/MALS), at Naval Air Stations (NASs), and approximately 326 Navy and Marine Squadrons.

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.

Funding for FY99-01 procures: 1) NTCSS equipment upgrades for ships; 2) NTCSS equipment upgrades for Naval Air Stations, Squadrons, Shore Support Facilities, Fleet Training Centers and MALS; and 3) necessary production engineering and installation support

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

COST ANALYSIS

DATE: February 2000

APPROPRIATION ACTIVITY: OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: 261100 Naval Tactical Command Support System

SUBHEAD: 52DY

TOTAL COST IN THOUSANDS OF DOLLARS

COST CODE	ELEMENT OF COST	ID CODE	PY QTY	PY TOTAL COST	FY 1999 QTY	FY 1999 UNIT COST	FY 1999 TOTAL COST	FY 2000 QTY	FY 2000 UNIT COST	FY 2000 TOTAL COST	FY 2001 QTY	FY 2001 UNIT COST	FY 2001 TOTAL COST
DY002	MALS/Shore Equipment	A	29	20,098	12	785.3	9,424						
DY004	Ship Set Equipment	A	93	53,813	29	753.8	21,860						
DY005	Ship Set Equipment Upgrades	A			20	854.8	17,096	79	325.5	25,715	48	317.7	15,250
DY006	MALS/Shore Equipment Upgrades	A			61	261.3	15,939	72	239.0	17,208	104	178.3	18,543
	Production Support						**4,973**			**3,234**			**2,540**
DY500	NTCSS (PY-FY00)	A	Var	10,246	Var		4,973	Var		3,234			
DY555	NTCSS (FY01)										Var		2,540
	INSTALLATION						**9,949**			**12,042**			**10,359**
	Non-FMP Installation												
DY776	NTCSS (PY-FY00)	A		1,243			4,178			4,153			
DY777	NTCSS (FY01)												4,249
	FMP Installation	A		59,295									
DY777	NTCSS						5,202			5,557			5,400
	NTCSS-DSA						569			2,332			710
	TOTAL CONTROL			**144,695**			**79,241**			**58,199**			**46,692**

Remarks:

Higher budgeted amount for Production Engineering Support in FY99 covers additional software implementation teams in support of the Y2K effort.

PROCUREMENT HISTORY AND PLANNING

A. DATE February 2000

B. APPROPRIATION/BUDGET ACTIVITY
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

C. P-1 ITEM NOMENCLATURE
261100 Naval Tactical Command Support System

SUBHEAD 52DY

COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
DY002	MALS/Shore Equipment	98	Hewlett Packard/TAC 4	IDIQ	Navy		Nov-97	Jan-98	12	$85,000	Yes	
			Sysorex/Vanstar	IDIQ	Navy		Nov-97	Jan-98	12	$231,750	Yes	
			Various	IDIQ	Navy		Nov-97	Jan-98	12	$434,171	Yes	
	MALS/Shore Equipment	99	Hewlett Packard/TAC 4	IDIQ	Navy		Nov-98	Jan-99	12	$84,830	Yes	
			Sysorex/Vanstar	IDIQ	Navy		Nov-98	Jan-99	12	$231,310	Yes	
			Various	IDIQ	Navy		Nov-98	Jan-99	12	$469,110	Yes	

D. REMARKS
Between years, shore site configurations changed, i.e., more larger sites in one year compared to another. As a result, the per unit costs are different. Moreover, different shore site configurations require different peripherals listed under the "Various" category, which leads to per unit cost differences in that category.

PROCUREMENT HISTORY AND PLANNING

A. DATE: February 2000

B. APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

C. P-1 ITEM NOMENCLATURE: 261100 Naval Tactical Command Support System

SUBHEAD: 52DY

COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
DY004	Ship Set Equipment	98	Hewlett Packard/TAC 4	IDIQ	Navy		Nov-97	Jan-98	71	$64,988	Yes	
			Sysorex/Vanstar	IDIQ	Navy		Nov-97	Jan-98	71	$319,750	Yes	
			Various	IDIQ	Navy		Nov-97	Jan-98	71	$318,130	Yes	
	Ship Set Equipment	99	Hewlett Packard/TAC 4	IDIQ	Navy		Nov-98	Jan-99	29	$68,660	Yes	
			Sysorex/Vanstar	IDIQ	Navy		Nov-98	Jan-99	29	$340,850	Yes	
			Various	IDIQ	Navy		Nov-98	Jan-99	29	$344,265	Yes	

D. REMARKS

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

PROCUREMENT HISTORY AND PLANNING

A. DATE: February 2000

B. APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

C. P-1 ITEM NOMENCLATURE: 261100 Naval Tactical Command Support System

SUBHEAD: 52DY

COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
DY005	Ship Set Equipment Upgrades	99	Hewlett Packard/TAC 4	IDIQ	Navy		Nov-98	Jan-99	20	$80,850	Yes	
			Sysorex/Vanstar	IDIQ	Navy		Nov-98	Jan-99	20	$375,680	Yes	
			Various	IDIQ	Navy		Nov-98	Jan-99	20	$398,240	Yes	
	Ship Set Equipment Upgrades	00	Hewlett Packard/TAC 4	IDIQ	Navy		Nov-99	Jan-00	79	$96,764	Yes	
			SPAWAR Consolidated	IDIQ	Navy		Nov-99	Jan-00	79	$164,904	Yes	
			Various	IDIQ	Navy		Nov-99	Jan-00	79	$63,873	Yes	
	Ship Set Equipment Upgrades	01	Hewlett Packard/TAC 4	IDIQ	Navy		Nov-00	Jan-01	48	$84,859	Yes	
			SPAWAR Consolidated	IDIQ	Navy		Nov-00	Jan-01	48	$140,889	Yes	
			Various	IDIQ	Navy		Nov-00	Jan-01	48	$91,965	Yes	

D. REMARKS

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

PROCUREMENT HISTORY AND PLANNING

A. DATE: February 2000

B. APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

C. P-1 ITEM NOMENCLATURE: 261100 Naval Tactical Command Support System

SUBHEAD: 52DY

COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
DY006	MALS/Shore Equipment Upgrades	99	Hewlett Packard/TAC 4	IDIQ	Navy		Nov-98	Jan-99	61	$37,780	Yes	
			Sysorex/Vanstar	IDIQ	Navy		Nov-98	Jan-99	61	$57,660	Yes	
			Various	IDIQ	Navy		Nov-98	Jan-99	61	$165,900	Yes	
	MALS/Shore Equipment Upgrades	00	Hewlett Packard/TAC 4	IDIQ	Navy		Nov-99	Jan-00	72	$77,368	Yes	
			SPAWAR Consolidated	IDIQ	Navy		Nov-99	Jan-00	72	$148,852	Yes	
			Various	IDIQ	Navy		Nov-99	Jan-00	72	$12,749	Yes	
	MALS/Shore Equipment Upgrades	01	Hewlett Packard/TAC 4	IDIQ	Navy		Nov-00	Jan-01	104	$58,847	Yes	
			SPAWAR Consolidated	IDIQ	Navy		Nov-00	Jan-01	104	$113,250	Yes	
			Various	IDIQ	Navy		Nov-00	Jan-01	104	$6,246	Yes	

D. REMARKS

Between years, shore site configurations changed, i.e., more larger sites in one year compared to another. As a result, the per unit costs are different. Moreover, different shore site configurations require different peripherals listed under the "Various" category, which leads to per unit cost differences in that category.

February-00

MODIFICATION TITLE: 261100 Naval Tactical Command Support System MALS/Shore Equipment (52DY/DY002)

MODELS OF SYSTEMS AFFECTED: Provides modern centrally managed mission support ADP systems to replace aging SNAP and NALCOMIS systems for Marine Aviation Logistics Squadrons (MALS), Naval Air Stations, squadrons, and training sites.

DESCRIPTION/JUSTIFICATION: Application subsystems include/financial/inventory management, organizational and surface maintenance management, and administrative information systems support. NTCSS procurements will also provide ship/shore capabilities for displaying and storing CALS initiative information (digitized engineering drawings, automated technical manuals, etc.).

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: ($ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment	8	6.3	9	4.8	12	9.0	12	9.4															41	29.5
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware*	8	0.4	9	0.4	12	0.5	12	0.3															41	1.6
PRIOR YR EQUIP	8	0.4																					8	0.4
FY 97 EQUIP			9	0.4																			9	0.4
FY 98 EQUIP					12	0.5																	12	0.5
FY 99 EQUIP							12	0.3															12	0.3
FY 00 EQUIP																							0	0.0
FY 01 EQUIP																							0	0.0
FY 02 EQUIP																							0	0.0
FY 03 EQUIP																							0	0.0
FY 04 EQUIP																							0	0.0
FY 05 EQUIP																							0	0.0
FY TC EQUIP																							0	0.0
TOTAL INSTALLATION COST	8	0.4	9	0.4	12	0.5	12	0.3															41	1.6
TOTAL PROCUREMENT COST		6.7		5.2		9.5		9.7																31.1

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 months PRODUCTION LEADTIME: 3 months

CONTRACT DATES: FY 1998: Nov-97 FY 1999: Nov-98 FY 2000: FY 2001:

DELIVERY DATES: FY 1998: Jan-98 FY 1999: Jan-99 FY 2000: FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4
INPUT	29		4	4	4								
OUTPUT	29		4	4	4								

INSTALLATION SCHEDULE:	FY 02 1	FY 02 2	FY 02 3	FY 02 4	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL *
INPUT																		41
OUTPUT																		41

* Total is the inventory objective.

February-00

MODIFICATION TITLE: 261100 Naval Tactical Cc Ship Set Equipment (52DY/DY004)

MODELS OF SYSTEMS AFFECTED: Provides modern centrally managed mission support ADP systems to replace aging SNAP systems for unit level ships.

DESCRIPTION/JUSTIFICATION: Application subsystems include/financial/inventory management, organizational and surface maintenance management, and administrative information systems support. NTCSS procurements will also provide ship capabilities for displaying and storing CALS initiative information (digitized engineering drawings, automated technical manuals, etc.). (Note: Total inventory adjusted to reflect increased units completed under BG line.)

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: ($ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment	10	1.7	12	2.2	71	49.9	29	21.9															122	75.7
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware*	10	1.1	12	1.1	71	18.5	29	2.9															122	23.6
PRIOR YR EQUIP	10	1.1																					10	1.1
FY 97 EQUIP			12	1.1																			12	1.1
FY 98 EQUIP					71	18.5																	71	18.5
FY 99 EQUIP							29	2.9															29	2.9
FY 00 EQUIP																							0	0.0
FY 01 EQUIP																							0	0.0
FY 02 EQUIP																							0	0.0
FY 03 EQUIP																							0	0.0
FY 04 EQUIP																							0	0.0
FY 05 EQUIP																							0	0.0
FY TC EQUIP																							0	0.0
TOTAL INSTALLATION COST	10	1.1	12	1.1	71	18.5	29	2.9															122	23.6
TOTAL PROCUREMENT COST		2.8		3.3		68.4		24.8																99.3

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 months PRODUCTION LEADTIME: 3 months

CONTRACT DATES: FY 1998: Nov-97 FY 1999: Nov-98 FY 2000: FY 2001:

DELIVERY DATES: FY 1998: Jan-98 FY 1999: Jan-99 FY 2000: FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99 1	2	3	4	FY 00 1	2	3	4	FY 01 1	2	3	4
INPUT	93		7	8	14								
OUTPUT	93		7	8	14								

INSTALLATION SCHEDULE:	FY 02 1	2	3	4	FY 03 1	2	3	4	FY 04 1	2	3	4	FY 05 1	2	3	4	TC	TOTAL
INPUT																		122
OUTPUT																		122

* Total is the inventory objective.

February-00

MODIFICATION TITLE: 261100 Naval Tactical Cc Ship Set Equipment Upgrades (52DY/DY005)

MODELS OF SYSTEMS AFFECTED: Provides modern centrally managed mission support ADP system upgrades and NTCSS-Optimized software to replace aging systems for Battle Group and unit level ships.

DESCRIPTION/JUSTIFICATION: Application subsystems include/financial/inventory management, organizational and surface maintenance management, and administrative information systems support. NTCSS procurements will also provide ship capabilities for displaying and storing CALS initiative information (digitized engineering drawings, automated technical manuals, etc.).

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: ($ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment							20	17.1	79	25.7	48	15.2	71	27.0	44	21.9	15	11.0	16	10.2			293	128.1
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware*							20	2.3	79	5.6	48	5.4	71	5.6	44	3.4	15	1.1	16	1.3			293	24.7
PRIOR YR EQUIP																							0	0.0
FY 97 EQUIP																							0	0.0
FY 98 EQUIP																							0	0.0
FY 99 EQUIP							20	2.3															20	2.3
FY 00 EQUIP									79	5.6													79	5.6
FY 01 EQUIP											48	5.4											48	5.4
FY 02 EQUIP													71	5.6									71	5.6
FY 03 EQUIP															44	3.4							44	3.4
FY 04 EQUIP																	15	1.1					15	1.1
FY 05 EQUIP																			16	1.3			16	1.3
FY TC EQUIP																							0	0.0
TOTAL INSTALLATION COST							20	2.3	79	5.6	48	5.4	71	5.6	44	3.4	15	1.1	16	1.3			293	24.7
TOTAL PROCUREMENT COST								19.4		31.3		20.6		32.6		25.3		12.1		11.5			0	152.8

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 months PRODUCTION LEADTIME: 3 months

CONTRACT DATES: FY 1998: FY 1999: Nov-98 FY 2000: Nov-99 FY 2001: Nov-00

DELIVERY DATES: FY 1998: FY 1999: Jan-99 FY 2000: Jan-00 FY 2001: Jan-01

INSTALLATION SCHEDULE:	PY	FY 99 1	2	3	4	FY 00 1	2	3	4	FY 01 1	2	3	4
INPUT			2	7	11		25	27	27		12	18	18
OUTPUT			2	7	11		25	27	27		12	18	18

INSTALLATION SCHEDULE:	FY 02 1	2	3	4	FY 03 1	2	3	4	FY 04 1	2	3	4	FY 05 1	2	3	4	TC	TOTAL *
INPUT		23	24	24		10	17	17		5	5	5		5	5	6	0	293
OUTPUT		23	24	24		10	17	17		5	5	5		5	5	6	0	293

* Total is the inventory objective.

February-00

MODIFICATION TITLE: 261100 Naval Tactical Cc MALS/Shore Equipment Upgrades(52DY/DY006)

MODELS OF SYSTEMS AFFECTED: Provides modern centrally managed mission support ADP system upgrades, and IMA-Optimized and OMA-Optimized software to replace aging systems at MALS, Naval Air Stations, squadrons, and training sites.

DESCRIPTION/JUSTIFICATION: Application subsystems include/financial/inventory management, organizational and surface maintenance management, and administrative information systems support. NTCSS procurements will also provide ship/shore capabilities for displaying and storing CALS initiative information (digitized engineering drawings, automated technical manuals, etc.).

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: ($ in millions)

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment							61	15.9	72	17.2	104	18.5	73	12.4	105	20.6	27	13.4	82	25.4			524	123.4
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware*							61	3.9	72	4.2	104	4.2	73	3.0	105	5.5	27	2.4	82	5.4			524	28.6
PRIOR YR EQUIP																							0	0.0
FY 97 EQUIP																							0	0.0
FY 98 EQUIP																							0	0.0
FY 99 EQUIP							61	3.9															61	3.9
FY 00 EQUIP									72	4.2													72	4.2
FY 01 EQUIP											104	4.2											104	4.2
FY 02 EQUIP													73	3.0									73	3.0
FY 03 EQUIP															105	5.5							105	5.5
FY 04 EQUIP																	27	2.4					27	2.4
FY 05 EQUIP																			82	5.4			82	5.4
FY TC EQUIP																							0	0.0
TOTAL INSTALLATION COST							61	3.9	72	4.2	104	4.2	73	3.0	105	5.5	27	2.4	82	5.4			524	28.6
TOTAL PROCUREMENT COST								19.8		21.4		22.7		15.4		26.1		15.8		30.8			0	152.0

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 months PRODUCTION LEADTIME: 3 months

CONTRACT DATES: FY 1998: FY 1999: Nov-98 FY 2000: Nov-99 FY 2001: Nov-00

DELIVERY DATES: FY 1998: FY 1999: Jan-99 FY 2000: Jan-00 FY 2001: Jan-01

INSTALLATION SCHEDULE:	PY	FY 99 1	2	3	4	FY 00 1	2	3	4	FY 01 1	2	3	4
INPUT	0		19	21	21		19	26	27		34	35	35
OUTPUT	0		19	21	21		19	26	27		34	35	35

INSTALLATION SCHEDULE:	FY 02 1	2	3	4	FY 03 1	2	3	4	FY 04 1	2	3	4	FY 05 1	2	3	4	TC	TOTAL *
INPUT		19	27	27		35	35	35		9	9	9		23	29	30		524
OUTPUT		19	27	27		35	35	35		9	9	9		23	29	30		524

* Total is the inventory objective.

UNCLASSIFIED
CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: Feb 00

APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: 261100 Naval Tactical Command Support System

SUBHEAD NO.: 52DY

COST CODE	ITEM/MANUFACTURER	FY	SERV	PROC QTY	ACCEP PRIOR TO 1-Oct	BAL DUE AS OF 1-Oct	FISCAL YEAR 98												FISCAL YEAR 99												FISCAL YEAR 00											
							PY97			CALENDAR YEAR 98													CALENDAR YEAR 99												CALENDAR YEAR 00											
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
DY002	COTS H/W and S/W	98		12	12			A		1	2	1	2	1	1	2	1	1																						
DY002	COTS H/W and S/W	99		12	12															A		1	2	1	2	1	1	2	1	1										
DY004	COTS H/W and S/W	98		71	71			A		8	8	7	8	8	7	9	9	7																						
DY004	COTS H/W and S/W	99		29	29															A		2	2	3	2	3	3	4	5	5										
DY005	COTS H/W and S/W	99		20	20															A		1	1	2	2	3	2	4	5											
DY005	COTS H/W and S/W	00		79	79																										A		8	8	9	9	9	9	9	9
DY005	COTS H/W and S/W	01		48	48																																			
DY006	COTS H/W and S/W	99		61	61															A		5	7	7	7	7	7	7	7	7										
DY006	COTS H/W and S/W	00		72	72																										A		5	7	7	8	9	9	9	9
DY006	COTS H/W and S/W	01		104	104																																			

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

NAVMAT FORM 7110/4 (REVISED 11/77)

P-1 SHOPPING LIST
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Exhibit P-21, Production Schedule
UNCLASSIFIED
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UNCLASSIFIED
CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: Feb 00

APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: 261100 Naval Tactical Command Support System

SUBHEAD NO.: 52DY

COST CODE	ITEM/MANUFACTURER/ PROCUREMENTY YEAR	FISCAL YEAR	CARRY OVER	FISCAL YEAR 01												FISCAL YEAR 02												FISCAL YEAR 03												LATER
				CY00			CALENDAR YEAR 01											CALENDAR YEAR 01												CALENDAR YEAR 02												
				OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
DY005	COTS H/W and S/W	01			A		4	4	4	6	6	6	6	6	6																								
DY006	COTS H/W and S/W	01			A		11	11	12	11	12	12	11	12	12																									
		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

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

NAVMAT FORM 7110/4 (REVISED 11/77)

P-1 SHOPPING LIST
ITEM NO. 63
PAGE NO. 12 of 12

Exhibit P-21, Production Schedule
UNCLASSIFIED
CLASSIFICATION

								DATE February 2000		
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						**P-1 ITEM NOMENCLATURE** Advanced Tactical Data Link Systems 2614			**SUBHEAD** Q2DR/52DR	
	PY	**FY 1999**	**FY 2000**	**FY 2001**	**FY 2002**	**FY 2003**	**FY 2004**	**FY 2005**	**TO COMP**	**TOTAL**
QUANTITY										
COST (in millions)		**$28.8**	**$19.0**	**$19.2**	**$14.9**	**$16.3**	**$33.5**	**$32.2**	**Continuing**	**Continuing**

PROGRAM COVERAGE: The Advanced Tactical Data Link Systems (ATDLS) funds the Time Division Multiple Access (TDMA) family of Link-16 terminals in the Joint Tactical Information Distribution System (JTIDS) terminals and the 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. ATDLS also funds the LMS-16 Link Monitoring System.

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

AN/UYQ-86 COMMAND AND CONTROL PROCESSOR (C2P) REHOST (C2P(R))/COMMON DATA LINK MANAGEMENT SYSTEM (CDLMS): AN/UYQ-86 C2P(R)/CDLMS program is the acquisition of commercial-off-the-shelf (COTS) versa module eurocards (VME) based Navy computers in conjunction with a software suite to provide the interface between tactical and digital communication systems and selected shipboard processors (Advanced Combat Direction Systems (ACDS) and AEGIS Command & Decision (C&D)). C2P extracts information from the Tactical Digital Information Links (TADILS) A, C & J (or Link-11, Link-4A, and Link-16), translates between TADILS and provides the information back to the on-board processor. This provides flexible capability for rapidly exchanging tactical information using a universal database for translating various Link formats while remaining independent of communication equipment and tactical data computing systems. C2P Rehost uses COTS hardware (AN/UYQ-70), making the system easier and cheaper to upgrade and maintain.

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

LMS-16 (LINK MONITORING SYSTEM): The LMS-16 provides for improved Link-16 network diagnostics, system monitoring and control capabilities. Network performance monitoring by platform and time slot allocation provide critical data to optimize the Link-16 network. Ruggedized LMS-16 hardware/software will allow the operator to analyze the Link-16 network in real-time and adjust network performance to support Theater Air Defense/Theater Missile Defense by Battle Groups and Joint Task Forces.

BUDGET ITEM JUSTIFICATION SHEET		DATE February 2000
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	**P-1 ITEM NOMENCLATURE** Advanced Tactical Data Link Systems 2614	**SUBHEAD** Q2DR/52DR

JUSTIFICATION OF FY99 REQUIREMENTS: FY99 funds were used to procure AN/URC-107(V) JTIDS, ship terminals, antenna sets, and C2P(R)/CDLMS computer sets (including S-TADIL-J) for install on various ship classes . Work will continue to develop SIDS and SARS for integrating S-TADIL-J on multiple ship classes. CG59 was upgraded from AN/UYK-43 (old C2P unit) to a C2P(R). Funding also includes production support and training curriculum for CDLMS, Link-16 Alteration Installation Team (AIT) and shipyard installs.

JUSTIFICATION OF FY00 REQUIREMENTS: FY00 funds will be used to procure C2P(R)/ CDLMS backfit, S-TADIL-J , E-JNL backfit kits, and associated production support. Installation funding includes CDLMS backfits to upgrade AN/UYK-43 to the AN/UYQ-70 configuration, including (2) training facilities, and AIT and shipyard installs for the remaining JTIDS terminals.

JUSTIFICATION OF FY01 REQUIREMENTS: FY01 funds will be used to procure C2P(R) /CDLMS backfit computer sets, LMS-16, S-TADIL-J, E-JNL, and associated production support. Funding will also be used for Link-16 Alteration Installation Team (AIT) and shipyard installs.

INSTALLATION AGENT: Space and Naval Warfare Systems Center, San Diego (SSC-SD) and Charleston (SSC-CH).

DEFINITIONS OF COST CODES:

DR001: AN/URC-107(V) (JTIDS): All hardware costs associated with AN/URC-107(V) JTIDS terminal hardware, antennas, filter devices and Engineering Change Proposals (ECP).

DR003: AN/UYQ-86 (C2P/C2P(R)/CDLMS): All hardware costs associated with Command and Control Processor (C2P), C2P Rehost, Common Data Link Management System (CDLMS), Common Shipboard Data Terminal Sets (CSDTS), Satellite-TADIL-J, Electronic JTIDS Network Library (E-JNL), Telelogistics, and all associated ECPs.

DR006: LMS-16 (LINK MONITORING SYSTEM): All hardware costs associated with a stand-alone LMS-16 workstation which includes monitor, keyboard, associated antenna and software license agreement.

DR555: PRODUCTION SUPPORT: AN/URC-107(V), AN/UYQ-86: Annualized production support includes evaluation of AN/URC-107(V) JTIDS Consolidated Avionics Support System (CASS) Test Program Set (TPS), AN/UYQ-86 C2P(R)/CDLMS Engineering Change Proposals (ECP)s; and production support services for JTIDS, S-TADIL-J, CDLMS and E-JNL.

DR666: TRAINING CURRICULUM: Training Curriculum (end-item) for CDLMS.

DR777: INSTALLATION OF EQUIPMENT: Non-FMP installations includes Link-16 equipment installations into shore and training facilities. FMP installations are in support of Link-16 Alteration Installation Team (AIT), shipyard installs and DSA, Electronic Environment Effects testing (EEE), and installation engineering and integration coordination for the Fleet. Covers AIT ship installs for JTIDS/C2P(R), C2P(R)/CDLMS backfits, S-TADIL-J backfits, and E-JNL backfits.

COST ANALYSIS											DATE: February 2000		
APPROPRIATION ACTIVITY: OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT					**P-1 ITEM NOMENCLATURE**: Advanced Tactical Data Link Systems 2614						**SUBHEAD**: Q2DR/52DR		
			TOTAL COST IN THOUSANDS OF DOLLARS										
				PY	**FY 1999**			**FY 2000**			**FY 2001**		
COST CODE	**ELEMENT OF COST**	**ID CODE**	**QTY**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**
DR001	AN/URC-107(V) (JTIDS)	A			8	1,018.3	8,146						
DR003	AN/UYQ-86 (C2P / C2P(R) / CDLMS)	A			19	576.2	10,947	17	532.1	9,045	14	542.6	7,597
DR006	LMS-16 (Link Monitoring System)	A									1	509.0	509
	Production Support						**419**			**239**			**190**
DR002	Production Support (AN/URC-107(V))	N/A					200						
DR004	Production Support (AN/UYQ-86) (PY-FY00)	N/A					219			239			
DR555	Production Support (AN/UYQ-86) (FY01)												190
DR666	**Training Curriculum**	N/A					**726**						
	INSTALLATION						**8,549**			**9,752**			**10,857**
	Installation of Equipment / Non-FMP												
DR776	Installation of Equipment / Non-FMP (FY99/FY00)	N/A								592			
DR777	Installation of Equipment / Non-FMP (FY01)	N/A											71
	Installation of Equipment / FMP												
DR777	Installation of Equipment / FMP	N/A					7,013			7,716			10,204
DR777	DSA	N/A					1,536			1,444			582
	TOTAL CONTROL						**28,787**			**19,036**			**19,153**

PROCUREMENT HISTORY AND PLANNING

A. DATE: February 2000

B. APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

C. P-1 ITEM NOMENCLATURE: Advanced Tactical Data Link Systems 2614

SUBHEAD: Q2DR/52DR

COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
DR001	AN/URC-107(V) (JTIDS)	98	Rockwell, Cedar Rapids, IA	FFP	Hanscom AFB	NA	Dec-97	Aug-99	3	990	YES	NA
		99	Rockwell, Cedar Rapids, IA	FFP	Hanscom AFB	NA	Feb-99	Aug-00	8	1,018	YES	NA
DR003	AN/UYQ-86 (C2P / C2P(R) / CDLMS)	98	Various [1]	FFP	Various	NA	Jun-98	Sep-99	3	1,158	YES	NA
		99	Various [2]	FFP	Various	NA	Feb-99	Feb-00	19	576	YES	NA
		00	Various [3]	FFP	Various	NA	Feb-00	Feb-01	17	532	YES	NA
		01	Various [3]	FFP	Various	NA	Feb-01	Feb-02	14	543	YES	NA
DR006	LMS-16 (Link Monitoring System)	01	Logicon, San Diego, CA	IDIQ	NAVSEA	NA	Dec-00	Jun-01	1	509	YES	NA

D. REMARKS

1. Sherikon, GAC, RJO. SSC San Diego integrates various commercial-off-the-shelf equipment. AN/UYQ-86 (C2P(R) / CDLMS) units are off-the-shelf hardware.
2. ACS Technologies, GAC Inc. and RJO Inc. ACS Technologies integrates various commercial-off-the-shelf components.
3. Competitive selection on GSA schedule.
4. DR003 - The FY 98 unit price includes funding of training curriculum and Telelogistics.
5. DR003 - The award date and date of first delivery represents the dates of the first contract to be awarded and the associated equipment integrated as a system and available for AN/UYQ-86 backfit installations. An additional six month lead time is required for AN/UYQ-86 forward fit installations.

MODIFICATION TITLE: **AN/URC-107(V) (JTIDS) SHIP INSTALLATIONS**
COST CODE **DR001**
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: **JTIDS is an advanced radio system providing information distribution, position location, and identification capability ("identify friend-or-foe") at high rates of speed, crypto-secure, and jam resistant. In FY99, we procured the final JTIDS terminals, with installations scheduled for FY01. JTIDS will be replaced with the next generation equipment, Multi-functional Information Distribution System (MIDS) on Ship. Installation costs associated with JTIDS includes the cost of AN/UYQ-86 (C2P(R)/CDLMS).**

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **POST-MS III**
FINANCIAL PLAN: ($ in millions)

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	51	63.6	3	3.0	8	8.1															62	74.7
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interim Contractor Support																						
Installation of Hardware*	34	28.8	9	5.7	9	6.8	2	1.5	8	4.3											62	47.1
PRIOR YR EQUIP	34	28.8	9	5.7	8	6.0															51	40.5
FY 98 EQUIP					1	0.8	2	1.5													3	2.3
FY 99 EQUIP									8	4.3											8	4.3
FY 00 EQUIP																					0	0.0
FY 01 EQUIP																					0	0.0
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		28.8		5.7		6.8		1.5		4.3		0.0		0.0		0.0		0.0		0.0		47.1
TOTAL PROCUREMENT COST		92.4		8.7		14.9		1.5		4.3		0.0		0.0		0.0		0.0		0.0		121.9

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 MOS PRODUCTION LEADTIME: 18 MOS

CONTRACT DATES: FY 1999: Feb-99 FY 2000: FY 2001:

DELIVERY DATES: FY 1999: Aug-00 FY 2000: FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4
INPUT	43		3	2	4		1	1		1	3	3	1
OUTPUT	41	2		3	2	4		1	1		1	3	3

INSTALLATION SCHEDULE:	FY 02 1	FY 02 2	FY 02 3	FY 02 4	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT																		62
OUTPUT	1																	62

Notes/Comments
1. Total quantity meets inventory objective.
2. JTIDS and C2P(R) are installed as a ship set.
3. JTIDS and C2P(R)/CDLMS are installed as a ship set except for command ships. In FY 01, JTIDS is being installed on four command ships.

February-00

MODIFICATION TITLE: **AN/UYQ-86 (C2P(R)/CDLMS) SHORE INSTALLATIONS**
COST CODE **DR003**
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: **The C2P(R)CDLMS equipment performs data link processing functions and provides the interface between the Tactical Digital Information Links (TADILS) and selected shipboard processors. CDLMS provides the ability to graphically display multiple TADIL networks for monitoring and analysis. These efforts provide CDLMS shore installations (which do not require antennas) at selected training sites.**

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **POST MS III**
FINANCIAL PLAN: ($ in millions)

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	15	27.0			3	1.7															18	28.7
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interim Contractor Support																						
Installation of Hardware*	13	3.0	2	0.5			3	0.6													18	4.1
PRIOR YR EQUIP	13	3.0	2	0.5																	15	3.5
FY 98 EQUIP																					0	0.0
FY 99 EQUIP							3	0.6													3	0.6
FY 00 EQUIP																					0	0.0
FY 01 EQUIP																					0	0.0
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		3.0		0.5		0.0		0.6		0.0		0.0		0.0		0.0		0.0		0.0		4.1
TOTAL PROCUREMENT COST		30.0		0.5		1.7		0.6		0.0		0.0		0.0		0.0		0.0		0.0		32.8

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 MOS PRODUCTION LEADTIME: 12 MOS

CONTRACT DATES: FY 1999: Feb-99 FY 2000: FY 2001:

DELIVERY DATES: FY 1999: Feb-00 FY 2000: FY 2001:

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

INSTALLATION SCHEDULE:	FY 02 1	FY 02 2	FY 02 3	FY 02 4	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT																		18
OUTPUT																		18

Notes/Comments
1. Total quantity meets inventory objective.

February-00

MODIFICATION TITLE: **UYQ-86 (C2P(R)/CDLMS) FORWARD FIT SHIP INSTALLATIONS**
COST CODE **DR003**
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: **The C2P(R)CDLMS equipment performs data link processing functions and provides the interface between the Tactical Digital Information Links (TADILS) and selected shipboard processors. CDLMS provides the ability to graphically display multiple TADIL networks for monitoring and analysis. These efforts provide CDLMS shore installations (which do not require antennas) at selected training sites. Link-16 Shipboard installation. The cost of installing C2P(R)/CDLMS is included in the JTIDS terminal installation cost (reflected in P3-A for DR001) for FY 99-01 and in MIDS on Ship installation cost (reflected in P-3A for DR010) for FY01-05.**
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **POST MS III**
FINANCIAL PLAN: ($ in millions)

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	51	52.4	3	3.2	4	2.3							3	1.7	6	3.6			2	1.3	69	64
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interim Contractor Support																						
Installation of Hardware*	34	0.0	9	0.0	9	0.0	2	0.0	4	0.0							3	0.0	8	0.0	69	0.0
PRIOR YR EQUIP	34		9	0.0	8	0.0															51	0.0
FY 98 EQUIP					1	0.0	2	0.0													3	0.0
FY 99 EQUIP									4	0.0											4	0.0
FY 00 EQUIP																					0	0.0
FY 01 EQUIP																					0	0.0
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																	3	0.0			3	0.0
FY 04 EQUIP																			6	0.0	6	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																			2	0.0	2	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0
TOTAL PROCUREMENT COST		52.4		3.2		2.3		0.0		0.0		0.0		1.7		3.6		0.0		1.3		64.4

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 MOS PRODUCTION LEADTIME: 18 MOS

CONTRACT DATES: FY 1999: Feb-99 FY 2000: FY 2001:

DELIVERY DATES: FY 1999: Aug-00 FY 2000: FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4
INPUT	43		3	2	4		1	1		1	1	2	
OUTPUT	41	2		3	2	4		1	1		1	1	2

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

Notes/Comments:
1. Total quantity meets inventory objective.
2. Production leadtime varies between 12 to 18 months. For forward fit ships, JTIDS or MIDS on Ship and UYQ-86 (C2P(R)/CDLMS) are installed as a ship set except for command ships. Delivery of forward fit units take six months longer than those procured for backfit into existing suites. This is due to longer integration and testing time at the SPAWAR Systems Center.
3. Installation costs are included in the JTIDS (DR001) or MIDS on Ship (DR010) installation costs.

February-00

MODIFICATION TITLE: **AN/UYQ-86 (C2P(R)/CDLMS) BACKFIT SHIP INSTALLATIONS**
COST CODE **DR003**
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: **The C2P(R)/CDLMS equipment performs data link processing functions and provides the interface between the Tactical Digital Information Links (TADILS) and selected shipboard processors. equipment. CDLMS provides the ability to graphically display multiple TADIL networks for monitoring and analysis. The purpose of C2P(R)/ CDLMS backfits is to upgrade the outdated AN/UYK-43 in the fleet with the newer AN/UYQ-86 COTS. CDLMS includes S-TADIL-J and E-JNL. Identified installation costs include S-TADIL-J installations planned in FY99, FY00 and FY01; and E-JNL installations planned in FY00.**

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **POST MS III**
FINANCIAL PLAN: ($ in millions)

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment					12	6.9	17	9.0	14	7.6	15	8.3									58	31.9
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interim Contractor Support																						
Installation of Hardware*						0.2	12	6.2	15	5.9	10	4.5	17	6.9	4	1.7					58	25.5
PRIOR YR EQUIP																					0	0.0
FY 98 EQUIP																					0	0.0
FY 99 EQUIP						0.2	12	6.2													12	6.4
FY 00 EQUIP									15	5.9	2	0.8									17	6.8
FY 01 EQUIP											8	3.7	6	2.4							14	6.1
FY 02 EQUIP													11	4.5	4	1.7					15	6.2
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.2		6.2		5.9		4.5		6.9		1.7		0.0		0.0		25.5
TOTAL PROCUREMENT COST		0.0		0.0		7.1		15.2		13.5		12.9		6.9		1.7		0.0		0.0		57.4

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 MOS PRODUCTION LEADTIME: 12 MOS

CONTRACT DATES: FY 1999: Feb-99 FY 2000: Feb-00 FY 2001: Feb-01

DELIVERY DATES: FY 1999: Feb-00 FY 2000: Feb-01 FY 2001: Feb-02

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4
INPUT							2	5	5		3	6	6
OUTPUT								2	5	5		3	6

INSTALLATION SCHEDULE:	FY 02 1	FY 02 2	FY 02 3	FY 02 4	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT	2	2	4	2	5	7	5			1		3						58
OUTPUT	6	2	2	4	2	5	7	5			1		3					58

Notes/Comments
1. Total quantity meets inventory objective.
2. FY 99 reflects installation costs only. Quantities are not shown as only S-TADIL-J and not AN/UYQ-86 is being installed.

February-00

MODIFICATION TITLE: **LMS-16 LINK MONITORING SYSTEM SHORE INSTALLATIONS**
COST CODE **DR006**
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: **LMS-16 provides improved Link-16 network diagnostics, system monitoring and control capabilities. Network performance monitoring by platform and time slot allocation provide critical data to optimize t Link-16 network.**

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment									1	0.5	1	0.5	1	0.5	1	0.5	1	0.5			5	2.6
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interim Contractor Support																						
Installation of Hardware*									1	0.1	1	0.1	1	0.1	1	0.1	1	0.1			5	0.5
PRIOR YR 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									1	0.1											1	0.1
FY 02 EQUIP											1	0.1									1	0.1
FY 03 EQUIP													1	0.1							1	0.1
FY 04 EQUIP															1	0.1					1	0.1
FY 05 EQUIP																	1	0.1			1	0.1
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		0.1		0.1		0.1		0.1		0.1		0.0		0.5
TOTAL PROCUREMENT COST		0.0		0.0		0.0		0.0		0.6		0.6		0.6		0.6		0.6		0.0		3.1

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 MOS PRODUCTION LEADTIME: 6 MOS

CONTRACT DATES: FY 1999: FY 2000: FY 2001: Dec-00

DELIVERY DATES: FY 1999: FY 2000: FY 2001: Jun-01

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

INSTALLATION SCHEDULE:	FY 02 1	FY 02 2	FY 02 3	FY 02 4	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT				1				1				1				1		5
OUTPUT				1				1				1				1		5

Notes/Comments
1. Total quantity meets inventory objective.

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February 2000

APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: Advanced Tactical Data Link Systems 2614

SUBHEAD NO.: Q2DR/52DR

COST CODE	ITEM/MANUFACTURER	FY	SERV	PROC QTY	ACCEP PRIOR TO 1-Oct	BAL DUE AS OF 1-Oct	FISCAL YEAR 98 / PY97 / CALENDAR YEAR 98																		FISCAL YEAR 99 / CALENDAR YEAR 99												FISCAL YEAR 00 / CALENDAR YEAR 00											
							PY97			CALENDAR YEAR 98															CALENDAR YEAR 99												CALENDAR YEAR 00											
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
DR001	AN/URC-107(V) (JTIDS)	98		3		3			A																			1		1		1																	
		99		8		8																	A																									1	1
DR003	C2P/C2P(R)/CDLMS	98		3		3									A														1		1		1																	
		99		19		19																	A																			1	2	2	2	2	2	2	2
		00		17		17																																					A								
		01		14		14																																												
DR006	LMS-16 (LINK MONITORING SYSTEM)	01		1		1																																												
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP

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

NAVMAT FORM 7110/4 (REVISED 11/77)

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE February 2000

APPROPRIATION/BUDGET ACTIVITY
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE
Advanced Tactical Data Link Systems 2614

SUBHEAD NO.
Q2DR/52DR

COST CODE	ITEM/MANUFACTURER/ PROCUREMENT YEAR	FISCAL YEAR	CARRY OVER	FISCAL YEAR 01														FISCAL YEAR 02												FISCAL YEAR 03												LATER
				CY00			CALENDAR YEAR 01												CALENDAR YEAR 02												CALENDAR YEAR 03												
				OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
DR001	AN/URC-107(V) (JTIDS)	98	0																																					0
		99	6	2	2	2																																		0
DR003	C2P/C2P(R)/ CDLMS	98	0																																					0
		99	4	2	2																																			0
		00	17					1	2	2	2	2	2	2	2	2																								0
		01	14					A												1	1	2	2	2	2	2	2													0
DR006	LMS-16 (LINK MONITORING SYSTEM)	01	1			A						1																												0

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

NAVMAT FORM 7110/4 (REVISED 11/77)

BUDGET ITEM JUSTIFICATION SHEET
P-40

DATE: **February 2000**

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

P-1 ITEM NOMENCLATURE
MINESWEEPING SYSTEM REPLACEMENT/262200/72LV

Program Element for Code B Items:
0603502N

Other Related Program Elements

	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
EQUIPMENT COST (In Millions)	N/A	B		**$17.2**	**$19.6**	**$9.0**	**$13.8**	**$12.5**	**$13.1**	**$49.7**	**CONT.**	**CONT.**
SPARES COST (In Millions)	N/A	B		**$4.4**	**$3.5**	**$4.1**	**$4.1**	**$10.0**	**$10.0**	**$8.9**	**CONT.**	**CONT.**

PROGRAM 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.

Closed Loop Degaussing (LV065) : The Closed Loop Degaussing (CLDG) system automatically monitors and maintains a ship's static magnetic signature through on-board magnetic field measurements, a computer algorithm for predicting off-board magnetic fields, and an advanced degaussing control system.

Integrated Combat Weapon System (ICWS) (LV066): The Integrated Combat Weapons System (ICWS) Program is a series of major, incremental Block upgrades to the current combat systems to ultimately provide to the MCM Class Ships an affordable and fully integrated combat weapon system comprised of the AN/SQQ-32 Mine Hunting Sonar, the AN/SLQ-48 Mine Neutralization System, the AN/SSQ-94 Combat System Onboard Trainer, and the AN/SSN-2 Navigation System. There are three block upgrades:
Block 0 - Establishes a baseline for shipboard configuration
Block 1 - Transitions combat systems to an open systems architecture, develops common operator consoles and establishes an ATM/SONET local area network (LAN).
Block 2 - Improves performance of "wet end" equipment (sonar and mine neutralization vehicle)

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION	DATE: **February 2000**
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY BA-2: COMMUNICATIONS / ELECTRONICS**	P-1 ITEM NOMENCLATURE **MINESWEEPING SYSTEM REPLACEMENT/ 262200/72LV**

ITEM DESCRIPTION / JUSTIFICATION (CONTINUED) :

Engine Upgrade (LV067): FY00-Procure level 2 drawings and engine sustainment items to support MCM 1 and MCM 2 Waukesha engines from the OEM. Engine sustainment items are required due to the fact the OEM will no longer be manufacturing these engines.

Installation of Equipment (LV5IN) : Funding is for the installation of equipment including fleet modernization program installations, installations of training equipment in other shore facilities.

Items procured in FY 99: Integrated Combat Weapons System, consisting of Doppler Speed Log Replacement, Battle Space Profiler, SSQ-94 procurement, and SQQ-32 Upgrade.

Items to be procured in FY 00: Integrated Combat Weapons System, consisting of Doppler Speed Log Replacement, Battle Space Profiler, SQQ-32 upgrade, and Engineering changes. CLDG 2 systems.

Items to be procured in FY 01: Integrated Combat Weapons System, consisting of Doppler Speed Log Replacement and Engineering changes. CLDG 1 system.

Code "B" Items: RMS Systems, PE 0603502N

	Planned
DT/OA	Jul - Sep 02
TECHEVAL Phase I	Jul - Oct 03
TECHEVAL Phase II/OPEVAL	Jul - Sep 04

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

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System												DATE: **February 2000**
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy** **BA-2: COMMUNICATIONS / ELECTRONICS**			ID Code **B**	P-1 ITEM NOMENCLATURE/SUBHEAD **MINESWEEPING SYSTEM REPLACEMENT/262200/72LV**											
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS Prior Years				FY 1999			FY 2000			FY 2001		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	MINE WARFARE, N852										2,882				
LV065	CLOSED LOOP DEGAUSSING (CLDG)	B							204	2	2,882	5,764	1	2,890	2,890
LV066	ICWS	A							12,561			10,399			5,528
LV067	ENGINE UPGRADE	A										400			
LV830	PRODUCTION ENGINEERING								294			213			141
LV900	CONSULTING SERVICES								100			378			430
LV5IN	INSTALLATION OF EQUIPMENT								4,029			2,398			0
TOTAL			**0**						**17,188**			**19,552**			**8,989**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE: February 2000

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Other Procurement, Navy BA-2: COMMUNICATIONS / ELECTRONICS	MINESWEEPING SYSTEM REPLACEMENT/262200	72LV

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FISCAL YEAR 99										
LV066 ICWS	VAR*	VAR*	NAVSEA/NSWC - CRANE/DAHL/CSS	N/A	SS/FP	VARIOUS	12/98	12/99	YES	
FISCAL YEAR 00										
LV065 CLDG	2	2882	NSWC, CARDEROCK	N/A	WR	VARIOUS	5/00	1/01	YES	
LV066 ICWS	VAR*	VAR*	NAVSEA/ NSWC CRANE/ DAHL/ CSS	N/A	SS/FP	VARIOUS	12/99	12/00	YES	
FISCAL YEAR 01										
LV065 CLDG	1	2890	NSWC CARDEROCK	N/A	WR	VARIOUS	12/00	8/01	YES	
LV066 ICWS	VAR*	VAR*	NAVSEA/ NSWC CRANE/ DAHL/ CSS	N/A	SS/FP	VARIOUS	12/00	12/01	YES	

D. REMARKS

* SEE SYSTEM DESCRIPTION ON P-40 FOR MORE DETAILS

FY 2000/01 BUDGET PRODUCTION SCHEDULE, P-21					DATE February 2000
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY**		Weapon System			P-1 ITEM NOMENCLATURE Minesweeping System Replacement/262200/72LV
		Production Rate		Procurement Leadtimes	

Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
LV065- CLDG	NSWC, CARDEROCK, MD	1		4			8		8	EACH

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 1998												FISCAL YEAR 1999												BAL
						1997			CALENDAR YEAR 1998										CALENDAR YEAR 1999												
						OCT	NOV	DEC	JAN	FEB	MAR	Aug	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2000												FISCAL YEAR 2001												BAL
						1999			CALENDAR YEAR 2000										CALENDAR YEAR 2001												
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
CLDG	00	EA	2	0	2								A								2								0
CLDG	01	EA	1	0	1															A								1		0

Remarks:

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

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

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: _____

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																						0.0
PROCUREMENT																						
INSTALLATION KITS																						0.0
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT	8	55.9																			8	55.9
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT																						0.0
SUPPORT EQUIPMENT																						0.0
OTHER																						0.0
OTHER																						0.0
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST	3	2.6	2	3.7	2	3.2	1	1.6														11.1
TOTAL PROCUREMENT	8	58.5	2.0	3.7	2.0	3.2	1.0	1.6	0.0	0.0		0.0		0.0		0.0		0.0				67.0

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

MODELS OF SYSTEMS AFFECTED: AN/SQQ-32 SONAR MODIFICATION TITLE: AN/SQQ-32 BACKFIT LV054

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: CONTRACTOR
ADMINISTRATIVE LEADTIME: 4 MONTHS PRODUCTION LEADTIME: 28 Months
CONTRACT DATES: FY 1999: N/A FY 2000: N/A FY 2001: N/A
DELIVERY DATE: FY 1999: N/A FY 2000: N/A FY 2001: N/A

($ in Millions)

Cost:	Prior Years		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS	3	2.6	2	3.7	2	3.2	1	1.6		0.0		0.0		0.0		0.0		0.0			8	11.1
FY 1998 EQUIPMENT				0.0		0.0		0.0		0.0						0.0		0.0			0	0.0
FY 1999 EQUIPMENT																					0	0.0
FY 2000 EQUIPMENT																					0	0.0
FY 2001 EQUIPMENT																					0	0.0
FY 2002 EQUIPMENT																					0	0.0
FY 2003 EQUIPMENT																					0	0.0
FY 2004 EQUIPMENT																					0	0.0
FY 2005 EQUIPMENT																					0	0.0
TO COMPLETE																						

INSTALLATION SCHEDULE:

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

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

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

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: _____

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.0
PROCUREMENT																						
INSTALLATION KITS																					0	0.0
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT	V	9.2	V	2.0																		11.2
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT																						0.0
SUPPORT EQUIPMENT																						0.0
OTHER																						0.0
OTHER																						0.0
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST	V	2.4			V	0.6	V	0.5														3.5
TOTAL PROCUREMENT	V	11.6	V	2.0	V	0.6	V	0.5	V	0.0		0.0		0.0		0.0		0.0				14.7

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

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

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT (TIGER TEAM)
ADMINISTRATIVE LEADTIME: VAR PRODUCTION LEADTIME: VAR
CONTRACT DATES: FY 1999: VAR FY 2000: VAR FY 2001: VAR
DELIVERY DATE: FY 1999: VAR FY 2000: VAR FY 2001: VAR

($ in Millions)

Cost:	Prior Years		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS	V	2.40																			V	2.4
FY 1998 EQUIPMENT																0.0		0.0			V	0.0
FY 1999 EQUIPMENT					V	0.6	V	0.5	V	0.0											V	1.1
FY 2000 EQUIPMENT																					0	0.0
FY 2001 EQUIPMENT																					0	0.0
FY 2002 EQUIPMENT																					0	0.0
FY 2003 EQUIPMENT																					0	0.0
FY 2004 EQUIPMENT																					0	0.0
FY 2005 EQUIPMENT																					0	0.0
TO COMPLETE																						

INSTALLATION SCHEDULE:

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

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

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

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: _____

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.0
PROCUREMENT																						
INSTALLATION KITS																					0	0.0
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT	V	9.1	V	7.8																	V	16.9
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT																						0.0
SUPPORT EQUIPMENT																						0.0
OTHER																						0.0
OTHER																						0.0
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST								0.3														0.3
TOTAL PROCUREMENT	V	9.1	V	7.8		0.0		0.3		0.0		0.0		0.0		0.0		0.0				17.2

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

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

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT (TIGER TEAM)
ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 12-15 Months
CONTRACT DATES: FY 1999: N/A FY 2000: N/A FY 2001: N/A
DELIVERY DATE: FY 1999: N/A FY 2000: N/A FY 2001: N/A

($ in Millions)

Cost:	Prior Years		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																					0	0.0
FY 1998 EQUIPMENT							V	0.3													###	0.3
FY 1999 EQUIPMENT																					0	0.0
FY 2000 EQUIPMENT																					0	0.0
FY 2001 EQUIPMENT																					0	0.0
FY 2002 EQUIPMENT																					0	0.0
FY 2003 EQUIPMENT																					0	0.0
FY 2004 EQUIPMENT																					0	0.0
FY 2005 EQUIPMENT																					0	0.0
TO COMPLETE																						

INSTALLATION SCHEDULE:

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

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

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

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: _____

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.0
PROCUREMENT																						
INSTALLATION KITS																					0	0.0
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT	V	4.8																			V	4.8
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT																						0.0
SUPPORT EQUIPMENT																						0.0
OTHER																						0.0
OTHER																						0.0
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST	V	0.0	V	0.1	V	0.2		0.0		0.0		0.0		0.0		0.0		0.0				0.4
TOTAL PROCUREMENT	V	4.9		0.1		0.2		0.0		0.0		0.0		0.0		0.0		0.0				5.2

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

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

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: ALT
ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 12-15 Months
CONTRACT DATES: FY 1999: N/A FY 2000: N/A FY 2001: N/A
DELIVERY DATE: FY 1999: N/A FY 2000: N/A FY 2001: N/A

($ in Millions)

Cost:	Prior Years		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS	V	0	V	0.1	V	0.2															V	0.4
FY 1998 EQUIPMENT																					0	0.0
FY 1999 EQUIPMENT																					0	0.0
FY 2000 EQUIPMENT																					0	0.0
FY 2001 EQUIPMENT																					0	0.0
FY 2002 EQUIPMENT																					0	0.0
FY 2003 EQUIPMENT																					0	0.0
FY 2004 EQUIPMENT																					0	0.0
FY 2005 EQUIPMENT																					0	0.0
TO COMPLETE																						

INSTALLATION SCHEDULE:

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

BUDGET ITEM JUSTIFICATION SHEET P-40												DATE: February 2000
APPROPRIATION/BUDGET ACTIVITY: **OTHER PROCUREMENT, NAVY BA-2: Communications/Electronics**							P-1 ITEM NOMENCLATURE: **SHALLOW WATER MCM/262400/72SW**					
Program Element for Code B Items: **PE 0603502N Surface and Shallow Water Mine Countermeasures**							Other Related Program Elements					
	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)	**N/A**	**B**		**$7.3**	**$18.7**	**$16.9**	**$37.9**	**$19.8**	**$7.7**	**$8.5**	**N/A**	**$116.6**
SPARES COST (In Millions)	**N/A**	**B**		**$0.6**	**$0.2**	**$0.6**	**$0.5**	**$1.0**	**$0.0**	**$0.0**	**N/A**	**$2.9**

PROGRAM DESCRIPTION/ JUSTIFICATION :

Shallow Water Mine Countermeasures (SWMCM) equipment is being developed to enable the US Navy to clear mines and light obstacles from the very shallow water and surf zones in preparation for an amphibious assault by the US Marines. Each of the equipments below is necessary to complete a "toolbox" for the Combat Engineer to perform this task.

SHALLOW WATER ASSAULT BREACHING SYSTEM (SABRE) - SW021: A linear demolition charge deployed into the deep end of the surf zone (10' - 3') to clear anti-invasion mines from the assault lanes. NON-RECURRING (SABRE) - SW021: Explosives facility rehabilitation/upgrades and qualification as well as tooling essential to begin production.

FULL SCALE INERT TRAINERS - SW022: A full size inert version of the explosive SABRE system, to be used for mission training during operational exercises.

SUB-CALIBER TRAINERS - SW023: An inert, small scale version of the explosive SABRE system, to be used for school and unit training.

LAUNCH CONTROLLERS - SW024: An electrical control box for centralized initiation and status check of the SABRE and Distributed Explosive Technology (DET) systems on board the Landing Craft Air Cushion (LCAC) mission platform.

FULL MISSION TRAINER - SW025: An upgrade to the existing LCAC Full Mission Trainer (FMT) to incorporate essential Assault Breaching Systems functionality.

DISTRIBUTED EXPLOSIVE TECHNOLOGY (DET) - SW031: An array of detonating cord deployed into the shallow end of the surf zone (3' - 0') to clear anti-invasion and land mines from the assault lane. Overall Flyaway costs remain at $363K per system however, tactical systems are split into critical subcomponents surveillance units and first article.

FULL SCALE INERT TRAINERS - SW032: A full size inert version of the explosive DET system, to be used for mission training during operational exercises.

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION	DATE: **February 2000**
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY BA-2: Communications/Electronics**	P-1 ITEM NOMENCLATURE **SHALLOW WATER MCM/262400/72SW**

SUB-CALIBER TRAINERS - SW033: An inert small scale version of the explosive DET system, to be used for school and unit training.

AUTOPILOT - SW061: An integrated improvement to the LCAC navigation system for craft control that allows precise movement and hovering within the breached lane during the deployment of DET and SABRE, and precise navigation of breached lanes.

EGI PROCUREMENT - Autopilot - SW062 : Economical buy of EGI (Embedded GPS INS), a subcomponent of Autopilot to avoid additional system cost. The thirty five EGI will be integrated into AUTOPILOT to meet current LCAC requirements. The remaining EGI will be procured as part of the LCAC Service Life Extension Program (SLEP).

PE #0603502N	SABRE	DET
DT	MAY 00	SEP 99
OT	JUN 00	OCT 99
TDP	MAY 00	OCT 99
PRODUCTION DECISION	SEP 00	JAN 00

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 2000

B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-2: COMMUNICATIONS / ELECTRONICS	C. P-1 ITEM NOMENCLATURE SHALLOW WATER MCM/262400	SUBHEAD 72SW

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FISCAL YEAR 1999										
SW061	16	214.0	N/A	N/A	WR	NSWC,CSS Panama City, FL	12/98	11/00	YES	
SW062	35	84.0	N/A	N/A	WR	NSWC,CSS Panama City, FL	2/99	9/00	YES	
FISCAL YEAR 2000										
SW021	32	152.8	NAVSEA	12/99	C/FP	UNKNOWN	10/00*	6/01	YES	
SW022	8	75.3	NAVSEA	12/99	C/FP	UNKNOWN	10/00	10/01	YES	
SW023	50	17.3	NAVSEA	12/99	C/FP	UNKNOWN	10/00	1/02	YES	
SW024	39	12.0	N/A	N/A	WR	NSWC, IH Indian Head, MD	12/99	6/01	YES	
SW025	1	1,000.0	NAWC, TSD	N/A	OPTION	Raytheon, Portsmouth RI	02/00	11/00	YES	
SW031	12	363.0	NAVSEA	12/99	C/FP	UNKNOWN	02/00	8/01	YES	
SW032	5	221.0	NAVSEA	12/99	C/FP	UNKNOWN	02/00	8/01	YES	
SW033	18	20.0	NAVSEA	12/99	C/FP	UNKNOWN	02/00	8/01	YES	
SW061	20	138.9	N/A	N/A	WR	NSWC, CSS Panama City, FL	12/99	9/01	YES	

D. REMARKS

SW025 - Option to PMS 377 contract #N61339-96-C-0109 (Raytheon);

* Long Lead Items to be procured by NSWC, Indian Head in 03/00.

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 2000

B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-2: COMMUNICATIONS / ELECTRONICS	C. P-1 ITEM NOMENCLATURE SHALLOW WATER MCM/262400	SUBHEAD 72SW

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FISCAL YEAR 1999										
SW061	16	214.0	N/A	N/A	WR	NSWC,CSS Panama City, FL	12/98	11/00	YES	
SW062	35	84.0	N/A	N/A	WR	NSWC,CSS Panama City, FL	2/99	9/00	YES	
FISCAL YEAR 2000										
SW021	32	152.8	NAVSEA	12/99	C/FP	UNKNOWN	10/00*	6/01	YES	
SW022	8	75.3	NAVSEA	12/99	C/FP	UNKNOWN	10/00	10/01	YES	
SW023	50	17.3	NAVSEA	12/99	C/FP	UNKNOWN	10/00	1/02	YES	
SW024	39	12.0	N/A	N/A	WR	NSWC, IH Indian Head, MD	12/99	6/01	YES	
SW025	1	1,000.0	NAWC, TSD	N/A	OPTION	Raytheon, Portsmouth RI	02/00	11/00	YES	
SW031	12	363.0	NAVSEA	12/99	C/FP	UNKNOWN	02/00	8/01	YES	
SW032	5	221.0	NAVSEA	12/99	C/FP	UNKNOWN	02/00	8/01	YES	
SW033	18	20.0	NAVSEA	12/99	C/FP	UNKNOWN	02/00	8/01	YES	
SW061	20	138.9	N/A	N/A	WR	NSWC, CSS Panama City, FL	12/99	9/01	YES	

D. REMARKS

SW025 - Option to PMS 377 contract #N61339-96-C-0109 (Raytheon);

* Long Lead Items to be procured by NSWC, Indian Head in 03/00.

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 2000
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-2: COMMUNICATIONS / ELECTRONICS	C. P-1 ITEM NOMENCLATURE SHALLOW WATER MCM/262400	SUBHEAD 72SW

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FISCAL YEAR 2001										
SW024	111	12.0	N/A	N/A	WR	NSWC, IH Indian Head, MD	11/00	12/01	YES	
SW031	24	344.2	NAVSEA	N/A	OPTION	UNKNOWN	11/00	4/02	YES	
SW032	10	206.3	NAVSEA	N/A	OPTION	UNKNOWN	11/00	4/02	YES	
SW033	182	10.4	NAVSEA	N/A	OPTION	UNKNOWN	11/00	4/02	YES	
SW061	11	132.0	N/A	N/A	WR	NSWC, CSS Panama City, FL	N/A	9/02	YES	

D. REMARKS

FY 02 delivery of SW061 will take extra time due to upgrade to SLEP LCAC.

FY 2000/01 BUDGET PRODUCTION SCHEDULE, P-21			DATE	February 2000
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY**		Weapon System	P-1 ITEM NOMENCLATURE - SHALLOW WATER	

		Production Rate			Procurement Leadtimes					
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
SW021,SW022,SW023,SW024	UNKNOWN									EA
SW025	Raytheon, Portsmouth RI									
SW031,SW032,SW033	UNKNOWN									
SW061, SW062										

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 1998												FISCAL YEAR 1999										BAL
						1997			CALENDAR YEAR 1998										CALENDAR YEAR 1999										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
SW061 AUTOPILOT	99	N	16	0	16															A										16
SW062 AUTOPILOT EGI	99	N	35	0	35																	A								35

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2000												FISCAL YEAR 2001										BAL
						1999			CALENDAR YEAR 2000										CALENDAR YEAR 2001										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
SW061 AUTOPILOT	99	N	16	0	16														16											0
SW062 AUTOPILOT EGI	99	N	35	0	35												35													0
SW021 SABRE TACTICAL	00	N	32	0	32						A*							A								10		6		16
SW022 SABRE FULL-SCALE INERT T	00	N	8	0	8													A												8
SW023 SABRE SUB-CALIBER TRNR	00	N	50	0	50													A												50
SW024 LAUNCH CONTROLLER	00	N	39	0	39			A																		15	10	4	10	0
SW025 FULL MISSION TRAINER	00	N	1	0	1					A									1											0
SW031 DET TACTICAL	00	N	12	0	12					A																		5	7	0
SW032 DET INERT TRAINER	00	N	5	0	5					A																		5		0
SW033 DET SUB-CALIBER TRAINER	00	N	18	0	18					A																		18		0
SW061 AUTOPILOT	00	N	20	0	20			A																					20	0
SW024 LAUNCH CONTROLLER	01	N	111	0	111														A											111
SW031 DET TACTICAL	01	N	24	0	24														A											24
SW032 DET INERT TRAINER	01	N	10	0	10														A											10
SW033 DET SUB-CALIBER TRAINER	01	N	182	0	182														A											182
SW061 AUTOPILOT	01	N	11	0	11														A											11

Remarks:
* Long Lead

FY 2000/01 BUDGET PRODUCTION SCHEDULE, P-21			DATE	February 2000
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY**		Weapon System	P-1 ITEM NOMENCLATURE - SHALLOW WATER MCM	

		Production Rate			Procurement Leadtimes					
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2002												FISCAL YEAR 2003												BAL
						2001			CALENDAR YEAR 2002									CALENDAR YEAR 2003												
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
SW021SABRE TACTICAL	00	N	32	16	16						10		6																	0
SW022 SABRE FULL-SCALE INERT T	00	N	8	0	8	2			2			2			2															0
SW023 SABRE SUB-CALIBER TRNR	00	N	50	0	50				10			10			10			20												0
SW024 LAUNCH CONTROLLER	01	N	111	0	111			15	10	10	10	10	10	10	10	16	10													0
SW031 DET TACTICAL	01	N	24	0	24							2	2	2	2	2	2	2	2	2	2	2	2							0
SW032 DET INERT TRAINER	01	N	10	0	10							2		2		2		2			2									0
SW033 DET SUB-CALIBER TRAINER	01	N	182	0	182							20	20	20	20	20	20	20	20		20	2								0
SW061 AUTOPILOT	01	N	11	0	11												1		10											0

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2004												FISCAL YEAR 2005												BAL
						2003			CALENDAR YEAR 2004									CALENDAR YEAR 2005												
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

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							DATE	February 2000	
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					**P-1 ITEM NOMENCLATURE** NAVSTAR GPS BLI 2657			**SUBHEAD** 521R	
	FY 1999	**FY 2000**	**FY 2001**	**FY 2002**	**FY 2003**	**FY 2004**	**FY 2005**	**TO COMP**	**TOTAL**
QUANTITY									
COST (in millions)	**$9.4**	**$8.5**	**$9.6**	**$9.0**	**$9.1**	**$10.7**	**$11.8**	**Continuing**	**Continuing**

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

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

FY99 funding procures 12 NAVSSI systems, 11 retrofit kits, installations of 12 NAVSSI systems & 19 RTS..

FY00 funding procures 11 NAVSSI systems, 2 RTS retrofit kits, installation of 11 NAVSSI systems and install of 2 RTS.

FY01 funding procures 12 NAVSSI systems, 3 RTS retrofit kits, installation of 12 NAVSSI systems and install of 3 RTS.

Installations are being done for each class/ship through the preparation of ship alteration proposals and ship alteration records.

Installation Agent: Installation teams and/or overhaul - to be determined for each ship during execution.

INDENT CODE: A

COST ANALYSIS						**DATE** February 2000					
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT						**P-1 ITEM NOMENCLATURE** NAVSTAR GPS BLI 2657				**SUBHEAD** 521R	
			FY 1999			**FY 2000**			**FY 2001**		
COST CODE	**ELEMENT OF COST**	**ID CODE**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**
1R555	Production Support	A			499			92			389
1R009	NAVSSI	A	12	444.3	5,331	11	395.9	4,355	12	399.0	4,788
1R011	NAVSSI - Retrofit	A	11	30.0	330	2	380.0	760	3	380.0	1,140
	Installation				3,207			3,264			3,290
1R777	Install - FMP	A			2,400			2,200			2,400
	Install - Retrofit	A			570			400			600
	Install - Design Service Agent	A			237			664			290
	TOTAL CONTROL				**9,367**			**8,471**			**9,607**

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Exhibit P-5

PROCUREMENT HISTORY AND PLANNING

A. DATE February 2000

B. APPROPRIATION/BUDGET ACTIVITY
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

C. P-1 ITEM NOMENCLATURE
NAVSTAR GPS BLI 2657

SUBHEAD 521R

COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
1R009	NAVSSI											
		99	Various	WX/RCP	Various	Various	Nov-98	May-99	12	444,250	Yes	
		00	Various	WX/RCP	Various	Various	Nov-99	Dec-99	11	395,909	Yes	
		01	Various	WX/RCP	Various	Various	Nov-00	Dec-00	12	399,000	Yes	
1R011	NAVSSI - Retrofit	99	Various	WX/RCP	Various	Various	Nov-98	Dec-98	11	30,000	Yes	
		00	Various	WX/RCP	Various	Various	Nov-99	Dec-99	2	380,000	Yes	
		01	Various	WX/RCP	Various	Various	Nov-00	Dec-00	3	380,000	Yes	

* FY98 and FY99 Retrofit procurements were for Y2K retrofit kits which cost $30K each. Subsequent retrofits are much more involved requiring nearly wholesale replacement of existing systems. As a result, retrofit procurement costs starting in FY00 will be $380K each."

D. REMARKS

UNCLASSIFIED

MODIFICATION TITLE: NAVSTAR Global Postioning System (GPS) (521R) NAVSSI (1R009) February-00

MODELS OF SYSTEMS AFFECTED: All models of ships will have NAVSTAR GPS

DESCRIPTION/JUSTIFICATION: The NAVSTAR Global Postioning 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 intiated. 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 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$		Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																							
PROCUREMENT:																							
Kit Quantity																							
Installation Kits																							
Installation Kits Nonrecurring																							
Equipment	65	10.7		0		12	5.3	11	4.4	12	4.8	12	4.8	12	5.0	12	5.1	11	4.7			147	44.8
Equipment Nonrecurring																							
Engineering Change Orders																							
Data																							
Training Equipment																							
Support Equipment																							
Other																							
Interm Contractor Support																							
Installation of Hardware*	46	10.3		19	2.3	12	2.4	11	2.2	12	2.4	12	2.4	12	2.4	12	2.4	11	2.2	0	0.0	147	29.0
PRIOR YR EQUIP	46	10.3		19	2.3																	65	12.6
FY 97 EQUIP																						0	0.0
FY 98 EQUIP																						0	0.0
FY 99 EQUIP						12	2.4															12	2.4
FY 00 EQUIP								11	2.2													11	2.2
FY 01 EQUIP										12	2.4											12	2.4
FY 02 EQUIP												12	2.4									12	2.4
FY 03 EQUIP														12	2.4							12	2.4
FY 04 EQUIP																12	2.4					12	2.4
FY 05 EQUIP																		11	2.2			11	2.2
FY TC EQUIP																						0	0.0
TOTAL INSTALLATION COST		10.3			2.3		2.4		2.2		2.4		2.4		2.4		2.4		2.2		0.0		29.0
TOTAL PROCUREMENT COST		21.0			2.3		7.7		6.6		7.2		7.2		7.4		7.5		6.9		0.0		73.8

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 1 PRODUCTION LEADTIME: 6

CONTRACT DATES: FY 1999: Nov-98 FY 2000: Nov-99 FY 2001: Nov-00

DELIVERY DATES: FY 1999: May-99 FY 2000: Dec-99 FY 2001: Dec-00

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4
INPUT	65	0	0	5	7	0	4	4	3	0	4	4	4
OUTPUT	65	0	0	5	7	0	4	4	3	0	4	4	4

INSTALLATION SCHEDULE:	FY 02 1	FY 02 2	FY 02 3	FY 02 4	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT	0	4	4	4	0	4	4	4	0	4	4	4	0	4	4	3		147
OUTPUT	0	4	4	4	0	4	4	4	0	4	4	4	0	4	4	3		147

Notes/Comments

February-00

MODIFICATION TITLE: NAVSTAR Global Postioning System (GPS) (521R) RETROFIT (1R011)

MODELS OF SYSTEMS AFFECTED: All models of ships will have NAVSTAR GPS

DESCRIPTION/JUSTIFICATION: The NAVSTAR Global Postioning 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 intiated. 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 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
		Qty	$		Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring	01																							
Equipment					25	0.9	11	0.3	2	0.8	3	1.1	2	0.8	2	0.8	13	1.9	21	2.9			79	9.5
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware*		0	0.0		17	0.6	19	0.6	2	0.4	3	0.6	2	0.4	2	0.4	13	1.0	21	1.5	0		79	5.5
PRIOR YR EQUIP																							0	0.0
FY 97 EQUIP																							0	0.0
FY 98 EQUIP					17	0.6	8	0.2															25	0.8
FY 99 EQUIP							11	0.4															11	0.4
FY 00 EQUIP									2	0.4													2	0.4
FY 01 EQUIP											3	0.6											3	0.6
FY 02 EQUIP													2	0.4									2	0.4
FY 03 EQUIP															2	0.4							2	0.4
FY 04 EQUIP																	13	1.0					13	1.0
FY 05 EQUIP																			21	1.5			21	1.5
FY TC EQUIP																							0	0.0
TOTAL INSTALLATION COST			0.0			0.6		0.6		0.4		0.6		0.4		0.4		1.0		1.5				5.5
TOTAL PROCUREMENT COST			0.0			1.5		0.9		1.2		1.7		1.2		1.2		2.9		4.4				15.0

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 1 PRODUCTION LEADTIME: 1

CONTRACT DATES: FY 1999: Nov-98 FY 2000: Nov-99 FY 2001: Nov-00

DELIVERY DATES: FY 1999: Dec-98 FY 2000: Dec-99 FY 2001: Dec-00

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT	25	0	5	6	0	0	2	0	0	0	3	0	0
OUTPUT	17	6	7	6	0	0	0	2	0	0	0	2	1

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT	0	2	0	0	0	2	0	0	0	4	4	5	0	7	7	7		79
OUTPUT	0	0	2	0	0	0	2	0	0	4	4	5	0	7	7	7		79

Notes/Comments

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February 2000

APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: NAVSTAR GPS BLI 2657

SUBHEAD NO.: 521R

COST CODE	ITEM/MANUFACTURER	FY	SERV	PROC QTY	ACCEP PRIOR TO 1-Oct	BAL DUE AS OF 1-Oct	FISCAL YEAR 98																FISCAL YEAR 99												FISCAL YEAR 00											
							PY97			CALENDAR YEAR 98													CALENDAR YEAR 99												CALENDAR YEAR 00											
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1R009	NAVSSI/Various																																											
		99		12		0														A					2	3	3	2	2														
		00		11		0																								A	1	1	1	1	1	2	1	1	1
		01		12		0																																				

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

NAVMAT FORM 7110/4 (REVISED 11/77)

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P-21A Exhibit

Unclassified

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE February 2000

APPROPRIATION/BUDGET ACTIVITY
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE
NAVSTAR GPS BLI 2657

SUBHEAD NO.
521R

COST CODE	ITEM/MANUFACTURER/ PROCUREMENTY YEAR	FISCAL YEAR	CARRY OVER	FISCAL YEAR 01												FISCAL YEAR 02												FISCAL YEAR 03												LATER
				CY00			CALENDAR YEAR 01												CALENDAR YEAR 02												CALENDAR YEAR 03											
				OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
1R009	NAVSSI/Various																																						0
																																							0
		99	0																																				0
		00	0																																				0
		01	0		A	1	1	2	1	1	2	1	1	1	1																								0
																																							0
																																							0
																																							0
																																							0
																																							0
																																							0
																																							0
																																							0
																																							0
				OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

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

NAVMAT FORM 7110/4 (REVISED 11/77)

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P-21A Exhibit

BUDGET ITEM JUSTIFICATION SHEET P-40												DATE: **February 2000**
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY/BA-2 Communications and Electronic Equipment**							P-1 ITEM NOMENCLATURE **Armed Forces Radio and Television/BLI: 266600 - Subhead 82K0**					
Program Element for Code B Items:							Other Related Program Elements					
	Prior Years	ID Code		FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)				**$15.9**	**$7.7**	**$9.0**	**$10.9**	**$4.4**	**$4.5**	**$4.5**		**$56.9**
SPARES COST (In Millions)												**$0.0**

PUC K0001: AFRTS Program - AFRTS shipboard entertainment systems provide improved quality of life at sea and at overseas shore bases. These systems contribute significantly to the habitability of Navy ships by providing and distributing news, command information, training, and entertainment programming using the latest technology available. These systems improve morale, combat effectiveness and retention rates of deployed personnel. All AFRTS systems use Commercial-Off-the-Shelf (COTS) equipment. Naval Media Center (NAVMEDIACEN) Fleet Support Detachments (FSDs) are the Installing agents for these systems. Each system installation is made based on ship availability. The AFRTS program consists of the following systems:

(a) SITE 2000/500 - This SITE system is designed for aircraft carriers (CV/CVN). It is used to playback videocassettes and compact discs distributed by AFRTS and NMPS over four channels on a cable distribution system. System also allows for the production of training tapes and command information programs. Systems are designed to interface with pierside cable systems where available. Requires manpower of two dedicated technicians and three operators. SITE 2000/500 is the next generation of the SITE 501 project. A total of seven systems required at an estimated unit cost of $378K. One unit will be procured in FY 01. Each system requires five to ten months lead time to procure and install. SITE 2000 includes Television Direct-to-Sailor (TV-DTS) equipment upgrades.

(b) SITE 2000/400 - This SITE system is designed for large amphibious and auxiliary ship classes (AOE/LHA/LHD/LPD/LSD). Same as SITE 2000/500 system, with the exception of studio production capability and lesser editing capability. Requires manpower of one dedicated technician and operator. Total of 33 systems required at an estimated unit cost of $209K. Four units will be procured in FY 01. Each system requires four to eight months lead time to be procured and installed. SITE 2000 includes TV-DTS equipment upgrades.

(c) SITE 2000/300 - This SITE system is designed for smaller combatants ship classes (CG/DD/DDG/FFG). This system is used primarily for playback of AFRTS and NMPS cassettes over two channels. Capable of producing simple local programs for training and command information. Requires manpower of one dedicated technician who also serves as operator. Total of 124 systems required at an estimated unit cost of $85K. Fifteen units will be procured in FY 01. Each system requires four to eight months lead time to procure and install. SITE 2000 includes TV-DTS equipment upgrades.

(d) SITE 2000/200 - Compact system used to playback AFRTS and NMPS cassettes over two channels on submarines (SSN/SSBN). Capable of making simple recordings for training and command information. Requires no dedicated technician or operator. A total of 54 systems are required at an estimated unit cost of $58K. Seven units will be procured in FY 01. Each system requires four to eight months lead time to procure and install.

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION	DATE: February 2000
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY/BA-2 Communications and Electronic Equipment**	P-1 ITEM NOMENCLATURE **Armed Forces Radio and Television/BLI: 266600 - Subhead 82K0**

(e) SAES - Shipboard Audio Entertainment System (SAES) upgrade is an assemblage of COTS items providing a standard/reliable means to play audio program material distributed by the AFRTS. A total of 84 systems are required at an estimated unit cost of $31K. In prior years 77 units have been procured. In FY 00 4 units will be procured, leaving 3 units to be procured in FY 01. Each system requires three to eight months lead time to procure and install. In FY02 the SAES system will be integrated into the SITE system. The following ship classes require the total of 84 SAES Units: CG, DD, DDG, FFG.

(f) IRFDS - Integrated Radio Frequency Distribution System (IRFDS) provides ship-wide transmission of command information, training and entertainment television programming. The IRFDS receives television signals from the ships SITE system or antenna and distributes the signals to all installed TV receivers. This system replaces the unsupportable Circuit 14TV. IRFDS is a COTS system. IRFDS procurement also includes the purchase of equipment to integrate all television displays onto one distribution system. Total of 106 systems are required. An average FY 01 unit cost to engineer, furnish and install is $270K. Cost per unit ranges from $195K for smaller ships to $530K for carriers. The unit costs are based on "first-in-the-class" estimates, follow-on ships in the same class will have a lower unit cost. In prior years 17 units have been procured. Two units will be procured in FY 00 and four units will be procured in FY 01. Each system requires a three to ten months lead time to be procured and installed. The following ship classes require the total of 106 IRFDS units: CG, CV/CVN, DD, DDG, FFG.

PUC K0INS: This funding supports the installation of SITE, SAES, and IRFDS systems onboard Navy ships.

PUC K0002: SPAWAR Program - Television Direct-to-Sailors (TV-DTS) will provide a receive-only television capability to 181 ships in the Fleet. This capability will feature two full-time news and entertainment television channels as well as two stereo audio music channels, one monographic audio radio news and sports channel, one 128kbps data channel, and an electronic program guide. AFRTS will provide the programming. Satellite transponders, ground-based earth stations and leases for terrestrial connectivity will be provided by SPAWAR (via O&MN funding). Each ship will be outfitted with COTS 1.3 meter C-band satellite stabilized antenna terminal for reception of the television signal. Funds were placed on contract for the procurement of hardware with 122 systems bought in FY 98 and 5 systems in FY 99. (Procurement of five systems is the contract minimum in FY99.) To meet the total inventory objective of 181, procurement of 4 units and installation of 26 units will be accomplished in FY00; procurement of 14 units and installation of 28 units will be accomplished in FY01; procurement of 36 units and installation of 30 units will be accomplished in FY02. Installations are accomplished by Alteration Installation Teams (AIT).

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE
		February 2000

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Other Procurement, Navy BA-2 Communications and Electronic Equipment	Armed Forces Radio & Television	82K0

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FY 99										
SITE 2000/200	8	52	TV Audio Sprt Activity	8/98	MIPR	Various	2/99	5/99	YES	
SITE 2000/300	9	84	TV Audio Sprt Activity	8/98	MIPR	Various	2/99	6/99	YES	
SITE 2000/400	6	201	TV Audio Sprt Activity	8/98	MIPR	Various	2/99	6/99	YES	
SITE 2000/500	1	393	TV Audio Sprt Activity	8/98	MIPR	Various	2/99	7/99	YES	
SAES	14	29	TV Audio Sprt Activity	1/96	MIPR	Various	1/99	3/99	YES	
IRFDS (Note (1))	4	259	TV Audio Sprt Activity	1/99	MIPR	Various	1/99	3/99	YES	
K0002 TV-DTS	5	70	SPAWAR SYSCEN	7/97	FP	MTN, Miami, FL	3/99	5/99	YES	
FY 00										
SITE 2000/200	7	58	TV Audio Sprt Activity		MIPR	Various	1/00	3/00	YES	
SITE 2000/300	14	84	TV Audio Sprt Activity		MIPR	Various	1/00	3/00	YES	
SITE 2000/400	7	205	TV Audio Sprt Activity		MIPR	Various	1/00	3/00	YES	
SITE 2000/500	1	378	TV Audio Sprt Activity		MIPR	Various	1/00	4/00	YES	
SAES	4	29	TV Audio Sprt Activity		MIPR	Various	1/00	3/00	YES	
IRFDS (Note (1))	2	268	TV Audio Sprt Activity		MIPR	Various	1/00	3/00	YES	
K0002 TV-DTS	4	76	SPAWAR SYSCEN		FP	MTN, Miami, FL	3/00	5/00	YES	
FY 01										
SITE 2000/200	7	58	TV Audio Sprt Activity		MIPR	Various	12/00	1/01	YES	
SITE 2000/300	15	85	TV Audio Sprt Activity		MIPR	Various	12/00	1/01	YES	
SITE 2000/400	4	209	TV Audio Sprt Activity		MIPR	Various	12/00	1/01	YES	
SITE 2000/500	1	378	TV Audio Sprt Activity		MIPR	Various	12/00	3/01	YES	
SAES	3	31	TV Audio Sprt Activity		MIPR	Various	12/00	2/01	YES	
IRFDS (Note (1))	4	270	TV Audio Sprt Activity		MIPR	Various	12/00	2/01	YES	
K0002 TV-DTS	14	112	SPAWAR SYSCEN		FP	MTN, Miami, FL	3/01	5/01	YES	

D. REMARKS

(1) In addition to hardware, total cost includes $135K/unit for engineering and installation support.

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE
		February 2000

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Other Procurement, Navy BA-2 Communications and Electronic Equipment	Armed Forces Radio & Television	82K0

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FY 99										
SITE 2000/200	8	52	TV Audio Sprt Activity	8/98	MIPR	Various	2/99	5/99	YES	
SITE 2000/300	9	84	TV Audio Sprt Activity	8/98	MIPR	Various	2/99	6/99	YES	
SITE 2000/400	6	201	TV Audio Sprt Activity	8/98	MIPR	Various	2/99	6/99	YES	
SITE 2000/500	1	393	TV Audio Sprt Activity	8/98	MIPR	Various	2/99	7/99	YES	
SAES	14	29	TV Audio Sprt Activity	1/96	MIPR	Various	1/99	3/99	YES	
IRFDS (Note (1))	4	259	TV Audio Sprt Activity	1/99	MIPR	Various	1/99	3/99	YES	
K0002 TV-DTS	5	70	SPAWAR SYSCEN	7/97	FP	MTN, Miami, FL	3/99	5/99	YES	
FY 00										
SITE 2000/200	7	58	TV Audio Sprt Activity		MIPR	Various	1/00	3/00	YES	
SITE 2000/300	14	84	TV Audio Sprt Activity		MIPR	Various	1/00	3/00	YES	
SITE 2000/400	7	205	TV Audio Sprt Activity		MIPR	Various	1/00	3/00	YES	
SITE 2000/500	1	378	TV Audio Sprt Activity		MIPR	Various	1/00	4/00	YES	
SAES	4	29	TV Audio Sprt Activity		MIPR	Various	1/00	3/00	YES	
IRFDS (Note (1))	2	268	TV Audio Sprt Activity		MIPR	Various	1/00	3/00	YES	
K0002 TV-DTS	4	76	SPAWAR SYSCEN		FP	MTN, Miami, FL	3/00	5/00	YES	
FY 01										
SITE 2000/200	7	58	TV Audio Sprt Activity		MIPR	Various	12/00	1/01	YES	
SITE 2000/300	15	85	TV Audio Sprt Activity		MIPR	Various	12/00	1/01	YES	
SITE 2000/400	4	209	TV Audio Sprt Activity		MIPR	Various	12/00	1/01	YES	
SITE 2000/500	1	378	TV Audio Sprt Activity		MIPR	Various	12/00	3/01	YES	
SAES	3	31	TV Audio Sprt Activity		MIPR	Various	12/00	2/01	YES	
IRFDS (Note (1))	4	270	TV Audio Sprt Activity		MIPR	Various	12/00	2/01	YES	
K0002 TV-DTS	14	112	SPAWAR SYSCEN		FP	MTN, Miami, FL	3/01	5/01	YES	

D. REMARKS

(1) In addition to hardware, total cost includes $135K/unit for engineering and installation support.

CLASSIFICATION: **UNCLASSIFIED**

TIME PHASED REQUIREMENT SCHEDULE P-23	A. APPROPRIATION/BUDGET ACTIVITY: Other Procurement, Navy BA-2	B. P-1 ITEM NOMENCLATURE: SITE - K0001	C. DATE: Feb-00

		FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				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	1	2	3	4	
ACTIVE FORCE INVENTORY	(P)	203	0	11	13	7	7	8	7	7	6	7	7	8	8	8	8	6	8	8	8	6	8	8	8	6	8	8	8	16
	(P)																													
SCHOOLS/OTHER TRAINING	(P)																													
OTHER	(P)																													
TOTAL PHASED REQ	(C)	203	203	214	227	234	241	249	256	263	269	276	283	291	299	307	315	321	329	337	345	351	359	367	375	381	389	397	405	421
ASSETS ON HAND	(BP)																													
DELIVERY FY 98 & PRIOR	(P)	174																												
FY 98 & PRIOR	(P)	9	9	10	1																									
FY 99	(P)	0	0	0	7	11	6																							
FY 00	(P)					0	6	8	8	7																				
FY 01	(P)									0	8	8	8	3																
FY 02	(P)													0	8	8	8	8												
FY 03	(P)																	0	8	8	8	6								
FY 04	(P)																					0	8	8	8	6				
FY 05	(P)																									0	10	10	10	
To Complete	(P)																													16
TOTAL ASSETS	(C)	183	192	202	210	221	233	241	249	256	264	272	280	283	291	299	307	315	323	331	339	345	353	361	369	375	385	395	405	421
QTY OVER (+) OR SHORT (-)		-20	-11	-12	-17	-13	-8	-8	-7	-7	-5	-4	-3	-8	-8	-8	-8	-6	-6	-6	-6	-6	-6	-6	-6	-6	-4	-2	0	0

D. REMARKS	E. RQMT (QTY) 421	TOTAL RQMT 421	INSTALLED 179	ON HAND AS OF 6/1/99 0	FY 98 & PRIOR UNDELIVERED 1	UNFUNDED 0
	1. APPN -					
	2. APPN -					
	3. PROCUREMENT LEADTIME	ADMIN	INITIAL ORDER		REORDER	

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A	P-1 ITEM NOMENCLATURE/PROJECT UNIT	DATE
	SITE/K0001	Feb-00

APPROPRIATION/BUDGET ACTIVITY
Other Procurement, Navy
BA-2 Communications and Electronic Equipmen

Installing Agent
N/A

1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1998								FY 1999							
								CVN 69	1	AOE 4	1	DD 965	1	AOE 6	1
								DD 967	1	CG 69	1	DD 997	1	CG 55	1
								DDG 65	1	CG 70	1	DDG 59	1	DD 973	1
								DDG 61	1	DD 972	1	DDG 55	1	DDG 58	1
								LPD 9	1	DDG 53	1	CG 62	1	DDG 57	1
								LSD 36	1	LPD 14	1	CG 65	1	FFG 36	1
								SSN 691	1	LSD 39	1	CG 52	1	DD 964	1
								SSN 708	1	SSN 700	1	CG 73	1	SSN 760	1
								SSN 710	1	SSN 715	1	SSN 755	1		
												SSN 758	1		
FY 2000								FY 2001							
AOE 2	1	CG 57, 54	1,1	AGF 3	1	ARS 52	1	LSD 47	1	AOE 7	1	CG 49	1	AGF 11	1
CG 63	1	DD 992,978	1,1	ARS 50	1	CG 47	1	CVN 74	1	DDG 72	1	CG 60	1	DD 989	1
CV 67	1	DD 977	1	CG 50	1	DD 968	1	LHA 5	1	CG 59	1	CG 53	1	DD 987	1
DDG 69,70	1,1	DDG 66	1	FFG 41	1	LPD 4	1	FFG 37	1	DD 982	1	DD 991	1	LPD 10	1
FFG 39	1	FFG 45	1	LHA 2	1	LHD 2	1	FFG 60	1	LHD 4	1	DDG 74	1	FFG 43	1
LHD 1	1	FFG 56	1	LHD 3	1	LSD 48	1	SSN 753	1	LSD 49	1	FFG 61	1	FFG 48	1
FFG 53	1	FFG 58	1	LSD 45	1	SSN 770	1	SSN 767	1	SSN 713	1	LSD 43	1	SSN 707	1
FFG 57	1	LSD 42	1	SSN 698	1	SSN 772	1			SSN 756	1	SSN 705	1	SSN 718	1
SSN 688	1	SSN 766	1												
SSN 750	1	SSN 773	1												

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A	P-1 ITEM NOMENCLATURE/PROJECT UNIT	DATE
	SITE/K0001	Feb-00

APPROPRIATION/BUDGET ACTIVITY	Installing Agent
Other Procurement, Navy	**N/A**
BA-2 Communications and Electronic Equipmen	

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 2002								FY 2003							
AOE 8	1	CG 72	1	CG 66	1	DD 988	1	CV 63	1	CG 64	1	ARS 53	1	AOE 10	1
CVN 71	1	DD 985	1	DDG 71	1	DD 969	1	ARS 51	1	CG 67	1	CG 51	1	DDG 79	1
DDG 75	1	FFG 47	1	FFG 59	1	DDG 76	1	DDG 78	1	DDG 73	1	LST 1184	1	DDG 80	1
		FFG 49	1	FFG 55	1	DDG 77	1	LHA 3	1	LHD 6	1	LHA 5	1	DDG 60	1
		FFG 32	1	FFG 52	1	FFG 42	1	LHA 4	1	LSD 46	1	DDG 52	1	LSD 52	1
		SSN 709	1	SSN 725	1	FFG 33	1	LPD 13	1	SSN 701	1	FFG 51	1	LSD 51	1
		SSN 719	1	SSN 769	1	SSN 761	1	SSN 751	1	SSN 762	1	LSD 50	1	SSN 706	1
		SSN 720	1	SSN 771	1	SSN 768	1	SSN 757	1	SSN 764	1	SSN 763	1	SSN 765	1
FY 2004								FY 2005							
DDG CLASS	4	CVN 65	1	DDG CLASS	5	DDG CLASS	5	CVN 75	1	DDG CLASS	6	DDG CLASS	8	DDG CLASS	7
LPD CLASS	1	DDG CLASS	3	LPD CLASS	1	LPD CLASS	1	DDG CLASS	3	LPD CLASS	1	SSBN 739	1	LPD CLASS	1
SSN 642	1	LPD CLASS	1	SSN 722	1	SSN 723	1	LPD CLASS	1	SSN 717	1	SSBN 741	1	SSBN 737	1
		SSBN 743	1	SSN 754	1	SSN 753	1	SSN 759	1	SSN 716	1			SSBN 738	1
		SSN 721	1							SSN 752	1				
		SSN 724	1												

CLASSIFICATION: **UNCLASSIFIED**

TIME PHASED REQUIREMENT SCHEDULE P-23	A. APPROPRIATION/BUDGET ACTIVITY: Other Procurement, Navy BA-2	B. P-1 ITEM NOMENCLATURE: SAES - K0001	C. DATE: Feb-00

		FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				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	1	2	3	4	
ACTIVE FORCE INVENTORY	(P)	63	3	6	5	1	1	1	1	1	1	0	1																	
	(P)																													
SCHOOLS/OTHER TRAINING	(P)																													
OTHER	(P)																													
TOTAL PHASED REQ	(C)	63	66	72	77	78	79	80	81	82	83	83	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84
ASSETS ON HAND	(BP)																													
DELIVERY FY 98 & PRIOR	(P)	55																												
FY 98 & PRIOR	(P)	8																												
FY 99	(P)		3	6	5																									
FY 00	(P)					0	2	1	1																					
FY 01	(P)									0	1	1	1																	
FY 02	(P)																													
FY 03	(P)																													
FY 04	(P)																													
FY 05	(P)																													
To Complete	(P)																													
TOTAL ASSETS	(C)	63	66	72	77	77	79	80	81	81	82	83	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84
QTY OVER (+) OR SHORT (-)		0	0	0	0	-1	0	0	0	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

D. REMARKS	E. RQMT (QTY) 84	TOTAL RQMT 84	INSTAL 55	ON HAND AS OF 6/1/99 0	FY 98 & PRIOR UNDELIVERED 0	UNFUNDED 0
	1. APPN -					
	2. APPN -					
	3. PROCUREMENT LEADTIME	ADMIN	INITIAL ORDER		REORDER	

DD for 2447, JUN 86

P-1 SHOPPING LIST

ITEM NO 68 PAGE NO 8

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A	P-1 ITEM NOMENCLATURE/PROJECT UNIT	DATE
	SAES/K0001	Feb-00

APPROPRIATION/BUDGET ACTIVITY	Installing Agent
Other Procurement, Navy	**N/A**
BA-2 Communications and Electronic Equipmen	

1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1998								FY 1999							
								CG 61	1	DDG 64	1	AOE 1	1	CG 69	1
								CG 68	1	DDG 51	1	DD 967	1	CG 70	1
								DD 978	1	LHD 5	1	DDG 53	1	DD 972	1
								DDG 68	1			DDG 65	1	DD 992	1
								FFG 50	1			LPD 9	1	LSD 50	1
								LCC 20	1			LSD 51	1		
								LHD 4	1						
								LSD 44	1						
FY 2000								FY 2001							
	0	CG 65	1	CG 62	1	CG 73	1		0	CG 72	1	CG 55	1	CG 63	1
		DD 965	1												

CLASSIFICATION: **UNCLASSIFIED**

TIME PHASED REQUIREMENT SCHEDULE
P-23

A. APPROPRIATION/BUDGET ACTIVITY
Other Procurement, Navy
BA-2

B. P-1 ITEM NOMENCLATURE
IRFDS - K0001

C. DATE
Feb-00

		FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				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	1	2	3	4	
ACTIVE FORCE INVENTORY	(P)	13	1	2	1	0	1	1	0	0	2	1	1	0	1	1	1	0	2	1	1	0	2	1	1	0	2	1	1	68
	(P)																													
SCHOOLS/OTHER TRAINING	(P)																													
OTHER	(P)																													
TOTAL PHASED REQ	(C)	13	14	16	17	17	18	19	19	19	21	22	23	23	24	25	26	26	28	29	30	30	32	33	34	34	36	37	38	106
ASSETS ON HAND	(BP)																													
DELIVERY FY 98 & PRIOR	(P)	12																												
FY 98 & PRIOR	(P)	1																												
FY 99	(P)	0	1	1	2																									
FY 00	(P)					0	0	1	1																					
FY 01	(P)									0	1	1	1	1																
FY 02	(P)													0	1	1	1													
FY 03	(P)																	0	1	1	1	1								
FY 04	(P)																					0	1	1	1	1				
FY 05	(P)																									0	1	2	1	
To Complete	(P)																													68
TOTAL ASSETS	(C)	13	14	15	17	17	17	18	19	19	20	21	22	23	24	25	26	26	27	28	29	30	31	32	33	34	35	37	38	106
QTY OVER (+) OR SHORT (-)		0	0	-1	0	0	-1	-1	0	0	-1	-1	-1	0	0	0	0	0	-1	-1	-1	0	-1	-1	-1	0	-1	0	0	0

D. REMARKS

E. RQMT (QTY) 106 | TOTAL RQMT 106 | INSTAL 13 | ON HAND AS OF 6/1/99 0 | FY 98 & PRIOR UNDELIVERED 0 | UNFUNDED 0

1. APPN -

2. APPN -

3. PROCUREMENT LEADTIME | ADMIN | INITIAL ORDER | REORDER

DD for 2447, JUN 86

P-1 SHOPPING LIST

ITEM NO 68 PAGE NO 10

CLASSIFICATION:

UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A	P-1 ITEM NOMENCLATURE/PROJECT UNIT IRFDS/K0001	DATE Feb-00

APPROPRIATION/BUDGET ACTIVITY	Installing Agent
Other Procurement, Navy	**N/A**
BA-2 Communications and Electronic Equipmen	

1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR	
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY
FY 1998								FY 1999							
								LSD 49	1	DD 963	1	LSD 44	1	DD 978 LSD 46	1 1
FY 2000								FY 2001							
	0		0	CG 51	1	CG 47	1		0	CG 50	1	DD 977	1	DD 972	1

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A								P-1 ITEM NOMENCLATURE/PROJECT UNIT IRFDS/K0001								DATE Feb-00	
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy** **BA-2 Communications and Electronic Equipmen**								Installing Agent **N/A**									
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR			
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY		
FY 2002								FY 2003									
DD 969	1	CG 56	1	CG 52	1	DD 989	1		0	CG 49	1	DDG 57	1	DDG 53	1		
FY 2004								FY 2005									
CG 54	1	CG 53	1	DDG 52	1	CG 60	1	CG 59	1	DDG 54	1	DDG 55 DDG 59	1 1	CG 57	1		

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: TV-DTS TYPE MODIFICATION: MODIFICATION TITLE: TV-DTS

DESCRIPTION/JUSTIFICATION:

Procurement and installation 1.3 meter C-band satellite transceivers and enclosed stabilized antenna terminals. Install costs increased in accordance with actual engineering requirements such as NAVSEA-approved locations and dual antenna requirements on 14 platforms.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.0
PROCUREMENT			122	8.4	5	0.3	4	0.3	14	1.2	36	2.6									181	12.8
INSTALLATION KITS																					0	0.0
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT																					0	0.0
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT																						0.0
SUPPORT EQUIPMENT																						0.0
OTHER																						0.0
OTHER																						0.0
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST			15	2.7	75	8.4	25	2.5	28	2.8	38	4.0									181	20.4
TOTAL PROCUREMENT				11.1		8.8		2.8		4.0		6.6										33.3

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

MODELS OF SYSTEMS AFFECTED: TV-DTS MODIFICATION TITLE: TV-DTS

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: 1 Month PRODUCTION LEADTIME: 3 Months
CONTRACT DATES: FY 1999: 3/99 FY 2000: 3/00 FY 2001: 3/01
DELIVERY DATE: FY 1999: 5/99 FY 2000: 5/00 FY 2001: 5/01

($ in Millions)

Cost:	Prior Years		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																					0	0
FY 1998 EQUIPMENT			15	2.7	75	11.3	25	3.2	7	0.8											122	18
FY 1999 EQUIPMENT									5	0.6											5	0.58
FY 2000 EQUIPMENT									4	0.5											4	0.47
FY 2001 EQUIPMENT									12	1.4	2	0.3									14	1.68
FY 2002 EQUIPMENT											36	4.0									36	3.97
FY 2003 EQUIPMENT																					0	0
FY 2004 EQUIPMENT																					0	0
FY 2005 EQUIPMENT																					0	0.0
TO COMPLETE																					0	0

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	122			5	0	0	0	3	1	0	0	8	6	0	5	16	15	0	0	0	0	0	0	0	0	0	0	0	0	0	181
Out	15	0	36	39	0	0	11	11	3	3	6	12	7	10	8	8	12	0	0	0	0	0	0	0	0	0	0	0	0	0	181

FY 2000/01 BUDGET PRODUCTION SCHEDULE, P-21			DATE September 1999	
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY/BA2**		Weapon System	P-1 ITEM NOMENCLATURE **TV-DTS**	

		Production Rate			Procurement Leadtimes					
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 1998												FISCAL YEAR 1999												BAL
						1997			CALENDAR YEAR 1998										CALENDAR YEAR 1999												
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
TV-DTS (SPAWAR)	99		5		5																		A		5				

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2000												FISCAL YEAR 2001												BAL
						1999			CALENDAR YEAR 2000										CALENDAR YEAR 2001												
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
TV-DTS (SPAWAR)	00		4		4						A		4																
TV-DTS (SPAWAR)	01		14		14																		A		7	0	7			

Remarks:

BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: February 2000	
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY - (BA-2) Communications & Electronics Equipment**							P-1 ITEM NOMENCLATURE **Strategic Platform Support Equipment/#267600/#267606**					
Program Element for Code B Items:							Other Related Program Elements					
	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)		A		**$12.5**	**$24.7**	**$15.4**	**$11.4**	**$20.2**	**$25.0**	**$12.7**		**$121.9**
SPARES COST (In Millions)												**$0.0**

PROGRAM DESCRIPTION/JUSTIFICATION:

Funding in this P-1 line provides electronics equipment that will be installed aboard ships and in the TRIDENT Training Facility (TRITRAFAC) and the TRIDENT Refit Facility (TRIREFFAC) located at Naval Submarine Bases (Bangor, WA and Kings Bay, GA) and other TRIDENT shore facilities. The TRIDENT program has shifted from its modernization phase to a program designed to maintain TRIDENT's capability to perform its defined mission. This will be accomplished via the Obsolete Equipment Replacement (OER) Program.

OBSOLETE EQUIPMENT REPLACEMENT (OER) - Replacement of existing hardware/software that, though functional, has become operationally obsolete, is no longer in production or supportable with spare parts, has a high failure rate, or is no longer cost effective to maintain. OER hardware/software changes would be expected to provide significant cost savings in reduced maintenance costs and would use Commercial-Off-The-Shelf (COTS) technology where ever possible as long as all technical requirements are met.

INSTALLATION (ELECTRONICS) - Provides funding for electronic equipment installation resulting from the OER Program.

WEAPONS SYSTEM COST ANALYSIS **P-5**	Weapon System	DATE: **February 2000**
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy** **BA-2: Communications & Electronics Equipment**	ID Code **A**	P-1 ITEM NOMENCLATURE/SUBHEAD **Strategic Platform Support Equipment/82P1**

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years	FY 1998			FY 1999			FY 2000			FY 2001		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	N872														
P1221	Equipment OER	A					29	Various Note 1/2	12,499			12,742			3,971
P1INS	Installation	A							0	4	Various Note 3	11,985	5	Various Note 4	11,385
			0			**0**			**12,499**			**24,727**			**15,356**

Note 1: Procures various quantities at various cost.
Note 2: Initiate ARCI procurement. (see attached ARCI/CCS Block 1C schedule).
Note 3: Installs 4 hardware packages on SSBN 732 at various cost.
Note 4: Installs 4 hardware packages on SSBN 733 at various cost and one shore site.

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 2000
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-2: Communications & Electronic Equipment	C. P-1 ITEM NOMENCLATURE Strategic Platform Support Equipment P1221 Obsolete Equipment Replacement	SUBHEAD 82P1

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
Fiscal Year (99)										
MS Workstation (P) **#1**	1	$117.50	NAVSEA	N/A	WR	NSWC CARD, Bethesda, MD	7/98	6/00	Yes	
Rev. 7.0 Certification/Testing	1	$4,987.00	NAVSEA	N/A	CPFF	EB Corp., Groton, CT	2/99	6/00	Yes	
DPS Rev 7.0 TSS	1	$211.00	NAVSEA	N/A	WR	NUWC Newport, RI	2/99	6/00	Yes	
DPS Rev 7.0 S/W H/W Changes	1	$598.00	NAVSEA	N/A	WR	NUWC Newport, RI	2/99	6/00	Yes	
EMSORT Q-Band Modification	2	$40.50	NAVSEA	N/A	WR	NUWC Newport, RI	3/99	6/99	Yes	
DPS Chg. MS Rev 7.0 AN/UYK-43 Opt.	1	$48.00	NAVSEA	N/A	WR	NUWC Newport, RI	2/99	6/00	Yes	
Rev 7.0 IRR Change	1	$10.00	NAVSEA	N/A	WR	NUWC Newport, RI	2/99	6/00	Yes	
MS Rev 7.0 AN/UYK-43 Option	1	$232.70	NAVSEA	N/A	WR	NSWC CARD, Bethesda, MD	2/99	6/00	Yes	
MS Rev 7.0 AN/UYK-43 Option	1	$142.30	NAVSEA	N/A	WR	EB Corp., Groton, CT	2/99	6/00	Yes	
Rev 7.0 Certification/Testing	1	$252.00	NAVSEA	N/A	WR	NUWC Newport, RI	2/99	6/00	Yes	
ARCI Phase I/II (TAMPP) (P)	1	$1,374.40	NAVSEA	N/A	CPFF	Lockheed M., Manassas VA	2/99	6/00	Yes	
ARCI Phase I/II (TAMPP) (P) (ON/247B)	1	$10.00	NAVSEA	N/A	WR	FTSC, Norfolk VA	6/99	6/00	Yes	
ARCI Phase I/II (TAMPP) (P)	1	$287.00	NAVSEA	N/A	WR	NUWC Keyport, WA	3/99	6/00	Yes	
ARCI Phase I/II (TAMPP) (P)	1	$1,365.00	NAVSEA	N/A	CPFF	DSR, Fairfax VA	2/99	6/00	Yes	
ARCI/TDR Interface	1	$231.90	NAVSEA	N/A	WR	NUWC Newport, RI	2/99	6/00	Yes	
ARCI Phase I/II (TAMPP) ILS	1	$170.00	NAVSEA	N/A	WR	FTSC, Norfolk VA	6/99	6/00	Yes	
ARCI Phase I/II (TAMPP) ILS	1	$371.00	NAVSEA	N/A	WR	NUWC Newport, RI	2/99	6/00	Yes	
ARCI Phase I/II (TAMPP) ILS	1	$64.20	NAVSEA	N/A	WR	NUWC Keyport, WA	2/99	6/00	Yes	
ARCI/Phase I/II (ILS) Mini SIU	1	$25.00	NAVSEA	N/A	CPFF	Lockheed M., Manassas VA	2/99	6/00	Yes	
ARCI/SA Remote Display	1	$260.00	NAVSEA	N/A	WR	NUWC Newport, RI	2/99	6/00	Yes	
ARCI/SA Remote Display	1	$255.00	NAVSEA	N/A	WR	NSWC Crane, IN	2/99	6/00	Yes	
Digital EMLOG Perf./ Reliab. Imprvmt.	1	$268.50	NAVSEA	N/A	WR	SPAWAR, Charleston, SC	3/99	6/99	Yes	
Digital EMLOG Perf./ Reliab. Imprvmt.	1	$34.00	NAVSEA	N/A	CPFF	EB Corp., Groton, CT	3/99	6/99	Yes	
Rev 5.5 and 5.6 DPS W/S	1	$237.00	NAVSEA	N/A	WR	NAWC/TSD Orlando, FL	3/99	6/99	Yes	
Revision 6.3	1	$287.00	NAVSEA	N/A	WR	NAWC/TSD Orlando, FL	3/99	6/99	Yes	
Dual Towed Array SIM/STIM	1	$285.00	NAVSEA	N/A	WR	NUWC Newport, RI	6/99	6/00	Yes	
Rev. 5.6 Certification/Testing	1	$169.50	NAVSEA	N/A	WR	NUWC Newport, RI	3/99	6/99	Yes	
NC Deferral	1	$125.00								

D. REMARKS

Note #1 MS Workstation will replace the existing TRIDENT MS console, supporting commonality, COTS equipment, and open system architecture. Funding controls are based on phased engineering change processes, prototype and hardware procurements, and testing costs, and can not be level funded.

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A) | Weapon System | **A. DATE** February 2000

B. APPROPRIATION/BUDGET ACTIVITY
Other Procurement, Navy
BA-2: Communications & Electronic Equipment

C. P-1 ITEM NOMENCLATURE
Strategic Platform Support Equipment
P1221 Obsolete Equipment Replacement

SUBHEAD 82P1

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
Fiscal Year (00)										
ARCI Phase I/II (TAMPP) (P)	1	$1,011.40	NAVSEA	N/A	CPFF	DSR, Fairfax, VA	2/00	6/01	Yes	
ARCI Phase I/II (TAMPP) (P)	1	$1,461.80	NAVSEA	N/A	CPFF	Lockheed M., Manassas, VA	2/00	6/01	Yes	
ARCI Phase I/II (TAMPP) (P)	1	$38.20	NAVSEA	N/A	WR	NSWC Crane, IN	2/00	6/01	Yes	
ARCI Phase I/II (TAMPP) (SS)	1	$1,052.90	NAVSEA	N/A	CPFF	Lockheed M., Manassas, VA	2/00	6/01	Yes	
ARCI Phase I/II (TAMPP) (TUE)**#5**	1	$1,876.00	NAVSEA	N/A	CPFF	Lockheed M., Manassas, VA	2/00	6/01	Yes	
ARCI Phase I/II (TAMPP) (TUE)**#5**	1	$25.00	NAVSEA	N/A	CPFF	EB, Corp., Groton, CT	2/00	6/01	Yes	
Rev. 7.0 Certification/Testing	1	$1,766.00	NAVSEA	N/A	WR	NUWC Newport, RI	2/00	6/01	Yes	
Rev. 7.0 TSS (DPS)	1	$454.00	NAVSEA	N/A	WR	NUWC Newport, RI	2/00	6/01	Yes	
ARCI/SA Remote Display	1	$128.70	NAVSEA	N/A	CPFF	Lockheed M., Manassas, VA	2/00	6/01	Yes	
ARCI/SA Remote Display	1	$498.80	NAVSEA	N/A	WR	NSWC Crane, IN	2/00	6/01	Yes	
Rev. 7.0 Ship Control	1	$30.00	NAVSEA	N/A	WR	NSWC CARD, Bethesda, MD	2/00	6/01	Yes	
ARCI/TDR Interface	1	$172.00	NAVSEA	N/A	WR	NSWC CARD, Bethesda, MD	2/00	6/01	Yes	
ARCI Phase I/II (TAMPP) ILS	1	$93.20	NAVSEA	N/A	CPFF	FTSC, Norfolk, VA	2/00	6/01	Yes	
ARCI Phase I/II (TAMPP) ILS	1	$16.00	NAVSEA	N/A	WR	NSWC Crane, IN	2/00	6/01	Yes	
DPS Rev. 7.0 S/W H/W Changes	1	$582.00	NAVSEA	N/A	WR	NUWC Newport, RI	2/00	6/01	Yes	
DPS Chg. MS Rev. 70 AN/UYK-43 Opt.	1	$24.00	NAVSEA	N/A	WR	NUWC Newport, RI	2/00	6/01	Yes	
MS Rev 7.0 AN/UYK-43 Option	1	$410.00	NAVSEA	N/A	WR	NSWC CARD, Bethesda, MD	2/00	6/01	Yes	
Rev 7.0 Planning Yard (SD)	1	$1,837.00	NAVSEA	N/A	CPFF	EB, Corp., Groton, CT	2/00	6/01	Yes	
CCS C4 to D5 Conversion	1	$225.00	NAVSEA	N/A	CPFF	Lockheed M., Manassas, VA	2/00	6/01	Yes	
OK-276 Overhaul for SSBN 733	1	$420.00	NAVSEA	N/A	WR	NUWC Newport, RI	2/00	6/01	Yes	
OK-542 Push Roller Assembly	1	$620.00	NAVSEA	N/A	WR	NUWC Newport, RI	2/00	6/01	Yes	
	1									
Fiscal Year (01)										
ARCI Phase I/II (TAMPP) (P)	1	$2,667.00	NAVSEA	N/A	CPFF	Lockheed M., Manassas, VA	12/00	6/02	Yes	
Rev. 7.0 Certification/Testing	1	$219.00	NAVSEA	N/A	WR	NUWC Newport, RI	12/00	6/02	Yes	
ARCI Phase I/II (TAMPP) (TUE)**#5**	1	$382.00	NAVSEA	N/A	CPFF	Lockheed M., Manassas, VA	12/00	6/02	Yes	
Rev. 7.0 TSS (DPS)	1	$48.00	NAVSEA	N/A	WR	NUWC Newport, RI	12/00	6/02	Yes	
Rev. 8.0 Ship Design/Planning Yard	1	$655.00	NAVSEA	N/A	CPFF	EB, Corp., Groton, CT	12/00	6/02	Yes	

D. REMARKS

Note #5 ARCI Phase (I/II) TAMPP will support commonality, COTS equipment, and open system architecture. Funding controls are based on phased engineering change processes, prototype and hardware procurements, and Training Unique Equipment costs to support shore based installations and can not be level funded.

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE: February 2000
B. APPROPRIATION/BUDGET ACTIVITY: Other Procurement, Navy; BA-2: Communications & Electronic Equipment	C. P-1 ITEM NOMENCLATURE: Strategic Platform Support Equipment; P1INS Installation	SUBHEAD: 82P1

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
Fiscal Year (99)										
None										
Fiscal Year (00)										
ARCI Phase I/II (MPP)/Block 1C **#1**	1	$768.00	NAVSEA	N/A	WR	PSNS Bremerton, WA	2/00	6/01	Yes	
OK-542A TAHS on SSBN 732	1	$4,560.00	NAVSEA	N/A	WR	PSNS Bremerton, WA	2/00	6/01	Yes	
ARCI Phase I/II (TA MPP) Testing Sys.	1	$30.00	NAVSEA	N/A	WR	NUWC Newport, RI	2/00	6/01	Yes	
ARCI/SA Remote Display/Sys. Engrg,	1	$20.00	NAVSEA	N/A	WR	NUWC Newport, RI	2/00	6/01	Yes	
CCS Rev 5.6/ 7.0 Planning Yard (SD)	1	$329.10	NAVSEA	N/A	CPFF	EB Corp., Groton, CT	2/00	6/01	Yes	
C4 to D5 Conversion (SSBN 732-733)	1	$400.00	NAVSEA	N/A	WR	NUWC Newport, RI	2/00	6/01	Yes	
C4 to D5 Conversion	1	$51.10	NAVSEA	N/A	CPFF	EB Corp., Groton, CT	2/00	6/01	Yes	
6" Countermeasures (JCF 96033)	1	$244.00	NAVSEA	N/A	CPFF	EB Corp., Groton, CT	2/00	6/01	Yes	
6" Countermeasures (JCF 96033)	1	$147.50	NAVSEA	N/A	WR	NSWC Crane, in	2/00	6/01	Yes	
6" Countermeasures (JCF 96033)	1	$42.50	NAVSEA	N/A	WR	NUWC Newport, RI	2/00	6/01	Yes	
Countermeasure LCP 421 (JCF 97049)	1	$22.70	NAVSEA	N/A	WR	NUWC Newport, RI	2/00	6/01	Yes	
Countermeasure LCP 421 (JCF 97049)	1	$10.20	NAVSEA	N/A	CPFF	EB Corp., Groton, CT	2/00	6/01	Yes	
Countermeasure LCP 421 (JCF 97049)	1	$36.00	NAVSEA	N/A	WR	NSWC Crane, in	2/00	6/01	Yes	
Countermeasure LCP 421 (JCF 97049)	1	$42.00	NAVSEA	N/A	WR	NAWC, TSD	2/00	6/01	Yes	
CCS Install Rev 7.0/5.6 Installation Cost	1	$4,802.90	NAVSEA	N/A	WR	PSNS Bremerton, WA	2/00	6/01	Yes	
CCS Install Rev 7.0 Cert/Testing	1	$479.00	NAVSEA	N/A	WR	NUWC Newport, RI	2/00	6/01	Yes	
Fiscal Year (01)										
OK-542A TAHS on SSBN 733	1	$4,855.00	NAVSEA	N/A	WR	PSNS Bremerton, WA	12/00	6/02	Yes	
ARCI Ph. I/II (MPP)/Block 1C **#1**	1	$816.00	NAVSEA	N/A	WR	PSNS Bremerton, WA	12/00	6/02	Yes	
CCS Rev 7.0 on SSBN 733 **#2**	1	$996.00	NAVSEA	N/A	WR	NUWC Newport, RI	12/00	6/02	Yes	
CCS Install Rev. 7.0/5.6 (Shipyard)	1	$4,718.00	NAVSEA	N/A	WR	PSNS Bremerton, WA	12/00	6/02	Yes	

D. REMARKS

Note #1 Support installation of ARCI Phase I/II on SSBN 732 & 733 during D-5 Conversion shipyard period and installation of CCS MK2 Block 1C.

Note #2 Rev 5.6/7.0 Certification/Testing procures and tests miscellaneous installation material to support the installation of Revision Engineering Kits aboard SSBN's 732 and 733 during D-5 Modernization.

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: Trident Sonar (Replaces AN/BQQ-5E(V)// AN/BQQ-6 Towed Array Processing) TYPE MODIFICATION: Obsolete Equipment Replacement MODIFICATION TITLE: Acoustic Rapid COTS Insertion (ARCI Phase I/II Multi-Purpose Processor (MPP)

DESCRIPTION/JUSTIFICATION:

Acoustic Rapid COTS Insertion (ARCI) (Phase I/II) Multi Purpose Processor (MPP) replaces obsolete AN/BQQ5E(V)//AN/BQQ-6 Sonar Towed and Hull array processing equipment with a COTS based open system architecture with increased acoustic advantage.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **OPEVAL = 12/97**

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E		1.5		0.8		2.3		0.6													0	5.2
PROCUREMENT																						
INSTALLATION KITS																					0	0.0
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT					1	3.6	1	2.6	1	2.7	1	2.7	4	11.1	4	11.4	2	5.8			14	39.9
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT							1	1.1			1	0.8									2	1.9
SUPPORT EQUIPMENT																			1	3.0	1	3.0
OTHER								2.7		0.40		1.3		1.0							0	5.4
OTHER																						0.00
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST							1	0.8	1	0.8	2	1.02	2	1.03	3	1.7	4	2.7	4	2.10	17	10.17
TOTAL PROCUREMENT	0	0.00	0	0.00	1	3.60	2	7.20	1	3.92	2	5.82	4	13.13	4	13.10	2	8.50	1	5.10	17	60.4

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

MODELS OF SYSTEMS AFFECTED: MODIFICATION TITLE: Acoustic Rapid COTS Insertion (ARCI) Phase I/II Multi-Purpose Processor (MPP)

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: Engineered Overhauls/ERPs
ADMINISTRATIVE LEADTIME: PRODUCTION LEADTIME: 15 Months
CONTRACT DATES: FY 1999: FY 2000: 12/99 FY 2001:
DELIVERY DATE: FY 1999: FY 2000: 6/00 FY 2001:

($ in Millions)

Cost:	Prior Years		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																					0	0.0
FY 1998 EQUIPMENT																					0	0.0
FY 1999 EQUIPMENT							1	0.8													1	0.8
FY 2000 EQUIPMENT									1	0.8	1	0.5									2	1.3
FY 2001 EQUIPMENT											1	0.6									1	0.6
FY 2002 EQUIPMENT													2	1.1							2	1.1
FY 2003 EQUIPMENT															3	1.7	1	0.7			4	2.4
FY 2004 EQUIPMENT																	3	2.0	1	0.9	4	2.9
FY 2005 EQUIPMENT																			2	1.2	2	1.2
TO COMPLETE																						

INSTALLATION SCHEDULE:

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

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: Thin Line Towed Array Handling System TYPE MODIFICATION: Obsolete Equipment Replacement MODIFICATION TITLE: OK-542 Towed Array Handling System on SSBNs 732-733

DESCRIPTION/JUSTIFICATION:

Replaces the SPALT 9080 Thin Line Towed Array Handling System (TLTAHS) with OK-542A TLTAHS on SSBNs 732-733.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.0
PROCUREMENT																						
INSTALLATION KITS																					0	0.0
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT	2	2.60																			2	2.6
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT																						0.0
SUPPORT EQUIPMENT																						0.0
OTHER																						0.0
OTHER																						0.0
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST							1	4.56	1	4.85											2	9.4
TOTAL PROCUREMENT	2	2.60	0	0.00	0	0.00	0	4.56	0	4.85	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2	12.0

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

MODELS OF SYSTEMS AFFECTED: TLTAHS MODIFICATION TITLE: OK-542 Towed Array Handling System on 732-733

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: Engineered Overhauls/ERPs
ADMINISTRATIVE LEADTIME: PRODUCTION LEADTIME: 18 Months
CONTRACT DATES: FY 1999: FY 2000: 12/99 FY 2001:
DELIVERY DATE: FY 1999: FY 2000: 6/00 FY 2001:

($ in Millions)

Cost:	Prior Years		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS							1	4.56	1	4.85											2	9.4
FY 1998 EQUIPMENT																					0	0.0
FY 1999 EQUIPMENT																					0	0.0
FY 2000 EQUIPMENT																					0	0.0
FY 2001 EQUIPMENT																					0	0.0
FY 2002 EQUIPMENT																					0	0.0
FY 2003 EQUIPMENT																					0	0.0
FY 2004 EQUIPMENT																					0	0.0
FY 2005 EQUIPMENT																					0	0.0
TO COMPLETE																						

INSTALLATION SCHEDULE:

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

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: Various TYPE MODIFICATION: Obsolete Equipment Replacement MODIFICATION TITLE: Installation of OER and Common Capabilities (SSN (SSBN) Modernizations on OHIO Class Submarine

DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **OPEVAL = 12/97**

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.0
PROCUREMENT																						
INSTALLATION KITS																					0	0.0
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT	2	0.4	10	0.7																	12	1.10
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT																						0.0
SUPPORT EQUIPMENT																						0.0
OTHER																						0.0
OTHER																						0.0
OTHER			*	5.4	*	8.89	*	6.34	*	0.92	*	3.58	*	6.09	*	8.6	*	1.47				41.3
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST	A	0.2	12	1.05			1	6.6	1	5.7	*	1.93	*	0.98	1	3.25	1	2.20			16	21.88
TOTAL PROCUREMENT	2	0.57	10	7.17	0	8.89	0	12.94	0	6.62	0	5.51	0	7.07	0	11.85	0	3.67	0	0.00	12	64.29

Note #1 The quantity of equipment modifications procured in FY99 and prior being installed on SSBNs 730, 731, 732 and 733 vary. This exhibit covers the installation requirements for the entire program minus ARCI and TAHS installations. Due to many separate requirements being installed, it is not possible to differentiate quantities.

* - CCS Revision 5.6/7.0/8.0 Planning Yard and other OER material, (ie MSWS in FY98, CTMSRs in FY04/05).

A: Provides installation design for DPWS, MSWS and 6" CTMSRs.

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

MODELS OF SYSTEMS AFFECTED: Various MODIFICATION TITLE: Installation of OER Modifications on OHIO Class Submarine

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: Various
ADMINISTRATIVE LEADTIME: PRODUCTION LEADTIME: Various
CONTRACT DATES: FY 1999: FY 2000: 12/99 FY 2001:
DELIVERY DATE: FY 1999: FY 2000: 6/00 FY 2001:

($ in Millions)

Cost:	Prior Years		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS			2	0.5																	2	0.5
FY 1998 EQUIPMENT			10	0.5																	10	0.5
FY 1999 EQUIPMENT							1	6.6													1	6.6
FY 2000 EQUIPMENT									1	5.7											1	5.7
FY 2001 EQUIPMENT											*	1.9									0	1.9
FY 2002 EQUIPMENT													*	1.0							0	1.0
FY 2003 EQUIPMENT															1	3.25					1	3.3
FY 2004 EQUIPMENT																	1	2.2			1	2.2
FY 2005 EQUIPMENT																					0	0.0
TO COMPLETE																						

INSTALLATION SCHEDULE:

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

BUDGET ITEM JUSTIFICATION SHEET P-40								DATE February 2000		
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						P-1 ITEM NOMENCLATURE BLI: 2760 OTHER SPAWAR TRNG. EQUIP.			SUBHEAD 52DF	
	PY	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY										
COST (in millions)		1.0	1.0	1.3	1.4	1.0	.5	.5	CONT	CONT

PROGRAM COVERAGE/JUSTIFICATION FOR BUDGET YEAR REQUIREMENTS: Joint Simulation System-Maritime (JSIMS-M). The mission of JSIMS is provide a readily available, operationally valid synthetic environment for the Commanders-in-Chief (CINCs), their components, other Joint organizations and the Services to: jointly train, educate, develop doctrine and tactics, formulate and assess operational plans, assess warfighting situations, define operational requirements, and provide operational inputs to the acquisition process. All services' Executive Agents (EAs) and Development (DAs) are required to contribute to the initial population of the JSIMS architecture with facilities, services and tools to meet an Initial Operational Capability (IOC) for the Joint Task Force (JTF) training in FY 2002. In June 1994 the Services and Director, Joint Program Office, signed a Memorandum of Agreement (MOA) to establish JSIMS, a critical n -generation Modeling and Simulation (M&S) system. The long term goal of the agreement is to integrate the range of missions of the Armed Forces within a common framework. That fram provides a balanced melding of live, virtual and constructive M&S representations, with Command, Control, Communications, Computers and Intelligence (C4I) fully supported, and interfaces using real-world equipment. As the Maritime Warfare EA, OPNAV (N7), on 2 Oct 98, reassigned JSIMS-M DA responsibility from NAVSEA to SPAWAR. The objective of the JSIMS-M Program is to train naval staffs at all levels command, in all warfare areas, including joint and service-specific training. JSIMS-M is responsible for developing the Maritime Mission Space Objects for the JSIMS Program, as well as selected portions of the core infrastructure and services to be determined when the Joint Object Model is partitioned. Supported sites are the Naval War College, Tactical Training Groups Atlantic and Pacific, and the Expeditionary Warfare Training Groups Atlantic and Pacific. This BLI procures the equipment on which the JSIMS simulations will run in support of fleetwide training.

Enhanced Naval Warfare Gaming System (ENWGS). ENWGS is the only Navy-recognized naval wargaming system. ENWGS supports wargaming for CINCLANTFLT, CINCPACFLT, Fleet Commanders, the Naval War College, and tactical training courses conducted at the Tactical Training Groups (Atlantic and Pacific) and the Expeditionary Warfare Training Groups (Atlantic and Pacific). ENWGS tests the Battle Group's Operational Orders and directives, providing the essential supplement to at-sea operations prior to sea.

FY99 budget procurement: ENWGS--Procured essential peripheral and host hardware to fully equip each host configuration. These items included HP J2240 Host Hardware and additional local/wide area network configuration items.

FY00 budget procurement: JSIMS**--**Procure essential systems engineering support and hardware to start equipping first JSIMS site at Tactical Training Group Atlantic and to provide security hardware suite.

FY01 budget procurement: JSIMS--Procure essential systems engineering support and hardware to complete JSIMS sites at Tactical Training Group Atlantic and Expeditionary Warfare Training Group Atlantic.

COST ANALYSIS													**DATE** February 2000
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT							**P-1 ITEM NOMENCLATURE** BLI 2760 OTHER SPAWAR TRAINING EQUIPMENT						**SUBHEAD** 52DF
			TOTAL COST IN THOUSANDS OF DOLLARS										
				PY	**FY 1999**			**FY 2000**			**FY 2001**		
COST CODE	**ELEMENT OF COST**	**ID CODE**	**QTY**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**
DF001	JSIMS-MARITIME							1*		1,005	2*		1,341
DF002	ENWGS				VAR		1,019						
	TOTAL CONTROL						1,019			1,005			1,341

Remarks: *QTY Column reflects number of shore sites receiving various quantities of computer and network hardware. UNIT COST varies with configuration. First site is begun in FY00 and is completed in FY01.

DD FORM 2446, JUN 86

PROCUREMENT HISTORY AND PLANNING

A. DATE: February 2000

B. APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

C. P-1 ITEM NOMENCLATURE: BLI 2760 OTHER SPAWAR TRNG EQUIP

SUBHEAD: 52DF

COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
DF001	JSIMS MARITIME	00	VARIOUS	C-FFP	SSCSD	Sep-99	Mar-00	Jun-00	1*		Yes	Aug-99
DF001	JSIMS MARITIME	01	VARIOUS	C-FFP	SSCSD	Sep-99	Jan-01	Jun-01	2*		Yes	Aug-99
DF002	ENWGS	99	CSC, SAN DIEGO	GSA	SPAWAR		Dec-98	Jan-99	VAR		Yes	N/A
DF002	ENWGS	99	PRC, SAN DIEGO	GSA	SPAWAR		Feb-99	Mar-99	VAR		Yes	N/A

D. Remarks: *QTY Column reflects number of shore sites receiving various quantities of computer and network hardware. UNIT COST varies with configuration.

DD FORM 2446, JUN 87

BUDGET ITEM JUSTIFICATION SHEET P-40												DATE: FEBRUARY 2000
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY/BA-2 Communications and Electronic Equipment**							P-1 ITEM NOMENCLATURE **OTHER TRAINING EQUIPMENT/BLI: 2762**					
Program Element for Code B Items:							Other Related Program Elements					
	Prior Years	ID Code		FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY				**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**		
COST (In Millions)				**$26.8**	**$51.1**	**$21.4**	**$48.1**	**$30.4**	**$28.6**	**$32.1**		**$238.5**
SPARES COST (In Millions)												**$0.0**

The equipment procured under the Other Training Equipment for NAVSEA line supports various types of Communication and Electronic training requirements: Procures sustaining and training equipment/systems, training aids and logistic support equipment to support Fleet training requirements. Representative training systems include, but are not limited to: Integrated Undersea Surveillance Systems (IUSS) On Board Trainers (OBT), Computer Improved Instructors Training Aid (CIITA), Acoustic Analysis Trainers, Ship Characteristic Demonstrators/Models, Ship Handling System, the Virtual Environment Submarine (VESUB), Submarine Piloting and Naviagtion Trainer (SPAN), and the Authorizing Instructional Material (AIM) System. Supports training support equipment requirements developed by the Chief of Naval Education and Training (CNET), and approved by CNO.

(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.

In FY 99 the projected BFTT Baseline Procurement consists of one full BFTT System for (6) DDG 51 Class, (2) CG 47 Class and (3) LSD 41 Class Ships, Production Integration, Integrated Logistics Support (ILS)/Spares, 8 Rehosted ACTS, 25 Shipboard RF/IF Stimulators, and CSTS/BFTT Systems Integration Hardware.

In FY 00 the projected Baseline Procurement consists of one full BFTT system for (1) CVN 68 Class, (3) CG 47 Class, (2) LSD 41 Class, (1) LHD 1 Class, and (5) DDG 51 Class ships, Production Integration, ILS/Spares, (8) Rehosted ACTS, (30) Shipboard RF/IF Stimulators, (10) BFTT Electronic Warfare Trainers (BEWTs), CSTS/BFTT System Integration Hardware, (4) BFTT ATC Stimulators, and (42) BFTT EW Trainers.

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION	DATE: FEBRUARY 2000
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-2 Communications and Electronic Equipment	P-1 ITEM NOMENCLATURE OTHER TRAINING EQUIPMENT/BLI: 2762

In FY 01 the projected Baseline Procurement consists of one full BFTT system for (1) LHD 1 Class, (3) CG 47 Class, and (2) DDG 51 Class ships, Production Integration, ILS/Spares, (13) Shipboard RF/IF Stimulators, (10) BFTT Electronic Warfare Trainers (BEWTs), and CSTS/BFTT System Integration Hardware.

In FY 02 the projected Baseline Procurement consists of one full BFTT system for (2) CV/CVN Class, (3) CG 47 Class, (2) DD 963 Class, (1) LHD Class, (1) LHA Class, and (6) DDG 51 Class ships, Production Integration, ILS/Spares, (32) Shipboard RF/IF Stimulators, (20) BFTT Electronic Warfare Trainers (BEWTs), and CSTS/BFTT System Integration Hardware.

(MB041) SUBMARINE SYNTHETIC WARFARE/COMBINED TEAM TRAINER MODE (CTTM)/ELECTRONIC CLASSROOMS

This line procures the submarine-unique requirements to support the Synthetic Warfare (SW), Combined Team Trainer Mode (CTTM), and Electronic Classroom (EC) Systems.
FY99, FY00 and FY01 funds procure additional capability for the submarine training sites to support Synthetic Warfare, CTTM, and EC requirements identified by TYCOM.

(MB050) SUBMARINE SONAR EMPLOYMENT TRAINER (SET)
The SET provides acoustic operator employment training for submarine sonar systems. It uses entirely commercial components to contain contact and environment models, simulations of the sensors and signal processing, simulated operator consoles, and an instructional subsystem including an instructor's console.
FY00 procures a SET system for the Naval Submarine School at Groton, CT.

The SET will support Sensor/Combat Systems programs of all currently deployed submarine classes, and will be a critical part of the training plans of the new SSN, Virginia, class in the future. The SET will be an essential component of an emerging shore based training system that will support the projected technology in the Fleet systems that are designed to meet current and future threats: the Acoustics, Rapid Commercial-Off-The-Shelf (COTS) Insertion (A-RCI) and C3I. The design concept for SET is based on the widely recognized and proven successful Interactive Multisensor Acoustic Trainer (IMAT) visualization and simulation technologies.

The SET will be part of the solution to a deficiency in operator competence and data recognition due to a lack of employment training by its use of 3-D graphics, animation, audio, and scientific visualization methods to illustrate highly complex displays and concepts of oceanographic physics.

The demands of curriculum and student throughput at the primary submarine training site at NavSubScol, Groton dictates the number and configuration of trainers provided by the N87 budgets, including the SET.

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

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System	DATE: FEB 2000
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy** **BA-2 Communications and Electronic Equipment**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **Other Training Equipment/82MB**

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years				FY 1999			FY 2000			FY 2001		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	EXPEDITIONARY WARFARE (N85)														
MB040	Battle Force Tactical Training (BFTT)								1,918			3,671			2,312
	SURFACE WARFARE (N86)														
MB032	Surface Sustaining/TTE								186			97			65
MB040	Battle Force Tactical Training (BFTT)								21,949			27,710			14,118
	BFTT Air Traffic Control (ATC)											3,000			
	BFTT Electronic Warfare Trainer (BEWT)											4,200			
	SUBMARINE WARFARE (N87)														
MB041	Submarine Synthetic Warfare, CTTM,EC								890			795			230
MB044	Training Support Equipment / Sub								1,871			2,359			4,660
	IUSS OBT								(133)			(260)			(218)
	Computer Imprvd, Instr. Trng. Aid								(306)			(300)			(225)
	Minor Training Support Equipment								(0)			(648)			(535)
	TAC III/IV / OBT DS								(162)			(351)			(498)
	VESUB						1	1,270	(1270)	1	800	(800)	1	650	(650)
	SPAN								(0)			(0)	1	1,554	(1554)
	Acoustic Analysis Trnr								(0)			(0)	1	980	(980)
MB050	SUBMARINE SONAR EMPLOYMENT														
	TRAINER (SET)								0			9,300			0
	MANPOWER/TRAINING (N7)														
MB043	Training Support Equipment														
	Authorizing Instructional Material (AIM)								10			10			5
	-														
	Subtotal (N85/N86)								24,053			38,678			16,495
	Subtotal (N87)								2,761			12,454			4,890
	Subtotal (N7)								10			10			5
									26,824			**51,142**			**21,390**

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE FEBRUARY 2000

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Other Procurement, Navy BA-2 Communications and Electronic Equipment	Other Training Equipment	82MB

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FY 1999										
MB040										
ILS/SPARES	MULTIPLE	1043	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	11/98	02/99	YES	
DDG 51 CLASS P&I	6	1175	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	02/99	05/99	YES	
LSD 41 CLASS P&I	3	952	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	03/99	06/99	YES	
CG 47 CLASS P&I	2	1200	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	11/98	05/99	YES	
REHOSTED ACTS (8)	8	200	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	12/98	04/99	YES	
STIM/SIM P&I (25)	25	250	NAVSEA ARL, VA	10/97	CPIF	AAI, HUNT VALLEY, MD	03/98	12/99	YES	
CSTS/BFTT P&I (1) SYSTEM	1	1918	NAVSEA ARL, VA	04/97	CPFF	LITTON DATA SYSTEMS OCEAN SPRINGS, MS	04/99	06/99	YES	
PRODUCTION INTEGRATION	5	150	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	10/98	04/99	YES	
MB044										
IUSS	MULTIPLE		NAWC/TSD	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	YES	
CIITA	MULTIPLE		NAWC/TSD	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	YES	
TACIII/IV / OBT DS	MULTIPLE		NAWC/TSD	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	YES	
VESUB	1	1270	NAWC/TSD	09/16/98	C/FFP	RDR, INC.	2/99	10/00	YES	

D. REMARKS

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE FEBRUARY 2000

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Other Procurement, Navy BA-2 Communications and Electronic Equipment	Other Training Equipment	82MB

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FY 2000										
MB040										
ILS/SPARES	MULTIPLE	1161	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	11/99	02/00	YES	
CVN 68 CLASS P&I	1	1504	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	01/00	07/00	YES	
CG 47 CLASS P&I	3	1532	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	01/00	04/00	YES	
DDG 51 CLASS P&I	5	1565	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	02/00	05/00	YES	
LSD 41 CLASS P&I	2	945	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	03/00	06/00	YES	
LHD 1 CLASS P&I	1	1700	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	03/00	06/00	YES	
BFTT ATC (Stim)	4	750	NAVSEA, ARL VA	N/A	CPIF	AAI, HUNT VALLEY, MD	03/98	09/00	YES	
BFTT EW Trnr (Congress)	42	100	NAVSEA, ARL VA	N/A	Phase III (SBIR)	EWA, FAIRMONT, WV	06/98	04/00	YES	
BEWT	10	100	NAVSEA ARL, VA	N/A	Phase III (SBIR)	EWA, FAIRMONT, WV	06/98	01/00	YES	
STIM/SIM P&I (30)	30	260	NAVSEA ARL, VA	10/97	CPIF	AAI, HUNT VALLEY, MD	03/98	05/00	YES	
CSTS/BFTT			NAVSEA			LITTON DATA SYSTEMS				
INTEGRATION	1	1985	ARL, VA	04/97	CPFF	OCEAN SPRINGS, MS	TBD	TBD	YES	
PRODUCTION										
INTEGRATION	12	160	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	10/99	02/00	YES	
MB044										
IUSS	MULTIPLE		NAWC/TSD	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	YES	
CIITA	MULTIPLE		NAWC/TSD	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	YES	
TSE	MULTIPLE		NAWC/TSD	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	YES	
TACIII/IV / OBT DS	MULTIPLE		NAWC/TSD	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	YES	
VESUB	1	800	NAWC/TSD	09/16/98	C/FFP(OPTION)	RDR, INC.	03/00	02/01	YES	
MB050										
SET	1	9300	NAVSEA	N/A	WR/RC	NSWC Carderock, MD	01/00	06/02	YES	

D. REMARKS

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE FEBRUARY 2000

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Other Procurement, Navy BA-2 Communications and Electronic Equipment	Other Training Equipment	82MB

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FY2001										
MB040										
ILS/SPARES	MULTIPLE	930	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	11/00	02/01	YES	
CG 47 CLASS P&I	3	1532	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	02/01	05/01	YES	
DDG 51 CLASS P&I	2	1565	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	02/01	05/01	YES	
LHD 1 CLASS P&I	1	1700	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	02/01	05/01	YES	
			NAVSEA							
BEWT	10	100	ARL, VA	N/A	Phase III (SBIR)	EWA, FAIRMONT, WV	06/98	01/01	YES	
STIM/SIM P&I (13)	13	260	ARL, VA	10/97	CPIF	AAI, HUNT VALLEY, MD	03/98	05/01	YES	
CSTS/BFTT			NAVSEA			LITTON DATA SYSTEMS				
INTEGRATION	1	704	ARL, VA	04/97	CPFF	OCEAN SPRINGS, MS	TBD	TBD	YES	
PRODUCTION										
INTEGRATION	6	165	PHD/NSWC, CA	VARIOUS	VARIOUS	VARIOUS	10/00	05/01	YES	
MB044										
IUSS	MULTIPLE		NAWC/TSD	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	YES	
Acoustic Analysis Trnr	1	980	NAWC/TSD	08/00	TBD	TBD	02/01	06/02	NO	09/99
CIITA	MULTIPLE		NAWC/TSD	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	YES	
TSE	MULTIPLE		NAWC/TSD	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	YES	
TACIII/IV / OBT DS	MULTIPLE		NAWC/TSD	VARIOUS	VARIOUS	VARIOUS	VARIOUS	VARIOUS	YES	
VESUB	1	650	NAWC/TSD	09/16/98	C/FFP(OPTION)	RDR, INC.	03/00	08/01	YES	
SPAN	1	1554	NAWC/TSD	N/A	WR	NAWC/TSD ORLANDO, FL	02/01	08/02	NO	09/00

D. REMARKS

CLASSIFICATION: **UNCLASSIFIED**

TIME PHASED REQUIREMENT SCHEDULE P-23	A. APPROPRIATION/BUDGET ACTIVITY: Other Procurement, Navy BA-2	B. P-1 ITEM NOMENCLATURE: AN/USQ-T46 BFTT	C. DATE: Feb-00

		FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				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	1	2	3	4	
ACTIVE FORCE INVENTORY	(P)	24	0	11	0	0	1	10	1	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
SCHOOLS/OTHER TRAINING	(P)	8	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	
OTHER	(P)																													
TOTAL PHASED REQ	(C)	32	32	43	43	43	44	54	55	55	55	61	61	61	61	61	61	61	61	62	62	62	62	62	62	62	62	62	62	93
ASSETS ON HAND	(BP)	0																												
DELIVERY FY 98 & PRIOR	(P)	32																												
FY 98 & PRIOR	(P)	0																												
FY 99	(P)	0	0	11	0																									
FY 00	(P)					0	1	10	1																					
FY 01	(P)									0	0	6	0																	
FY 02	(P)													0	0	0	0													
FY 03	(P)																	0	0	0	0									
FY 04	(P)																					0	0	0	0					
FY 05	(P)																									0	0	0	0	
To Complete	(P)																													31
TOTAL ASSETS	(C)	32	32	43	43	43	44	54	55	55	55	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	92
QTY OVER (+) OR SHORT (-)		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

D. REMARKS	E. RQMT (QTY) 120	TOTAL RQMT 120	INSTALLED 32 32	ON HAND AS OF 6/1/99 0	FY 98 & PRIOR UNDELIVERED 0	UNFUNDED 0
	1. APPN -					
	2. APPN -					
	3. PROCUREMENT LEADTIME	ADMIN	INITIAL ORDER		REORDER	

DD for 2447, JUN 86 P-1 SHOPPING LIST CLASSIFICATION:

ITEM NO 71 PAGE NO 7

UNCLASSIFIED

TIME PHASED REQUIREMENTS SCHEDULE (SUPPLEMENT SHEET-INSTALLATION DATA) P-23A								P-1 ITEM NOMENCLATURE/PROJECT UNIT AN/USQ-T46 BFTT								DATE Feb-00			
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-2 Communications and Electronic Equipmen								Installing Agent N/A											
1ST QTR		2ND QTR		3RD QTR		4TH QTR		1ST QTR		2ND QTR		3RD QTR		4TH QTR					
E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY	E.I./L	QTY				
								FY 1999											
													11						
FY 2000								FY 2001											
			1		10		1						6						

BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: February 2000	
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY**							P-1 ITEM NOMENCLATURE **MARINE AIR TRAFFIC CONTROL & LANDING SYSTEMS 42MJ**					
Program Element for Code B Items:							Other Related Program Elements **NOT APPLICABLE**					
	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)	**$22.6**		**$4.8**	**$11.6**	**$12.3**	**$4.3**	**$1.0**	**$14.7**	**$16.2**	**$16.6**	**Cont**	**Cont**

DESCRIPTION:

Marine Air Traffic Control & Landing System (MATCALS) is a fully automated all weather expeditionary terminal Air Traffic Control System that provides arrival/ departure and enroute surveillance control, automated precision approach and landing control, or Ground Controlled Approach (GCA). MATCALS satisfies the operational requirements set forth by Specific Operational Requirements (SOR) 34-22 of 12 July 1973. MATCALS is also comprised of other visual and navigational aids including Pulse Coded Microwave Landing Systems (SOR 34-26 of 30 APRT5), ATC systems and ancillary equipment. ORD 341-88-93 of 1 Sep 93 also applies.

MATCALS, with other Marine Air Command and Control Systems and federal agencies, provides the ability to project air combat power in the Amphibious Operations Area (AOA) without regard to weather. Air traffic control and landing automation reduces air traffic controllers' traffic handling and management time, allowing more time for mission response and task accomplishment. It supports a required increase in aircraft sortie rates and contributes to extended time on target. The system provides for integration of Air Traffic Control (ATC) into the total Marine Air Command and Control System (MACCS).

MATCALS has three primary subsystems: (1) Air Traffic Control Subsystem (ATCS) consisting of AN/TPS-73 Airport Surveillance Radar and various peripheral equipment; (2) All-Weather Landing Subsystem (ALS) consisting of an AN/TPN-22 Precision Approach Landing Radar, AN/UYK-44 computer and peripheral equipment; and (3) the Control and Communications Subsystem (CCS) (AN/TSQ-131(V)) with a Communications Control Group (CCG), radios, computer software, multi mode displays and peripherals. Other Fleet Marine Force ATC equipment supported by the funding line MATCALS are the AN/TSQ-120 Tower, AN/TRN-44 TACAN, AN/TPN-30 Marine Remote Area Approach & Landing Set (MRAALS), the AN/TSQ-216 Remote Landing Site Tower (RLST), the AN/TSM-170 Maintenance Shelters and various support items. Total requirement is for 17 subsystems: 12 for the Marine Air Traffic Control Detachments (MATCD); 1 for the Aviation Ground Support Element at 29 Palms, CA; 1 for operational contingencies/ISEA Test Bed at San Diego, CA; 2 for the Naval Air Technical Training Center (NATTC) in Pensacola, FL; and 1 for NAWCAD Landing Systems Test Facility, Patuxent River, MD.

An initiative has been approved to transition the current MATCALS to the Next Generation Marine ATC System, referred to as the Air Surveillance and Precision Approach Radar Control System (ASPARCS) (ORD 518-88-99 of 12 May 99). ASPARCS will consist of an Air Surveillance Radar which will replace the AN/TPS-73, a Precision Approach Radar which will replace the AN/TPN-22, and an Operations/Communications Subsystem which will replace the AN/TSQ-131. ASPARCS will provide greater mobility, transportability, reliability, maintainability, and interoperability with Marine Corps/Navy Command and Control Systems than the current MATCALS. Total requirement for ASPARCS is 11 units: 8 for the Marine Air Traffic Control Detachments (MATCD's), 2 for the Naval Air Technical Training Center (NATTC) in Pensacola, FL, and 1 for the Depot (TBD).

FY98 funding procured 25 MATCALS Radio Upgrades, 10 AN/UYQ-42 Upgrades, various maintainability/reliability improvements and related installation.
FY99 funding procured 38 MATCALS Radio Upgrades, 6 RLSTs, maintainability/reliability improvements, and related installation.
FY00 funding procures 77 MATCALS Radio Upgrades, 6 RLSTs, 36 Manpack Radios, various maintainability/reliability improvements and related installation.
FY01 funding procures 44 MATCALS Radio Upgrades, 12 Manpack Radios, various maintainabillity/reliability improvements and related installation.

INSTALLATION AGENT: SPAWARSYSCEN, SD
Facilities that are to receive the equipment: Marine Corps air traffic control facilities, expeditionary airfields, and remote landing sites.

BUDGET ITEM JUSTIFICATION SHEET FOR AGGREGATED ITEMS
P-40a

DATE: **February 2000**

APPROPRIATION/BUDGET ACTIVITY
OTHER PROCUREMENT, NAVY

P-1 ITEM NOMENCLATURE
MARINE AIR TRAFFIC CONTROL & LANDING SYSTEMS 42MJ

Procurement Items	ID Code	Prior Years	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
MJ413 AN/TPN-30 MOD	A											
QTY		75										75
FUNDING		5.479										5.479
MJ429 AN/TRC-131REPL (RLST)	A											
QTY		1		6	6							13
FUNDING		3.140	0.796	6.402	4.571							14.909
MJ430 MATCALS												
RADIO UPGRADE	A											
QTY		0	25	38	77	44	5	20	37	54	28	328
FUNDING		0	1.648	2.177	4.466	2.552	0.290	1.160	2.146	3.132	1.624	19.195
MJ437 AN/UYQ-42 UPGRD	A											
QTY		24	10									34
FUNDING		1.037	0.429									1.466
MJ439 AN/TSQ-120 UPRGD	A											
QTY		4							2	1	4	11
FUNDING		1.786							1.046	0.523	2.092	5.447
MJ432 MANPACK RADIOS	A											
QTY		0			36	12						48
FUNDING		0			0.889	0.310						1.199
MJTBD NEXT GEN SYSTEM	A											
(ASPARCS) QTY		0						2	2	2	5	11
FUNDING		0						11.298	11.502	11.754	30.507	65.061
MJ425 AN/TPN-20 SSM	A											
QTY		17										17
FUNDING		8.115										8.115
OTHER COSTS		3.089	1.915	3.023	2.417	1.432	0.729	2.242	1.506	1.239	CONT	CONT
TOTAL FUNDING		22.646	4.788	11.602	12.343	4.294	1.019	14.700	16.200	16.648	CONT	CONT

P-1 SHOPPING LIST CLASSIFICATION:

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System				DATE: February 2000
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy**		**BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **MARINE AIR TRAFFIC CONTROL & LANDING SYSTEMS**			**42MJ**

TOTAL COST IN THOUSANDS OF DOLLARS

COST CODE	ELEMENT OF COST	ID Code	Prior Years	FY 1998			FY 1999			FY 2000			FY 2001		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
MJ413	AN/TPN-30 MOD	A	5,479												
MJ427	MAINT/RELIABILITY IMPROVEMENT	A	1,757	VAR		608	VAR		478	VAR		89	VAR		438
MJ429	AN/TRC-131 REPL (RLST)	A	3,140			796	6	1,067	6,402	6	762	4,571			
MJ430	MATCALS RADIO UPGRADE	A	0	25	66	1,648	38	57	2,177	77	58	4,466	44	58	2,552
MJ437	AN/UYQ-42 UPGRADE	A	1,037	10	43	429									
MJ439	AN/TSQ-120 UPGRADE	A	1,786												
MJ800	INTEGRATED LOGISTICS SUPPORT	N/A	94			130			337			372			144
MJ830	PRODUCTION ENGINEERING	N/A	54			667			1,034			1,488			472
MJ831	PRODUCTION SUPPORT	N/A	618												
MJ860	ACCEPTANCE TEST & EVALUATION	N/A	114			30			372			50			90
MJ900	NON-FMP INSTALLATION	N/A	411			441			702			377			240
MJ990	INITIAL TRAINING	N/A	41			39			100			41			48
MJ432	MANPACK RADIOS	A	0							36	25	889	12	26	310
MJTBD	NEXT GENERATION SYSTEM (ASPARCS)	A	0												
MJ425	AN/TPN-22 SOLID STATE MODULATOR	A	8,115												
			22,646			**4,788**			**11,602**			**12,343**			**4,294**

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 2000

B. APPROPRIATION/BUDGET ACTIVITY		C. P-1 ITEM NOMENCLATURE	SUBHEAD
Other Procurement, Navy	BA2 - Communications and Electronic Equipment	MARINE AIR TRAFFIC CONTROL & LANDING SYSTEM	42MJ

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
MJ429 RLST										
FY - 99	6	1067.0	NAVAIR	Nov-97	C/OPTION	SNC, SPARK, NV	Dec-98	May-00	YES	
FY - 00	6	761.8	NAVAIR	Nov-98	C/OPTION	SNC, SPARK, NV	Nov-99	Oct-00	YES	
MJ430 MATCALS RADIO UPGRADE										
FY - 98	25	65.9	NAVAIR	Nov-97	SS/FP	COLLINS RADIO	May-98	Nov-98	YES	
FY - 99	38	57.3	NAVAIR	Nov-98	SS/OPTION	CEDAR RAPIDS, IA	May-99	Jul-99	YES	
FY - 00	77	58.0	NAVAIR	Nov-99	SS/OPTION	CEDAR RAPIDS, IA	Jan-00	Jul-00	YES	
FY - 01	44	58.0	NAVAIR	Nov-00	SS/OPTION	CEDAR RAPIDS, IA	Apr-01	Oct-01	YES	
MJ437 AN/UYQ-42 UPGRADE										
FY - 98	10	42.9	SPAWARSYSCEN, SD	Nov-98	SS/OPTION	LORAL, ST PAUL, MN	Jan-98	Apr-98	YES	
MJ432 MANPACK RADIO										
FY - 00	36	24.7	NAWCAD	Oct-99	GOTS	HARRIS COMM	Mar-00	Mar-01	YES	
FY - 01	12	25.8	NAWCAD	Oct-00	GOTS	HARRIS COMM	Nov-00	Nov-01	YES	

D. REMARKS

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: Expeditionary airfield and remote area landing sites TYPE MODIFICATION: Operational Enhancement MODIFICATION TITLE: Various (MJ413, MJ425, MJ427)

DESCRIPTION/JUSTIFICATION:

ECP AN/TPN-30 MRAALS upgrade modification for fleet operational commitments. Directs Aircraft into final flight approach pattern. Provides highly mobile navigational aid to tactical aircraft.

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

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.000
PROCUREMENT																					0	0.000
INSTALLATION KITS																					0	0.000
INSTALLATION KITS - UNIT COST																					0	0.000
INSTALLATION KITS NONRECURRING																					0	0.000
EQUIPMENT		14.580		0.290		0.120		0.000		0.276		0.020		0.481		0.000		0.000			0	15.767
EQUIPMENT NONRECURRING																					0	0.000
ENGINEERING CHANGE ORDERS																					0	0.000
DATA																					0	0.000
TRAINING EQUIPMENT																					0	0.000
SUPPORT EQUIPMENT																					0	0.000
OTHER																					0	0.000
OTHER																					0	0.000
OTHER																					0	0.000
INTERIM CONTRACTOR SUPPORT																					0	0.000
INSTALL COST		0.161		0.441		0.387		0.217		0.015		0.014		0.104		0.000		0.000		0.000	0	1.339
TOTAL PROCUREMENT		14.741		0.731		0.507		0.217		0.291		0.034		0.585		0.000		0.000		0.000		17.106

NOTE: TOTAL QUANTITY REFLECTS THE INVENTORY OBJECTIVE FOR THIS ITEM.
MATCALS PROGRAM TRANSFERRED FROM SPAWAR TO NAVAIR IN FY97.
HIGHER INSTALL COST PRIOR TO FY99 REFLECTS NON-RECURRING REQUIREMENT FOR PROCUREMENT OF PECULIAR INSTALLATION JIGS AND DIES.

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

MODELS OF SYSTEMS AFFECTED: **Expeditionary airfield and remote area landing sites.** MODIFICATION TITLE: Various (MJ413, MJ425, MJ427)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **AIT**

ADMINISTRATIVE LEADTIME: Various PRODUCTION LEADTIME: Various

CONTRACT DATES: FY 1999: N/A FY 2000: N/A FY 2001: N/A

DELIVERY DATE: FY 1999: N/A FY 2000: N/A FY 2001: N/A

($ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS		0.156				0.155		0.338		0.217													0	0.866
FY 1997 EQUIPMENT				0.005		0.150																	0	0.155
FY 1998 EQUIPMENT						0.136																	0	0.136
FY 1999 EQUIPMENT								0.049															0	0.049
FY 2000 EQUIPMENT										0.000													0	0.000
FY 2001 EQUIPMENT												0.015											0	0.015
FY 2002 EQUIPMENT														0.014									0	0.014
FY 2003 EQUIPMENT																0.104							0	0.104
FY 2004 EQUIPMENT																							0	0.000
FY 2005 EQUIPMENT																							0	0.000
TO COMPLETE																							0	0.000

INSTALLATION SCHEDULE:

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

The equipment and installation cost represented on the P3-A are for individual modification programs that do not exceed $5 million in either budget year or $10 million in all years.

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: Expeditionary airfield and remote area landing sites

TYPE MODIFICATION: Maintenance/Capability

MODIFICATION TITLE: MATCALS Radio Upgrade (MJ430)

DESCRIPTION/JUSTIFICATION:

Replaces obsolete radio in MATCALS, improves maintainability, provides capability for HAVEQUICK, SINGCARS, CRYPTO, GPS, and SATCOM communications with A/C and other C3I Agencies. Consolidates all communications traffic through one communications device.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **COTS/GOTS Radios to be fully developed FY98.**

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.000
PROCUREMENT																					0	0.000
INSTALLATION KITS																					0	0.000
INSTALLATION KITS - UNIT COST																					0	0.000
INSTALLATION KITS NONRECURRING																					0	0.000
EQUIPMENT			25	1.648	38	2.177	77	4.466	44	2.552	5	0.290	20	1.160	37	2.146	54	3.132	28	1.624	328	19.195
EQUIPMENT NONRECURRING																					0	0.000
ENGINEERING CHANGE ORDERS																					0	0.000
DATA																					0	0.000
TRAINING EQUIPMENT																					0	0.000
SUPPORT EQUIPMENT																					0	0.000
OTHER																					0	0.000
OTHER																					0	0.000
OTHER																					0	0.000
INTERIM CONTRACTOR SUPPORT																					0	0.000
INSTALL COST			0	0.000	63	0.315	32	0.160	45	0.225	44	0.220	5	0.025	20	0.100	37	0.185	82	0.410	328	1.640
TOTAL PROCUREMENT				1.648		2.492		4.626		2.777		0.510		1.185		2.246		3.317		2.034		20.835

NOTE: TOTAL QUANTITY REFLECTS THE INVENTORY OBJECTIVE FOR THIS ITEM.

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

MODELS OF SYSTEMS AFFECTED: **Expeditionary airfield and remote area landing sites.**

MODIFICATION TITLE: MATCALS RADIO UPGRADE (MJ430)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **AIT**

ADMINISTRATIVE LEADTIME: 8 Months*

PRODUCTION LEADTIME: Various*

CONTRACT DATES: FY 1999: May-99 FY 2000: Jan-00 Apr-01

DELIVERY DATE: FY 1999: Jul-99 FY 2000: Jul-00 Oct-01

($ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																							0	0.000
FY 1997 EQUIPMENT																							0	0.000
FY 1998 EQUIPMENT							25	0.125															25	0.125
FY 1999 EQUIPMENT							38	0.190															38	0.190
FY 2000 EQUIPMENT									32	0.160	45	0.225											77	0.385
FY 2001 EQUIPMENT													44	0.220									44	0.220
FY 2002 EQUIPMENT															5	0.025							5	0.025
FY 2003 EQUIPMENT																	20	0.100					20	0.100
FY 2004 EQUIPMENT																			37	0.185			37	0.185
FY 2005 EQUIPMENT																					54	0.270	54	0.270
TO COMPLETE																					28	0.140	28	0.140

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	25	0	0	38	0	0	0	32	15	15	15	0	15	15	14	0	0	5	0	0	0	5	5	10	0	15	15	7	82	328
Out	0	25	0	0	38	0	0	0	32	15	15	15	0	15	15	14	0	0	5	0	0	0	5	5	10	0	15	15	7	82	328

* Production Leadtime can vary from 2 months to 6 months due to the delivery schedule which is based upon production needs of the joint PMA 209 contract.

* Admin Leadtime will be 8 months for FY99, 4 months in FY00 and 7 months in FY00, respectively.

Exhibit P-20, Requirements Study	APPROPRIATION/BUDGET ACTIVITY **BA-2 COMMUNICATIONS** **Other Procurement Navy** **AND ELECTRONIC EQUIPMENT**	DATE: **February 2000**
P-1 ITEM NOMENCLATURE **MJ-429 AN/TRC-131 (Replacement (RLST))**	Admin Leadtime (after Oct1): **4 MONTHS**	Prod Leadtime : **1st LOT 18 MONTHS** **2nd LOT 12 MONTHS**

	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Buy Summary		**6**	**6**					
Unit Cost		**1067.000**	**761.833**					
Total Cost	**796.000**	**6,402.000**	**4,571.000**					
Asset Dynamics								
Beginning Asset Position			1	7	13	13	13	13
Deliveries from all prior year funding		1						
Deliveries from FY 1999 funding			6					
Deliveries from FY 2000 funding				6				
Deliveries from FY 2001 funding								
Deliveries from subsequent years' funding								
Other Gains								
Combat Losses/Usage								
Training Losses/Usage								
Test Losses/Usage								
Other Losses/Usage								
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position		1	7	13	13	13	13	13
Inventory Objective or Current Authorized Allowance		13	13	13	13	13	13	13

Inventory Objective 13	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)	Vehicles Eligible for FY 2000 Replacement:	Aircraft: TOAI:
Assets Rqd For Combat Loads:	FY 1998 thru XXXXX:	FY 1998 thru XXXXX:	FY 1998 thru XXXXX:	Vehicles Eligible for FY 2001 Replacement:	PAA: TAI
WRM Rqmt:	FY 1997:	FY 1997:	FY 1997:	Vehicle Augment:	Attrition Res:
Pipeline:	FY 1996:	FY 1996:	FY 1996:		BAI
Other:	FY 1995:	FY 1995:	FY 1995:		Inactive Inv:
TOTAL:					Storage:

Remarks:

BUDGET ITEM JUSTIFICATION SHEET P-40							DATE: February 2000					
APPROPRIATION/BUDGET ACTIVITY: **OTHER PROCUREMENT, NAVY**							P-1 ITEM NOMENCLATURE: **Shipboard Air Traffic Control (SATC) NARM #283100**					
Program Element for Code B Items: **Not Applicable**							Other Related Program Elements: **0604504N**					
	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)	$71.1	A	$3.6	$8.5	$7.5	$7.9	$8.1	$8.1	$8.3	$8.4	CONT	CONT

DESCRIPTION:

Shipboard Air Traffic Control (SATC) systems are responsible for safe and expeditious control of air traffic within 50 NM of a ship. SATC systems include the air traffic surveillance radar, AN/SPN-43, and the air traffic central tracking and control system which has two major configurations: Carrier Air Traffic Control Center-Direct Altitude and Identity Readout (CATCC-DAIR) and Amphibious Air Traffic Control-Direct Altitude and Identity Readout (AATC-DAIR). Both DAIR systems use AN/SPN-43 and Identification Friend or Foe (IFF) inputs to track and control aircraft. Obsolescence problems are being addressed through various upgrades. The major upgrades include AN/SPN-43C, CATCC-to-AATC field change, and AN/TPX-42 display upgrade.

Funding in FY 1998 through FY 2001 provides for procurement and installation of the following:

FY 1998 funded the installation of SATC modification kits and AN/SPN-43C upgrades.

FY 1999 funded the procurement of one CATCC-to-AATC field change kits, one AN/TPX-42(V)14, one AN/SPN-43C upgrade, and various SATC modification kits. It also funded the installation of one CATCC-to-AATC field change kit, one AN/TPX-42(V)14, and one AN/SPN-43C upgrade.

FY 2000 funded the procurement of two CATCC-to-AATC field change kits and various SATC modification kits. It also funds the installation of one CATCC-to-AATC field change and one AN/SPN-43C upgrade.

FY 2001 funds the procurement of two CATCC-to-AATC field change kits and various SATC modification kits. It also funds the installation of one CATCC-to-AATC field change and one AN/TPX-42(V)14.

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), Integrated Combat System Test Facility (San Diego), Landing Systems Test Facility (NAWCAD, Patuxent River), and training sites.

BUDGET ITEM JUSTIFICATION SHEET FOR AGGREGATED ITEMS P-40a									DATE: February 2000			
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY							P-1 ITEM NOMENCLATURE Shipboard Air Traffic Control (SATC)					
Procurement Items	ID Code	Prior Years	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
MP031												
AN/SPN-43C UPG	A											
QTY		22		1								23
FUNDING		4.980		0.199								5.179
MP040												
AN/TPX-42A(V)14	A											
QTY		5		1								6
FUNDING		19.754		2.541								22.295
MP042												
CATCC to AATC F/C KIT	N/A											
QTY		6		1	2	2	2	1	1	1		16
FUNDING		8.582		2.471	5.007	5.033	5.126	2.600	2.637	2.701		34.157
MP043												
AN/TPX-42 ADS UPG	N/A											
QTY							1	1	1	2	5	10
FUNDING							0.879	0.905	0.924	1.850	6.742	11.300
OTHER COST	N/A	37.797	3.605	3.256	2.494	2.912	2.110	4.601	4.745	3.818	CONT	CONT
TOTAL P-1 FUNDING		71.113	3.605	8.467	7.501	7.945	8.115	8.106	8.306	8.369	CONT	CONT

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System		DATE: February 2000
APPROPRIATION/BUDGET ACTIVITY: **Other Procurement, Navy**	ID Code: **A**	P-1 ITEM NOMENCLATURE/SUBHEAD: **Shipboard Air Traffic Control 42MP**	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years	FY 1998			FY 1999			FY 2000			FY 2001		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
MP023	SATC MOD KITS	N/A	287				VAR		162	VAR		72	VAR		735
MP031	AN/SPN-43C UPGRADE	N/A	4,980				1	199	199						
MP040	AATC-DAIR SYSTEM AN/TPX-42(V)14	A	19,754				1	2,541	2,541						
MP042	CATCC TO AATC F/C KITS	N/A	8,582				1	2,471	2,471	2	2,504	5,007	2	2,517	5,033
MP043	AN/TPX-42 ADS UPGRADE	N/A													
MP800	INTEGRATED LOGISTICS SUPPORT	N/A	120			104			166			115			107
MP830	PRODUCTION ENGINEERING SPT	N/A	454			193			279			205			243
MP840	QUALITY ASSURANCE	N/A	20			17			33			79			96
MP860	ACCEPTANCE TEST & EVALUATION	N/A							314			142			
MP900	NON-FMP INSTALLATION	N/A	621			70			262			745			1,129
MP910	FMP INSTALLATION	N/A	24,084			3,221			2,040			1,136			602
	VARIOUS 1/	N/A	12,211												
			71,113			3,605			8,467			7,501			7,945

1/ Prior year funding associated with cost elements not financed after FY 1994.

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System			A. DATE February 2000		
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy — BA2-Communications and Electronics Equipment					C. P-1 ITEM NOMENCLATURE Shipboard Air Traffic Control (SATC)				SUBHEAD 42MP	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
MP031 AN/SPN-43C Upgrade Kits										
FY99	1	$199	NAVAIR		PX	NAWCAD St. Inigoes	4/99	7/99	YES	
MP040 AATC-DAIR SYSTEM AN/TPX-42(V)14										
FY99	1	$2,541	NAVAIR		PX	NAWCAD St. Inigoes	5/99	3/01	YES	
MP042 CATTC to AATC-DAIR F/C Kits										
FY99	1	$2,471	NAVAIR		PX	NAWCAD St. Inigoes	3/99	9/00	YES	
FY00	2	$2,504	NAVAIR		PX	NAWCAD St. Inigoes	3/00	9/01	YES	
FY 01	2	$2,517	NAVAIR		PX	NAWCAD St. Inigoes	3/01	9/02	YES	

D. REMARKS

1. System integration and assembly will be accomplished by the field activity, NAWCAD, after procuring individual components through existing contractual vehicles.

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: CVs, CVNs, LHDs, LHAs, and selected shore sites.

TYPE MODIFICATION: R&M

MODIFICATION TITLE: SATC Modification Kit Summary (MP023) (MP043)

DESCRIPTION/JUSTIFICATION:

SATC MODIFICATION KIT SUMMARY This exhibit summarizes procurement and installation for project units MP023 and MP043.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								0.000
PROCUREMENT																								0.000
INSTALLATION KITS		0.002		0.285				0.162		0.072		0.735		1.205		2.566		1.797		3.768		CONT	CONT	CONT
INSTALLATION KITS - UNIT COST																								0.000
INSTALLATION KITS NONRECURRING																								0.000
EQUIPMENT																								0.000
EQUIPMENT NONRECURRING																								0.000
ENGINEERING CHANGE ORDERS																								0.000
DATA																								0.000
TRAINING EQUIPMENT																								0.000
SUPPORT EQUIPMENT																								0.000
OTHER																								0.000
OTHER																								0.000
OTHER																								0.000
INTERIM CONTRACTOR SUPPORT																								0.000
INSTALL COST	0	0.108	0	0.117	0	0.070	0	0.069	0	0.245	0	0.778	0	0.390	0	1.439	0	2.209	0	0.855	0	0.000	CONT	CONT
TOTAL PROCUREMENT		0.110		0.402		0.070		0.231		0.317		1.513		1.595		4.005		4.006		4.623				CONT

The equipment and installation costs represented on this P-3a are for individual modification programs that do not exceed $5 million in either budget year or $10 million in all years.

CLASSIFICATION: **UNCLASSIFIED**

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

MODELS OF SYSTEMS AFFECTED: CVs, CVNs, LHDs, LHAs, and selected shore sites.

MODIFICATION TITLE: SATC Modification Kit Summary (MP023) (MP043)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME: N/A

PRODUCTION LEADTIME: N/A

CONTRACT DATES: FY 1999: N/A FY 2000: N/A FY 2001: N/A

DELIVERY DATE: FY 1999: N/A FY 2000: N/A FY 2001: N/A

($ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS		0.108																						0.108
FY 1997 EQUIPMENT				0.117		0.070																		0.187
FY 1998 EQUIPMENT																								0.000
FY 1999 EQUIPMENT								0.069		0.245														0.314
FY 2000 EQUIPMENT																								0.000
FY 2001 EQUIPMENT												0.778		0.390		0.396								1.564
FY 2002 EQUIPMENT																0.825		0.153						0.978
FY 2003 EQUIPMENT															AP	0.218		1.834						2.052
FY 2004 EQUIPMENT																	AP	0.222		0.720				0.942
FY 2005 EQUIPMENT																			AP	0.135		CONT		0.135
TO COMPLETE																						CONT		CONT

INSTALLATION SCHEDULE:

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

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: CVs, CVNs, LHDs, LHAs and selected shore sites.

TYPE MODIFICATION: R & M Upgrade

MODIFICATION TITLE: AN/SPN-43C Upgrade (MP031)

DESCRIPTION/JUSTIFICATION:

This kit replaces the obsolete and unprocurable AN/SPN-43B receiver and transmitter units with a dual channel receiver/transmitter using state-of-the-art solid state circuitry.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Fielded

	FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								0.000
PROCUREMENT																								0.000
INSTALLATION KITS	22	4.980					1	0.199															23	5.179
INSTALLATION KITS - UNIT COST		0.226						0.199															0	0.000
INSTALLATION KITS NONRECURRING																							0	0.000
EQUIPMENT																							0	0.000
EQUIPMENT NONRECURRING																							0	0.000
ENGINEERING CHANGE ORDERS																							0	0.000
DATA																							0	0.000
TRAINING EQUIPMENT																							0	0.000
SUPPORT EQUIPMENT																							0	0.000
OTHER																							0	0.000
OTHER																							0	0.000
OTHER																							0	0.000
INTERIM CONTRACTOR SUPPORT																							0	0.000
INSTALL COST	12	11.648	6	4.354	3	2.642	1	0.193	1	1.028	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	23	19.865
TOTAL PROCUREMENT		16.628		4.354		2.642		0.392		1.028		0.000		0.000		0.000		0.000		0.000		0.000		25.044

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

MODELS OF SYSTEMS AFFECTED: CVs, CVNs, LHDs, LHAs and selected shore sites.

MODIFICATION TITLE: AN/SPN-43C Upgrade (MP031)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: N/A

PRODUCTION LEADTIME: N/A

CONTRACT DATES: FY 1999: N/A FY 2000: N/A FY 2001: N/A

DELIVERY DATE: FY 1999: N/A FY 2000: N/A FY 2001: N/A

($ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS	12	11.648																					12	11.648
FY 1997 EQUIPMENT			6	4.354	3	2.642			1	1.028													10	8.024
FY 1998 EQUIPMENT																							0	0.000
FY 1999 EQUIPMENT							1	0.193															1	0.193
FY 2000 EQUIPMENT																							0	0.000
FY 2001 EQUIPMENT																							0	0.000
FY 2002 EQUIPMENT																							0	0.000
FY 2003 EQUIPMENT																							0	0.000
FY 2004 EQUIPMENT																							0	0.000
FY 2005 EQUIPMENT																							0	0.000
TO COMPLETE																							0	0.000

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	22	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	23
Out	21	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23

The total inventory objective is 29 units, of which 6 are SCN funded and 23 OPN funded. FY 1999 equipment has been assembled by field activity (NAWCAD), using decommissioned assets in part.

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: CVNs, LHDs, and LHAs TYPE MODIFICATION: SAFETY MODIFICATION TITLE: AN/TPX-42(V)14 (MP040)

DESCRIPTION/JUSTIFICATION:

AN/TPX-42 is an interrogator used to control air traffic on ships and is required on amphibious 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		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								0.000
PROCUREMENT																								0.000
INSTALLATION KITS																								0.000
INSTALLATION KITS - UNIT COST																								0.000
INSTALLATION KITS NONRECURRING																								0.000
EQUIPMENT	4	16.127	1	3.627			1	2.541															6	22.295
EQUIPMENT NONRECURRING																								0.000
ENGINEERING CHANGE ORDERS																								0.000
DATA																								0.000
TRAINING EQUIPMENT																								0.000
SUPPORT EQUIPMENT																								0.000
OTHER																								0.000
OTHER																								0.000
OTHER																								0.000
INTERIM CONTRACTOR SUPPORT																								0.000
INSTALL COST	3	4.678	1	1.614	AP	0.579	1	1.325	0	0.000	1	0.351	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	6	8.547
TOTAL PROCUREMENT		20.805		5.241		0.579		3.866		0.000		0.351		0.000		0.000		0.000		0.000		0.000		30.842

FY99 equipment cost reflects addition of SYSCOM Deferral. Upon release of deferred funds, this end item effort will be augmented.

CLASSIFICATION: **UNCLASSIFIED**

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

MODELS OF SYSTEMS AFFECTED: CVNs, LHDs, LHAs MODIFICATION TITLE: AN/TPX-42(V)14 (MP040)

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION:
ADMINISTRATIVE LEADTIME: 8 Months PRODUCTION LEADTIME: 22 Months
CONTRACT DATES: FY 1999: May-99 FY 2000: N/A FY 2001: N/A
DELIVERY DATE: FY 1999: N/A FY 2000: N/A FY 2001: Mar-01

($ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS	3	4.678	1	1.614																			4	6.292
FY 1997 EQUIPMENT					AP	0.579	1	1.325															1	1.904
FY 1998 EQUIPMENT																							0	0.000
FY 1999 EQUIPMENT											1	0.351											1	0.351
FY 2000 EQUIPMENT																							0	0.000
FY 2001 EQUIPMENT																							0	0.000
FY 2002 EQUIPMENT																							0	0.000
FY 2003 EQUIPMENT																							0	0.000
FY 2004 EQUIPMENT																							0	0.000
FY 2005 EQUIPMENT																							0	0.000
TO COMPLETE																							0	0.000

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	5	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	6
Out	4	1	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	6

NOTE: FY 1999 installation is on an LHA-1 class ship.

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: CVs, CVNs, LHDs, LHAs, and selected shore sites.

TYPE MODIFICATION: SAFETY ENHANCEMENT

MODIFICATION TITLE: CATCC to AATC F/C Kits (MP042)

DESCRIPTION/JUSTIFICATION:

This kit retrofits CV/CVNs with improvements from the AATC-DAIR system configuration. Previously CATCC-to-AATC kits were being procured without the Advanced Display System (AN/UYQ-70) ECP. Beginning in FY 1999 the kits are being procured with ADS.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Production ECP 1/97 (configuration with ADS)

	FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								0.000
PROCUREMENT																								0.000
INSTALLATION KITS	4	5.103	2	3.479			1	2.471	2	5.007	2	5.033	2	5.126	1	2.600	1	2.637	1	2.701			16	34.157
INSTALLATION KITS - UNIT COST		1.276		1.740				2.471		2.504		2.517		2.563		2.600		2.637		2.701				0.000
INSTALLATION KITS NONRECURRING																								0.000
EQUIPMENT																								0.000
EQUIPMENT NONRECURRING																								0.000
ENGINEERING CHANGE ORDERS																								0.000
DATA																								0.000
TRAINING EQUIPMENT																								0.000
SUPPORT EQUIPMENT																								0.000
OTHER																								0.000
OTHER																								0.000
OTHER																								0.000
INTERIM CONTRACTOR SUPPORT																								0.000
INSTALL COST	4	1.682	0	0.000	0	0.000	1	0.715	1	0.608	1	0.602	2	0.980	2	1.076	2	1.273	1	0.617	2	0.928	16	8.481
TOTAL PROCUREMENT		6.785		3.479		0.000		3.186		5.615		5.635		6.106		3.676		3.910		3.318		0.928		42.638

The total quantity reflects the inventory objective for this item.

FY94 and prior unit cost is lower because these units did not include the ADS upgrade.

The FY99 unit cost is higher because in FY97 (and prior) assets from decommissioned ships were used, but no additional assets will be available for the FY99 through FY05 units.

Total quantity of 16 represents the OPN inventory objective for this item. An additional unit has been purchased with SCN funds.

CLASSIFICATION: **UNCLASSIFIED**

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

MODELS OF SYSTEMS AFFECTED: CVs, CVNs, LHDs, LHAs, and selected shore sites.

MODIFICATION TITLE: CATCC to AATC F/C Kits (MP042)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: 6 Months

PRODUCTION LEADTIME: 18 Months for first unit on contract (every 4 months afterward for subsequent units.)

CONTRACT DATES: FY 1999: Mar-99 FY 2000: Mar-00 FY 2001: Mar-01

DELIVERY DATE: FY 1999: Sep-00 FY 2000: Sep-01 FY 2001: Sep-02

($ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS	4	1.682																					4	1.682
FY 1997 EQUIPMENT							1	0.715	1	0.572													2	1.287
FY 1998 EQUIPMENT																							0	0.000
FY 1999 EQUIPMENT									AP	0.036	1	0.450											1	0.486
FY 2000 EQUIPMENT											AP	0.152	2	0.819									2	0.971
FY 2001 EQUIPMENT													AP	0.161	2	0.829							2	0.990
FY 2002 EQUIPMENT															AP	0.247	2	1.189					2	1.436
FY 2003 EQUIPMENT																	AP	0.084	1	0.446			1	0.530
FY 2004 EQUIPMENT																			AP	0.171	1	0.462	1	0.633
FY 2005 EQUIPMENT																					1	0.466	1	0.466
TO COMPLETE																							0	0.000

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	4	1	0	1	0	0	0	0	1	0	0	0	2	0	0	0	2	0	0	0	2	0	0	0	1	0	0	0	1	1	16
Out	4	0	1	0	0	1	0	0	0	0	1	0	0	0	1	1	0	0	1	1	0	1	0	1	0	0	1	0	0	2	16

BUDGET ITEM JUSTIFICATION SHEET P-40										DATE: February 2000		
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY**							P-1 ITEM NOMENCLATURE **Automatic Carrier Landing System (ACLS) 42PN**					
Program Element for Code B Items: **Not Applicable**							Other Related Program Elements **0604504N**			**NARM# 283200**		
	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)	$155.0	A	11.0	10.7	18.5	18.5	16.4	18.0	18.4	18.8	CONT	CONT

The Automatic Carrier Landing System (ACLS) provides the primary precision electronic guidance for landing aircraft under all weather conditions on CVs, CVNs, LHAs, LHDs and at selected Naval Air Stations. Many of the components in the system have been in service for more than twenty years. This program funds maintainability, reliability and supportability improvements to existing equipment components that can no longer be maintained and supported, as well as items providing upgraded operational capability.

Due to design engineering and maintenance deficiencies, and length of time in service, the AN/SPN-42A landing system was replaced with the AN/SPN-46(V)1 on CVs and CVNs.

FY 1998-Procured one AN/SPN-41 Individual Landing Monitor (ILM), various ACLS Modification Kits, and associated installation efforts.

FY 1999-Procured one AN/SPN-41 Individual Landing Monitor (ILM), various ACLS Modification Kits, and associated installation efforts.

FY 2000-Procured three AN/SPN-41 Individual Landing Monitors (ILMs), various ACLS Modification Kits, and associated installation efforts.

FY 2001-Procures three AN/SPN-41 Individual Landing Monitors (ILMs), various ACLS Modification Kits, and associated installation efforts.

Installing Agent: Shipyards and Alteration Installation Teams (AITs).
Ships or facilities to receive equipment: CV/CVNs, LHAs, LHDs, selected LPHs, the In-Service Engineering Agent (ISEA-NAWCAD, St. Inigoes), selected shore sites and the training site.

BUDGET ITEM JUSTIFICATION SHEET FOR AGGREGATED ITEMS P-40a											DATE: February 2000	
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY							P-1 ITEM NOMENCLATURE Automatic Carrier Landing System (ACLS) 42PN					
Procurement Items	ID Code	Prior Years	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
PN403												
AN/SPN-46(V)	A											
Quantity		8										8
Funding		71.440										71.440
PN404												
AN/SPN-41	A											
Quantity		13	1	1	3	3	1					22
Funding		19.858	2.317	2.368	7.218	7.338	2.489					41.588
Other Costs		63.691	8.703	8.334	11.268	11.172	13.862	18.016	18.379	18.787	CONT	CONT
Total Funding		154.989	11.020	10.702	18.486	18.510	16.351	18.016	18.379	18.787	CONT	CONT

WEAPONS SYSTEM COST ANALYSIS **P-5**	Weapon System		DATE: **February 2000**
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy**	ID Code **A**	P-1 ITEM NOMENCLATURE/SUBHEAD **Automatic Carrier Landing System (ACLS) 42PN**	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years	FY 1998			FY 1999			FY 2000			FY 2001		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
PN403	AN/SPN-46(V)	A	71,440												
PN404	AN/SPN-41 Ind Landing Monitor (ILM)	A	19,858	1	2,317	2,317	1	2,368	2,368	3	2,406	7,218	3	2,446	7,338
PN408	ACLS Mod Kits	N/A	4,376	VAR		6,165	VAR		4,709	VAR		6,520	VAR		5,008
PN800	Integrated Logistics Support	N/A	225			162			288			421			274
PN830	Production Engineering Support	N/A	762			337			445			561			194
PN840	Quality Assurance	N/A	251			270			262			276			30
PN900	Non-FMP Installation	N/A	917			318			404			682			1,694
PN910	FMP Installation	N/A	45,820			1,451			2,226			2,808			3,972
	Various 1/		11,340												
	1/ The amount identified against this cost element reflects total prior year funding associated with cost elements no longer financed in FY95 and beyond.														
			154,989			11,020			10,702			18,486			18,510

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE: February 2000

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Other Procurement, Navy / BA-2-Communications and Electronics Equipment	Automatic Carrier Landing Systems (ACLS)	42PN

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
PN404 AN/SPN-41 ILM										
FY97	1	$2,266	NAVAIR		PX	NAWCAD St. Inigoes	11/96	1/98	YES	
FY98	1	$2,317	NAVAIR		PX	NAWCAD St. Inigoes	11/97	1/99	YES	
FY99	1	$2,368	NAVAIR		PX	NAWCAD St. Inigoes	11/98	1/00	YES	
FY00	3	$2,406	NAVAIR		PX	NAWCAD St. Inigoes	11/99	1/01	YES	
FY01	3	$2,446	NAVAIR		PX	NAWCAD St. Inigoes	11/00	1/02	YES	

D. REMARKS

System integration and assembly will be accomplished by the field activity, NAWCAD, after procuring individual components through existing contractual vehicles.
Some components will be reused assets refurbished and modified by NAWCAD.

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: CVs, CVNs and selected shore sites. TYPE MODIFICATION: Flight Safety MODIFICATION TITLE: AN/SPN-46(V) (PN403)

DESCRIPTION/JUSTIFICATION:

Provide safe, reliable final guidance for CV/CVN based aircraft in all weather conditions.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: IOC 1991

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																						0.000
PROCUREMENT																						0.000
INSTALLATION KITS																						0.000
INSTALLATION KITS - UNIT COST																						0.000
INSTALLATION KITS NONRECURRING																						0.000
EQUIPMENT	8	71.440																			8	71.440
EQUIPMENT NONRECURRING																						0.000
ENGINEERING CHANGE ORDERS																						0.000
DATA																						0.000
TRAINING EQUIPMENT																						0.000
SUPPORT EQUIPMENT																						0.000
OTHER																						0.000
OTHER																						0.000
OTHER																						0.000
INTERIM CONTRACTOR SUPPORT																						0.000
INSTALL COST	8	17.980	0	0.795	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	8	18.775
TOTAL PROCUREMENT		89.420		0.795		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		90.215

The total program quantity for this item is fifteen, of which eight were OPN funded and seven SCN funded. Equipment cost of $718K in FY97 represents GFE purchased to support the AN/SPN-46(V)2 PAR program, which was cancelled.

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

MODELS OF SYSTEMS AFFECTED: CVs, CVNs and selected shore sites. MODIFICATION TITLE: AN/SPN-46(V) (PN403)

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: N/A PRODUCTION LEADTIME: N/A
CONTRACT DATES: FY 1999: N/A FY 2000: N/A FY 2001: N/A
DELIVERY DATE: FY 1999: N/A FY 2000: N/A FY 2001: N/A

($ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS	6	15.431	2	2.549		0.795																	8	18.775
FY 1997 EQUIPMENT																								0.000
FY 1998 EQUIPMENT																								0.000
FY 1999 EQUIPMENT																								0.000
FY 2000 EQUIPMENT																								0.000
FY 2001 EQUIPMENT																								0.000
FY 2002 EQUIPMENT																								0.000
FY 2003 EQUIPMENT																								0.000
FY 2004 EQUIPMENT																								0.000
FY 2005 EQUIPMENT																								0.000
TO COMPLETE																								0.000

INSTALLATION SCHEDULE:

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

FY 1998 installation is a cost growth of FY 1997 installation on CVN-71. Due to nondelivery of SPN-46(V)3 software in time to meet ship's schedule, the (V)3 configuration had to be converted back to a (V)1.

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: CVs/CVNs, LHAs, LHDs and selected shore sites.

TYPE MODIFICATION: Flight Safety

MODIFICATION TITLE: AN/SPN-41 (PN404)

DESCRIPTION/JUSTIFICATION:

Provides independent landing monitor capability for carriers and amphibious classes.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: IOC 1994

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																						0.000
PROCUREMENT																						0.000
INSTALLATION KITS																						0.000
INSTALLATION KITS - UNIT COST																						0.000
INSTALLATION KITS NONRECURRING																						0.000
EQUIPMENT	13	19.858	1	2.317	1	2.368	3	7.218	3	7.338	1	2.489									22	41.588
EQUIPMENT NONRECURRING																						0.000
ENGINEERING CHANGE ORDERS																						0.000
DATA																						0.000
TRAINING EQUIPMENT																						0.000
SUPPORT EQUIPMENT																						0.000
OTHER																						0.000
OTHER																						0.000
OTHER																						0.000
INTERIM CONTRACTOR SUPPORT																						0.000
INSTALL COST	12	13.507	1	0.904	1	1.426	1	1.679	3	3.540	3	4.306	1	1.330	0	0.000	0	0.000	0	0.000	22	26.692
TOTAL PROCUREMENT		33.365		3.221		3.794		8.897		10.878		6.795		1.330		0.000		0.000		0.000		68.280

The total program quantity for this item is twenty-eight, of which twenty-two are OPN funded and six SCN funded.

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

MODELS OF SYSTEMS AFFECTED: CVs/CVNs, LHAs, LHDs and selected shore sites.

MODIFICATION TITLE: AN/SPN-41 (PN404)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: AIT

ADMINISTRATIVE LEADTIME: 2 Months

PRODUCTION LEADTIME: 14 Months

CONTRACT DATES:	FY 1999:	11-98	FY 2000:	11-99	FY 2001:	11-00
DELIVERY DATE:	FY 1999:	1-00	FY 2000:	1-01	FY 2001:	1-02

($ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS	7	12.700																					7	12.700
FY 1997 EQUIPMENT	AP	0.573	AP	0.234	1	0.656																	1	1.463
FY 1998 EQUIPMENT					AP	0.248	1	1.426															1	1.674
FY 1999 EQUIPMENT									1	1.290													1	1.290
FY 2000 EQUIPMENT									AP	0.389	3	3.077											3	3.466
FY 2001 EQUIPMENT											AP	0.463	3	4.146									3	4.609
FY 2002 EQUIPMENT													AP	0.160	1	1.330							1	1.490
FY 2003 EQUIPMENT																							0	0.000
FY 2004 EQUIPMENT																							0	0.000
FY 2005 EQUIPMENT																							0	0.000
TO COMPLETE																							0	0.000

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	13	0	1	0	0	0	1	0	0	0	1	1	1	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	22
Out	13	0	1	0	0	0	1	0	0	0	0	2	1	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	22

This is an in house build by NAWCAD St. Inigoes.

CLASSIFICATION:

BUDGET ITEM JUSTIFICATION SHEET P-40							DATE: February 2000				
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY/BA2-COMMUNICATIONS AND ELECTRONICS EQUIPMENT**							P-1 ITEM NOMENCLATURE **NATIONAL AIRSPACE SYSTEM (NAS)**				**NARM#** **284000**
Program Element for Code B Items:							Other Related Program Elements: **0604504N**				
	Prior Years	ID Code	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY											
COST (In Millions)	$2.2	B	$7.7	$34.9	$30.5	$43.8	$31.7	$32.6	$19.2	CONT	CONT

DESCRIPTION:

The National Airspace System (NAS) modernization program upgrades the Department of Defense 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 existing Department of Defense Air Traffic Control facilities 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 Navy/Marine Air Traffic Control facilities.

The Air Force is the DoD lead activity for the Joint Acquisition Program. The Joint Program Office (JPO) is located at Hanscom AFB, MA.

FY99 provides funding to procure: 3 Tower Automation Systems; and 60 Military Air Space Management Systems (MAMS).

FY00 provides funding to procure: 4 DAAS; 9 Digital Airport Surveillance Radar (DASR); and 9 Tower Automation Systems.

FY01 provides funding to procure: 7 DAAS; 4 DASR; and 7 Tower Automation Systems.

Installing Agent: Alteration Installation Teams (AIT)
When installation to be made: N/A
Activities to receive equipment: Navy and Marine Corps shore based Air Traffic Control facilities.

CLASSIFICATION:

BUDGET ITEM JUSTIFICATION SHEET FOR AGGREGATED ITEMS P-40a								DATE: February 2000			
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY/BA2 - COMMUNICATIONS AND ELECTRONICS EQUIPMENT**								P-1 ITEM NOMENCLATURE **NATIONAL AIRSPACE SYSTEM (NAS)**			
Procurement Items	ID Code	Prior Years	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
CB010 DOD ADVANCED	B										
AUTOMATION SYS											
QTY		1	VAR *	4	7	0	0	0	0	35	47
FUNDING		0.860	0.685	3.842	6.696	0.000	0.000	0.000	0.000	32.519	44.602
CB020 MILITARY AIR SPACE	B										
MANAGEMENT SYS											
QTY			60								60
FUNDING			0.974								0.974
CB030 RADAR (DASR)	B										
QTY				9	4	0	0	0		26	39
FUNDING				21.446	10.126	0.000	0	0.000		66.83	98.402
CB040 TOWER AUTOMATION	B										
QTY			3	9	7	0	0	0	0	38	57
FUNDING			1.256	2.471	1.810	0	0.000	0	0	10.659	16.196
OTHER COSTS		1.340	4.787	7.160	11.917	0.000	0.000	0	0	CONT	CONT
TOTAL FUNDING		2.200	7.702	34.919	30.549	0.000	0.000	0.000	0.000	CONT	CONT

* NOTE: FY99 funds under the CB010 line provide interim collision avoidance capabilty for Navy Air Traffic Control facilities as approved by the House Appropriations Committee as a risk reduction measure.

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5						Weapon System				DATE: **February 2000**		
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY/BA2 - COMMUNICATIONS AND ELECTRONICS EQUIPMENT**						ID Code **B**	P-1 ITEM NOMENCLATURE/SUBHEAD **NATIONAL AIRSPACE SYSTEM (NAS)**					**42CB**
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS Prior Years	FY 1999			FY 2000			FY 2001		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
CB010	DOD ADVANCED AUTOMATION SYS	B	860	VAR		685	4	961	3,842	7	957	6,696
CB020	MAMS	B		60	16	974						
CB030	RADAR (DASR)	B					9	2,383	21,446	4	2,532	10,126
CB040	TOWER AUTOMATION	B		3	419	1,256	9	275	2,471	7	259	1,810
CB800	INTEGRATED LOGISTICS SUPPORT	N/A	412			502			763			668
CB830	PRODUCTION ENGINEERING	N/A	928			3,369			3,121			3,346
CB900	INSTALLATION (NON-FMP)	N/A				916			3,151			7,773
CB990	INITIAL TRAINING	N/A							125			130
NAS RDT&E entirely funded by Air Force Unit costs vary per site.												
			2,200			**7,702**			**34,919**			**30,549**

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE: February 2000
B. APPROPRIATION/BUDGET ACTIVITY: OTHER PROCUREMENT, NAVY — BA2 - COMMUNICATIONS AND ELECTRONICS EQUIPMENT	C. P-1 ITEM NOMENCLATURE: NATIONAL AIRSPACE SYSTEM (NAS)	SUBHEAD: 42CB

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
CB010 DOD ADVANCED AUTOMATION SYSTEM 1/										
FY00	4	961	FAA, WASH DC	03/96	OPTION	RAYTHEON, MA	01/00	01/01	YES	
FY01	7	957	FAA, WASH DC	03/96	OPTION	RAYTHEON, MA	01/01	01/02	YES	
CB020 MAMS										
FY99	60	16	SPAWAR, CHASN	11/98	C/FFP	SPAWAR, CHASN	01/99	03/99	YES	
CB030 RADAR (DASR)										
FY00	9	2383	USAF,Hanscom, MA	02/96	C/FFP	RAYTHEON, CA	01/00	06/01	YES	
FY01	4	2532	USAF,Hanscom, MA	02/96	MIPR/OPTION	RAYTHEON, CA	12/00	06/02	YES	
CB040 TOWER AUTOMATION 2/										
FY99	3	419	SPAWAR, CHASN	N/A	C/FP	SPAWAR, CHASN	08/99	01/00	YES	
FY00	9	275	SPAWAR, CHASN	N/A	OPTION	SPAWAR, CHASN	01/00	01/01	YES	
FY01	7	259	SPAWAR, CHASN	N/A	OPTION	SPAWAR, CHASN	01/01	01/02	YES	

D. REMARKS

1/ DOD Advanced Automation System (DAAS) unit costs vary per site. P-5 page unit cost is only average of sites each year. Delivery dates are for Navy DAAS.

2/ Tower Automation is a Government propriety system and unit costs vary per site.

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: NAS TYPE MODIFICATION: SAFETY MODIFICATION TITLE: DOD ADVANCED AUTOMATION SYSTEMS (CB010)

DESCRIPTION/JUSTIFICATION:

The DOD Advanced Automation System (DAAS) is being developed as part of a joint DOD/FAA program to modernize and standardize Air Traffic Control equipment in the National Air Traffic Control System. The systems will be installed at Navy Air Traffic Control facilities to replace aging, obsolete equipment and comply with the joint DOD/FAA modernization program agreements. DAAS provides for processors and displays for tower and approach controls.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **MILESTONE III (MARCH 2001)**

	FY 1998 & Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																				
PROCUREMENT																				
INSTALLATION KITS																				0.000
INSTALLATION KITS - UNIT COST																				0.000
INSTALLATION KITS NONRECURRING																				0.000
EQUIPMENT	1	0.9	VAR	0.685	4	3.842	7	6.696	0	0.000	0	0.000	0	0.000	0	0.000	35	12.480	47	44.602
EQUIPMENT NONRECURRING																				0.000
ENGINEERING CHANGE ORDERS																				0.000
DATA																				0.000
TRAINING EQUIPMENT																				0.000
SUPPORT EQUIPMENT																				0.000
OTHER																				0.000
OTHER																				0.000
OTHER																				0.000
INTERIM CONTRACTOR SUPPORT																				0.000
INSTALL COST	0	0.000	0	0.533	1	1.699	4	4.007	0	0.000	0	0.000	0	0.000	0	0.000	42	35.009	47	41.248
TOTAL PROCUREMENT		0.860		1.218		5.541		10.703		0.000	0	0.000	0	0.000	0	0.000	0	67.528		85.850

NOTE: FY99 funds under the CB010 line provide interim collision avoidance capablity for Navy Air Traffic Control facilities as approved by the House Appropriations Committee as a risk reduction measure.

CLASSIFICATION: **UNCLASSIFIED**

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

MODELS OF SYSTEMS AFFECTED: _____ MODIFICATION TITLE: DOD ADVANCED AUTOMATION SYSTEMS (CB010)

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 12 Months
CONTRACT DATES: FY 1999: N/A FY 2000: 01/00 FY 2001: 01/01
DELIVERY DATE: FY 1999: N/A FY 2000: 01/01 FY 2001: 01/02

($ in Millions)

Cost:	Prior Years		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																			0	0.000
FY 1998 EQUIPMENT			AP	0.031	1	0.050													1	0.081
FY 1999 EQUIPMENT			VAR	0.150															0	0.150
FY 2000 EQUIPMENT			AP	0.352	AP	1.649	4	2.237											4	4.238
FY 2001 EQUIPMENT							AP	1.770	0	0.000									0	1.770
FY 2002 EQUIPMENT									AP	0	0	0.000							0	0.000
FY 2003 EQUIPMENT											AP	0.000	0	0.000					0	0.000
FY 2004 EQUIPMENT													AP	0.000	0	0.000			0	0.000
FY 2005 EQUIPMENT															AP	0			0	0.000
TO COMPLETE																	42	35.900	5	6.239

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	1	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42	47
Out	0	0	0	0	0	1	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42	47

NOTE: $150K of installation funds provided for interim collision avoidance capablity as approved by the House Appropriations Committee as a risk reduction measure.

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: NAS TYPE MODIFICATION: SAFETY MODIFICATION TITLE: MAMS (CB020)

DESCRIPTION/JUSTIFICATION:

The Military Air Space Management system is being developed as part of a joint DOD/FAA program to standardize air traffic control scheduling across the National Air Traffic Control System. MAMS will comply with the Joint DOD/FAA modernization program agreements.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: IOC NOVEMBER 1998

	FY 1998 & Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																				
PROCUREMENT																				
INSTALLATION KITS																				0.000
INSTALLATION KITS - UNIT COST																				0.000
INSTALLATION KITS NONRECURRING																				0.000
EQUIPMENT			60	0.974															60	0.974
EQUIPMENT NONRECURRING																				0.000
ENGINEERING CHANGE ORDERS																				0.000
DATA																				0.000
TRAINING EQUIPMENT																				0.000
SUPPORT EQUIPMENT																				0.000
OTHER																				0.000
OTHER																				0.000
OTHER																				0.000
INTERIM CONTRACTOR SUPPORT																				0.000
INSTALL COST	0	0.000	60	0.075	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	60	0.075
TOTAL PROCUREMENT		0.0		1.049		0.000		0.000		0.000		0.000		0.000		0.000		0.000		1.049

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

MODELS OF SYSTEMS AFFECTED: _____ MODIFICATION TITLE: MAMS (CB020)

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: 4 Months PRODUCTION LEADTIME: 3 Months
CONTRACT DATES: FY 1999: 1/99 FY 2000: N/A FY 2001: N/A
DELIVERY DATE: FY 1999: 3/99 FY 2000: N/A FY 2001: N/A

($ in Millions)

Cost:	Prior Years		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																				
FY 1998 EQUIPMENT																				
FY 1999 EQUIPMENT			60	0.075															60	0.075
FY 2000 EQUIPMENT																				
FY 2001 EQUIPMENT																				
FY 2002 EQUIPMENT																				
FY 2003 EQUIPMENT																				
FY 2004 EQUIPMENT																				
FY 2005 EQUIPMENT																				
TO COMPLETE																				

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60
Out	0	0	0	30	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	60

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: NAS TYPE MODIFICATION: SAFETY MODIFICATION TITLE: RADAR (DASR) (CB030)

DESCRIPTION/JUSTIFICATION:

The Digital Airport Surveillance Radar (DASR) is being developed as part of a joint DOD/FAA program to modernize and standardize air traffic control equipment in the National Air Traffic Control System. The DASR will be installed at Navy air traffic control facilities to replace aging, obsolete approach control radars and comply with the joint DOD/FAA modernization program agreements.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **MILESTONE III (MARCH 2001)**

	FY 1998 & Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																				
PROCUREMENT																				
INSTALLATION KITS																				0.000
INSTALLATION KITS - UNIT COST																				0.000
INSTALLATION KITS NONRECURRING																				0.000
EQUIPMENT					9	21.446	4	10.126	0	0.000	0	0.000	0	0.000			26	66.830	39	98.402
EQUIPMENT NONRECURRING																				0.000
ENGINEERING CHANGE ORDERS																				0.000
DATA																				0.000
TRAINING EQUIPMENT																				0.000
SUPPORT EQUIPMENT																				0.000
OTHER																				0.000
OTHER																				0.000
OTHER																				0.000
INTERIM CONTRACTOR SUPPORT																				0.000
INSTALL COST	0	0.000	0	0.293	0	1.042	3	3.000	0	0.000	0	0.000	0	0.000	0	0.000		20.058	39	24.393
TOTAL PROCUREMENT		0.000		0.293		22.488		13.126		0.000		0.000		0.000		0.000		86.888		122.795

NOTE; Advanced installation planning included in install funds one year prior to installs.
FY 01 install also funds $550K radar transition system.

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

MODELS OF SYSTEMS AFFECTED: _____ MODIFICATION TITLE: RADAR (DASR) (CB030)

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 17 MONTHS (VARIOUS)
CONTRACT DATES: FY 1999: N/A FY 2000: 01/00 FY 2001: 12/00
DELIVERY DATE: FY 1999: N/A FY 2000: 06/01 FY 2001: 06/02

($ in Millions)

Cost:	Prior Years		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																			0	0.000
FY 1998 EQUIPMENT																			0	0.000
FY 1999 EQUIPMENT																			0	0.000
FY 2000 EQUIPMENT			AP	0.293	AP	1.042	3	1.134											3	3.445
FY 2001 EQUIPMENT							AP	1.866											0	1.866
FY 2002 EQUIPMENT																			0	0.000
FY 2003 EQUIPMENT																			0	0.000
FY 2004 EQUIPMENT																			0	0.000
FY 2005 EQUIPMENT																			0	0.000
TO COMPLETE																	36	20.058	36	20.058

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	39
Out	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	39

NOTE:

BUDGET ITEM JUSTIFICATION SHEET P-40										DATE: February 2000	
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY/ BA2-COMMUNICATIONS AND ELECTRONIC**						P-1 ITEM NOMENCLATURE **AIR STATION SUPPORT EQUIPMENT**				**NARM# 284500**	
Program Element for Code B Items:						Other Related Program Elements **0204696N**					
	Prior Years	ID Code	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY											
(In Millions)	$98.0		$7.2	$7.2	$6.7	$7.5	$7.6	$7.8	$8.0	CONT	CONT

DESCRIPTION:

The Naval Air Systems Command (NAVAIR) has an established requirement to provide shore based Air Traffic Control (ATC) terminal facilities and equipment, many of which interface through automated means with the Federal Aviation Administration (FAA), which is required in joint efforts to efficiently and safely monitor and direct military and commercial air traffic in national and international air space. Additionally, NAVAIR has material support responsibility for Air Navigation Aid Systems, Tactical Communications, Mobile ATC Equipment, Special Instrumentation Systems, and Ancillary Equipment used at Navy and Marine Corps Aviation Shore activities in the continental United States and overseas.

(1) Communications Systems Upgrade Program - This program procures and installs advanced, commercial state-of-the-art, ATC voice switching and recording/reproduction equipment which will be used to replace aging AN/FSA-52/58 and OJ-314 voice communication switching systems and the RD-379/379A/390 and RP-214 recorder/reproducers. Existing systems and equipment use 1950's toggle switch & 1960's push-button analog technology that is becoming logistically unsupportable.

(2) AN/FSC-119(V) Integrated Voice Communication Switching System (IVCSS) - Advanced commercial-digital technology voice switching equipment which is primarily being used to replace existing AN/FSA-52 Voice Communication Switching Systems. The existing equipment uses 1950's toggle switch analog technology that is becoming logistically unsupportable.

(3) UHF/VHF Radio Replacement Program - This program modernizes aging Navy and Marine Corps UHF/VHF transmitter and receiver equipment. This equipment is the central core of all critical Air Traffic Control communications. This program is replacing the aging AN/GRT-21/22 VHF/UHF (10 watt) transmitters, AM-6154/GRT-21 & AM-6155/GRT-22 VHF/UHF (50 watt) Linear Power Amplifiers, and AN/GRR-23/24 VHF/UHF receivers that are becoming logistically unsupportable.

(4) Engineering Change Proposal (ECP)/Operational Capability Improvement Request (OCIR) modernization: The ECP/OCIR program provides for the procurement, and or modification, of critically needed communications, radar, displays, data processors, and other electronic systems/equipment needed at Navy/Marine Corps Air Traffic Control facilities worldwide. ECP/OCIR procurements replace and modernize costly-to-maintain systems and equipment in order to increase Air Traffic Control efficiency and safety, improve affordable readiness, and reduce total ownership costs.

FY 98 through FY 01 funds are presently planned to procure and or install:

FY 98: 3 UHF/VHF Antenna Upgrades (MR404); 139 UHF/VHF Radio Replacements (MR407); 4 Communication System Upgrades (MR408); and various OCIRs (MR069) for approved sites.

FY 99: 42 UHF/VHF Radio Replacements (MR407); 6 Communication System Upgrades (MR408); and various OCIRs (MR069) for approved sites.

CLASSIFICATION:

BUDGET ITEM JUSTIFICATION SHEET FOR AGGREGATED ITEMS P-40a						DATE: February 2000					
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/ BA2-COMMUNICATIONS AND ELECTRONIC EQUIPMENT						P-1 ITEM NOMENCLATURE AIR STATION SUPPORT EQUIPMENT					
Procurement Items	ID Code	Prior Years	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
MR404 UHF/VHF	N/A										
ANTENNA UPGRADE											
QTY		34									34
FUNDING		4.335									4.335
MR405 RATCF/DAIR	N/A										
UPGRADE											
QTY		17									17
FUNDING		1.188									1.188
MR407 UHF/VHF	N/A										
RADIO											
REPLACEMENT											
QTY		906	42	191	295	348	327	406	650	1130	4295
FUNDING		4.558	0.203	0.935	1.472	1.761	1.687	2.140	3.497	6.204	22.457
MR408 COMM SYS	N/A										
UPGRADE											
QTY		4	6	9	8	7	7	6	2		49
FUNDING		1.416	1.904	3.220	2.560	2.275	2.324	2.034	0.692		16.425
MR430 FIBER OPTIC	N/A										
INTERSITE UPGRADE											
QTY									2	20	22
FUNDING									0.613	6.255	6.868
OTHER COST	N/A	86.501	5.113	3.081	2.673	3.418	3.592	3.632	3.172	CONT	CONT
TOTAL FUNDING		97.998	7.220	7.236	6.705	7.454	7.603	7.806	7.974	CONT	CONT

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS
P-5

DATE: **February 2000**

APPROPRIATION/BUDGET ACTIVITY
OTHER PROCUREMENT, NAVY
BA2 - COMMUNICATIONS AND ELECTRONICS EQUIPMENT

P-1 ITEM NOMENCLATURE/SUBHEAD
AIR STATION SUPPORT EQUIPMENT **42MR**

TOTAL COST IN THOUSANDS OF DOLLARS

COST CODE	ELEMENT OF COST	ID Code	Prior Years	FY 1999			FY 2000			FY 2001		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
MR069	ECP/OCIR	N/A	5,220	VAR		335	VAR		168	VAR		107
MR404	UHF/VHF ANTENNA UPGRADE	N/A	4,335									
MR405	RATCF/DAIR UPGRADE	N/A	1,188									
MR407	UHF/VHF RADIO REPLACEMENT	N/A	4,558	42	5	203	191	5	935	295	5	1,472
MR408	COMMUNICATION SYSTEM UPGRADE	N/A	1,416	6	317	1,904	9	358	3,220	8	320	2,560
MR800	INTEGRATED LOGISTICS SUPPORT	N/A	4,688			215			225			266
MR830	PRODUCTION ENGINEERING	N/A	11,785			649			567			576
MR900	INSTALLATION OF EQUIPMENT (NON-FMP)	N/A	19,544			3,699			1,966			1,566
MR990	INITIAL TRAINING	N/A	467			215			155			158
	VARIOUS 1/		44,797									
			97,998			**7,220**			**7,236**			**6,705**

1/ the amount identified against this cost element reflects total prior year funding associated with cost elements no longer financed in FY 1997 and beyond.

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE: February 2000

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
OTHER PROCUREMENT, NAVY — BA2 - COMMUNICATIONS AND ELECTRONICS EQUIPMENT	AIR STATION SUPPORT EQUIPMENT	42MR

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
MR404 UHF/VHF ANTENNA UPGRADE										
FY98	3	153	SPAWAR CHASN	08/95	SS/CPFF	RCI, INC. VIENNA, VA MINERAL WELLS, TX	01/98	07/98	YES	
MR407 UHF/VHF RADIO REPLACEMENT										
FY98	139	7	FAA, WASH.,D.C.	03/94	FFP/OPTION	MOTOROLA, PHOENIX, AZ	10/97	04/98	YES	
FY99	42	5	SPAWAR CHASN	07/98	SS/FFP	MOTOROLA, PHOENIX, AZ	11/98	04/99	YES	
FY00	191	5	SPAWAR CHASN	07/98	FFP/OPTION	MOTOROLA, PHOENIX, AZ	11/99	04/00	YES	
FY01	295	5	SPAWAR CHASN	07/98	FFP/OPTION	MOTOROLA, PHOENIX, AZ	11/00	04/01	YES	
MR408 COMM SYSTEM UPGRADE										
FY98	4	330	FAA, WASH.,D.C.	02/95	FFP/OPTION	DENRO, GAITHERSBURG, MD	12/97	06/98	YES	
FY99	6	317	FAA, WASH.,D.C.	02/95	FFP/OPTION	DENRO, GAITHERSBURG, MD	12/98	06/99	YES	
FY00	9	358	FAA, WASH.,D.C.	02/95	FFP/OPTION	DENRO, GAITHERSBURG, MD	12/99	06/00	YES	
FY01	8	320	FAA, WASH.,D.C.	02/95	FFP/OPTION	DENRO, GAITHERSBURG, MD	12/00	06/01	YES	

D. REMARKS

MR407 - UHF/VHF Radio unit costs vary based on product quantity mix (6 types with different prices) of replacement radios being procured, average unit costs are shown.
MR408 - Communication System Upgrade requirements vary from site to site, which causes equipment size and costs to vary from site to site, average unit costs are shown.

CLASSIFICATION: **UNCLASSIFIED**

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

MODELS OF SYSTEMS AFFECTED: **AIR STATION** MODIFICATION TITLE: IVCSS (MR047)

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: N/A PRODUCTION LEADTIME: N/A
CONTRACT DATES: FY 1999: N/A FY 2000: N/A FY 2001: N/A
DELIVERY DATE: FY 1999: N/A FY 2000: N/A FY 2001: N/A

($ in Millions)

Cost:	Prior Years		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS	7	2.920	4	1.120															15	4.956
FY 1998 EQUIPMENT																			0	0.000
FY 1999 EQUIPMENT																			0	0.000
FY 2000 EQUIPMENT																			0	0.000
FY 2001 EQUIPMENT																			0	0.000
FY 2002 EQUIPMENT																			0	0.000
FY 2003 EQUIPMENT																			0	0.000
FY 2004 EQUIPMENT																			0	0.000
FY 2005 EQUIPMENT																			0	0.000
TO COMPLETE																			0	0.000

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Out	11	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	0	0	0	15

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: **AIR STATION** TYPE MODIFICATION: CAPABILITY IMPROVEMENT MODIFICATION TITLE: ECP/OCIR SUMMARY (MR069)

DESCRIPTION/JUSTIFICATION:

The ECP/OCIR program provides for the procurement, and or modification, of critically needed communications, radar, displays, data processors, and other electronic systems/equipment needed at Navy/Marine Corps Air Traffic Control facilities worldwide. ECP/OCIR procurements replace and modernize costly-to- maintain systems and equipments in order to increase Air Traffic Control efficiency and safety, improve affordable readiness, and reduce total ownership costs.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTO N/A

	FY 1998 & Prior*		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																				
PROCUREMENT																				
INSTALLATION KITS																				
INSTALLATION KITS - UNIT COST																				
INSTALLATION KITS NONRECURRING																				
EQUIPMENT		5.220		0.335		0.168		0.107		0.251		0.271		0.288		0.301	CONT	CONT	CONT	CONT
EQUIPMENT NONRECURRING																				
ENGINEERING CHANGE ORDERS																				
DATA																				
TRAINING EQUIPMENT																				
SUPPORT EQUIPMENT																				
OTHER																				
OTHER																				
OTHER																				
INTERIM CONTRACTOR SUPPORT																				
INSTALL COST		3.932		0.495		0.066		0.050		0.075		0.076		0.078		0.080	CONT	CONT	CONT	CONT
TOTAL PROCUREMENT		9.152		0.830		0.234		0.157		0.326		0.347		0.366		0.381	CONT	CONT	CONT	CONT

NOTE: The equipment and installation costs represented on this P-3A are a summary of individual ECP/OCIR modification programs that do not exceed $5 Million in either budget year or $10 Million in all years.

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

MODELS OF SYSTEMS AFFECTED: **AIR STATION** MODIFICATION TITLE: ECP/OCIR SUMMARY (MR069)

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: MONTHS (Various) PRODUCTION LEADTIME: MONTHS (Various)
CONTRACT DATES: FY 1999: N/A FY 2000: N/A FY 2001: N/A
DELIVERY DATE: FY 1999: N/A FY 2000: N/A FY 2001: N/A

($ in Millions)

Cost:	Prior Years		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS		2.889																	0	2.417
FY 1998 EQUIPMENT																			0	1.043
FY 1999 EQUIPMENT				0.495															0	0.495
FY 2000 EQUIPMENT						0.066													0	0.066
FY 2001 EQUIPMENT								0.050											0	0.050
FY 2002 EQUIPMENT										0.075									0	0.075
FY 2003 EQUIPMENT												0.076							0	0.076
FY 2004 EQUIPMENT														0.078					0	0.078
FY 2005 EQUIPMENT																0.080			0	0.080
TO COMPLETE																		CONT	0	CONT

INSTALLATION SCHEDULE:

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

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

MODELS OF SYSTEMS AFFECTED: **AIR STATION** MODIFICATION TITLE: ECP/OCIR SUMMARY (MR069)

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: MONTHS (Various) PRODUCTION LEADTIME: MONTHS (Various)
CONTRACT DATES: FY 1999: N/A FY 2000: N/A FY 2001: N/A
DELIVERY DATE: FY 1999: N/A FY 2000: N/A FY 2001: N/A

($ in Millions)

Cost:	Prior Years		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS		2.889																	0	2.417
FY 1998 EQUIPMENT																			0	1.043
FY 1999 EQUIPMENT				0.495															0	0.495
FY 2000 EQUIPMENT						0.066													0	0.066
FY 2001 EQUIPMENT								0.050											0	0.050
FY 2002 EQUIPMENT										0.075									0	0.075
FY 2003 EQUIPMENT												0.076							0	0.076
FY 2004 EQUIPMENT														0.078					0	0.078
FY 2005 EQUIPMENT																0.080			0	0.080
TO COMPLETE																		CONT	0	CONT

INSTALLATION SCHEDULE:

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

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: **AIR STATION** TYPE MODIFICATION: RELIABILITY/MAINTAINABILITY MODIFICATION TITLE: UHF/VHF ANTENNA UPGRADE (MR404)

DESCRIPTION/JUSTIFICATION:

UHF/VHF antenna systems are needed for ground-to-air and air-to-ground Air Traffic Control communications. New antenna systems are required to replace existing, aged and deteriorated antennas and cables for dependable ATC communications.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTC NDI

	FY 1998 & Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																				0.000
PROCUREMENT																				
INSTALLATION KITS																				0.000
INSTALLATION KITS - UNIT COST																				0.000
INSTALLATION KITS NONRECURRING																				0.000
EQUIPMENT	34	4.335																	34	4.335
EQUIPMENT NONRECURRING																				0.000
ENGINEERING CHANGE ORDERS																				0.000
DATA																				0.000
TRAINING EQUIPMENT																				0.000
SUPPORT EQUIPMENT																				0.000
OTHER																				0.000
OTHER																				0.000
OTHER																				0.000
INTERIM CONTRACTOR SUPPORT																				0.000
INSTALL COST	31	4.375	3	0.590	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	34	4.965
TOTAL PROCUREMENT		8.710		0.590		0.000		0.000		0.000		0.000		0.000		0.000		0.000		9.300

The total Quantity reflects the inventory objective for this item.

MR404 - Equipment costs vary from site to site, therefore unit costs are not consistent.

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

MODELS OF SYSTEMS AFFECTED: **AIR STATION** MODIFICATION TITLE: UHF/VHF ANTENNA UPGRADE (MR404)

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: 4 MONTHS PRODUCTION LEADTIME: 6 MONTHS
CONTRACT DATES: FY 1999: N/A FY 2000: N/A FY 2001: N/A
DELIVERY DATE: FY 1999: N/A FY 2000: N/A FY 2001: N/A

($ in Millions)

Cost:	Prior Years		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS	31	4.375																	24	3.425
FY 1998 EQUIPMENT			3	0.590															3	0.590
FY 1999 EQUIPMENT																			0	0.000
FY 2000 EQUIPMENT																			0	0.000
FY 2001 EQUIPMENT																			0	0.000
FY 2002 EQUIPMENT																			0	0.000
FY 2003 EQUIPMENT																			0	0.000
FY 2004 EQUIPMENT																			0	0.000
FY 2005 EQUIPMENT																			0	0.000
TO COMPLETE																			0	0.000

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34
Out	31	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34

Note: Installation efforts were delayed due to unanticipated problems obtaining air field waivers for towers, environmental issues (tree clearing & endangered species), and facilities/public works department delays.

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AIR STATION TYPE MODIFICATION: MODERNIZATION MODIFICATION TITLE: UHF/VHF RADIO REPLACEMENT (MR407)

DESCRIPTION/JUSTIFICATION:

UHF/VHF Radio Replacement Program - This program modernizes aging Navy and Marine Corps UHF/VHF transmitter and receiver equipment that is the central core of all critical Air Traffic Control communications. This program is procuring NDIs previously developed by Motorola for the FAA as form, fit, and function replacements of the aging AN/GRT-21/22 VHF/UHF (10 watt) transmitters, AM-6154/GRT-21 & AM-6155/GRT-22 VHF/UHF (50 watt) Linear Power Amplifiers, and AN/GRR-23/24 VHF/UHF receivers that are the same as those used by the Navy and Marine Corps. The existing radios use 1960's analog technology with the LPAs still using vacuum tubes and other out-of-production components and cause numerous casualty reports (CASREPs) and logistics supportability problems due to equipment and parts obsolescence. [The radio quantities reflect the inventory objective for the total of the six different types of radios being procured with the various costs averaged and provided for budgeting and planning purposes. The actual costs and quantities of the radios procured in the year of execution will vary based on the mix/costs of radio types required/procured for the air stations to have their old radios replaced and will be determined/controlled/limited by funding availability.]

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: NDI

	FY 1998 & Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																				0.000
PROCUREMENT																				
INSTALLATION KITS																				0.000
INSTALLATION KITS - UNIT COST																				0.000
INSTALLATION KITS NONRECURRING																				0.000
EQUIPMENT	906	4.558	42	0.203	191	0.935	295	1.472	348	1.761	327	1.687	406	2.140	650	3.497	1130	6.204	4295	22.457
EQUIPMENT NONRECURRING																				0.000
ENGINEERING CHANGE ORDERS																				0.000
DATA																				0.000
TRAINING EQUIPMENT																				0.000
SUPPORT EQUIPMENT																				0.000
OTHER																				0.000
OTHER																				0.000
OTHER																				0.000
INTERIM CONTRACTOR SUPPORT																				0.000
INSTALL COST	793	0.477	155	0.099	191	0.115	295	0.182	348	0.218	327	0.211	406	0.263	650	0.430	1130	0.763	4295	2.758
TOTAL PROCUREMENT		5.035		0.302		1.050		1.654		1.979		1.898		2.403		3.927		6.967		25.215

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

MODELS OF SYSTEMS AFFECTED: **AIR STATION** MODIFICATION TITLE: UHF/VHF RADIO REPLACEMENT (MR407)

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: 2 MONTHS (NOMINAL) PRODUCTION LEADTIME: 6 MONTHS (NOMINAL)
CONTRACT DATES: FY 1999: 11/98 FY 2000: 11/99 FY 2001: 11/00
DELIVERY DATE: FY 1999: 4/99 FY 2000: 4/00 FY 2001: 4/01

($ in Millions)

Cost:	Prior Years		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS	793	0.477																	170	0.098
FY 1997 EQUIPMENT																			597	0.361
FY 1998 EQUIPMENT			113	0.071															139	0.089
FY 1999 EQUIPMENT			42	0.028															42	0.028
FY 2000 EQUIPMENT					191	0.115													191	0.115
FY 2001 EQUIPMENT							295	0.182											295	0.182
FY 2002 EQUIPMENT									348	0.218									348	0.218
FY 2003 EQUIPMENT											327	0.211							327	0.211
FY 2004 EQUIPMENT													406	0.263					406	0.263
FY 2005 EQUIPMENT															650	0.430			650	0.430
TO COMPLETE																	1130	0.763	1130	0.763

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	793	0	0	155	0	0	0	191	0	0	0	295	0	0	0	348	0	0	0	327	0	0	0	406	0	0	0	650	0	1130	4295
Out	793	0	0	75	80	0	0	94	97	0	0	145	150	0	0	174	174	0	0	163	164	0	0	203	203	0	0	325	325	1130	4295

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: **AIR STATION** TYPE MODIFICATION: MODERNIZATION MODIFICATION TITLE: COMMUNICATION SYSTEM UPGRADE (MR408)

DESCRIPTION/JUSTIFICATION:

Communications Systems Upgrade - Advanced commercial state-of-the-art ATC voice switching and recording/reproduction equipment which will be used to replace existing AN/FSA-52/58 and OJ-314 voice communications switching systems and the RD-379/379A/390 and RP-214 recorder/reproducers. Existing systems and equipment use 1950's toggle switch & 1960's push-button analog technology, are no longer in production, and causing numerous casualty reports (CASREPs) and logistics supportability problems due to system and parts obsolescence. The voice switching system selected for use by the Navy is a Non-Developmental Item, developed by the FAA via a, full and open competition, contract which was awarded by the FAA to Denro, Inc. The recorder/reproducer system selected for use by the Navy is a commercial item produced by Advanced Integrated Recorders, Inc. and are be obtained through a contract awarded to AIR, Inc. on 7/31/98 by our coordinating field activity, SPAWAR Charleston, SC. The existing equipment is obsolete and becoming logistically unsupportable. Note - New recorder/reproducers will be procured and installed at all Navy/Marine Corps Air Stations with up to two new recorder/reproducers systems needed per each communications system upgrade shown below.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: NDI

	FY 1998 & Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																				
PROCUREMENT																				0.000
INSTALLATION KITS																				
INSTALLATION KITS - UNIT COST																				0.000
INSTALLATION KITS NONRECURRING																				0.000
EQUIPMENT	4	1.416	6	1.904	9	3.220	8	2.560	7	2.275	7	2.324	6	2.034	2	0.692			49	16.425
EQUIPMENT NONRECURRING																				0.000
ENGINEERING CHANGE ORDERS																				0.000
DATA																				0.000
TRAINING EQUIPMENT																				0.000
SUPPORT EQUIPMENT																				0.000
OTHER																				0.000
OTHER																				0.000
OTHER																				0.000
INTERIM CONTRACTOR SUPPORT																				0.000
INSTALL COST	0	0.652	5	1.395	8	1.785	8	1.334	8	1.918	8	1.915	8	1.893	4	0.957	0	0.000	49	11.849
TOTAL PROCUREMENT		2.068		3.299		5.005		3.894		4.193		4.239		3.927		1.649		0.000		28.274

The total Quantity reflects the inventory objective for this item.

MR408 Equipment size and cost will vary from site to site,applicable installation costs will vary based on equipment size and location of installation, average costs are shown for budgeting and planning

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

MODELS OF SYSTEMS AFFECTED: **AIR STATION** MODIFICATION TITLE: COMMUNICATION SYSTEM UPGRADE (MR408)

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: 2 MONTHS (NOMINAL) PRODUCTION LEADTIME: 6 MONTHS (NOMINAL)
CONTRACT DATES: FY 1999: 12/98 FY 2000: 12/99 FY 2001: 12/00
DELIVERY DATE: FY 1999: 06/99 FY 2000: 6/00 FY 2001: 6/01

($ in Millions)

Cost:	Prior Years		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																			0	0.000
FY 1998 EQUIPMENT			4	1.241															4	1.893
FY 1999 EQUIPMENT			1	0.154	5	1.116													6	1.270
FY 2000 EQUIPMENT					3	0.669	6	1.005											9	1.674
FY 2001 EQUIPMENT							2	0.329	6	1.444									8	1.773
FY 2002 EQUIPMENT									2	0.474	5	1.200							7	1.674
FY 2003 EQUIPMENT											3	0.715	4	0.947					7	1.662
FY 2004 EQUIPMENT													4	0.946	2	0.479			6	1.425
FY 2005 EQUIPMENT															2	0.478			2	0.478
TO COMPLETE																			0	0.000

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	0	49
Out	0	0	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	0	49

NOTE: FY 97 & FY 98 funds provided for Advanced Planning installation preparation and site survey efforts. Equipment costs and installation efforts/costs will vary from air station to air station based on facility requirements and location.

BUDGET ITEM JUSTIFICATION SHEET **P-40**						DATE: **February 2000**					
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY/ BA2-COMMUNICATIONS AND ELECTRONIC EQUIPMENT**						P-1 ITEM NOMENCLATURE **LANDING SYSTEMS (LS) NARM# 284600**					
Program Element for Code B Items:						Other Related Program Elements **Not Applicable**					
	Prior Years	ID Code	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY											
COST (In Millions)	$19.0		$4.6	$5.3	$5.1	$5.4	$5.5	$5.6	$5.8	CONT	CONT

DESCRIPTION:

The Naval Air Systems Command (NAVAIR) has an established requirement to provide shore based Air Traffic Control (ATC) terminal facilities and equipment, many of which interface through automated means with the Federal Aviation Administration (FAA), which is required in joint efforts to efficiently and safely monitor and direct military and commercial air traffic in national and international air space. Additionally, NAVAIR has material support responsibility for Air Navigation Aid Systems, Tactical Communications, Mobile ATC Equipment, Special Instrumentation Systems, and Ancillary Equipment used for ATC&LS by the Navy and Marine Corps. This Landing Systems (LS) 42X1 program, in conjunction with the other three programs (Air Station Support Equipment 42MR, Fleet Area Control and Surveillance Facility (FACSFAC) 42TT, and the National Airspace System Modernization 42CB) which make up program element 0204696N, provide the four pillars by which NAVAIR supports and meets established requirements to modernize and ensure reliable, safe and effective operations of ATC&LS used at Navy and Marine Corps air stations and ATC facilities worldwide.

This Landing Systems (LS) budget provides funding to modernize and ensure the reliability and safety of existing Precision Approach Radars (PAR), Tactical Air Navigation (TACAN) systems, Instrument Landing Systems (ILS), and other aircraft navigation aids used by the Navy and Marine Corps. This program also ensures that all interservice interoperability requirements identified in the National Airspace System Plan (NASP), the Federal Radio Navigation Plan (FRNP), and the Joint Chiefs of Staff (JCS) master navigation plan are fulfilled.

Funding in FY98 through FY01 provides procurement of the following:

FY 98 provides funding to procure 10 AN/FPN-63 Environmental Shelters and various ECPs/OCIRs as required for approved sites.

FY 99 provides funding to procure 10 AN/FPN-63 Environmental Shelters, 1 commercial Instrument Landing System, and various ECPs/OCIRs as required for approved sites.

FY 00 provides funding to procure 5 AN/FPN-63 Environmental Shelters and various ECPs/OCIRs as required for approved sites.

FY 01 provides funding to procure 1 commercial Instrument Landing System and various ECPs/OCIRs as required for approved sites.

CLASSIFICATION:

BUDGET ITEM JUSTIFICATION SHEET FOR AGGREGATED ITEMS P-40a								DATE: **February 2000**			
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY/ BA2-COMMUNICATIONS AND ELECTRONICS EQUIPMENT**						P-1 ITEM NOMENCLATURE **LANDING SYSTEMS (LS)**					
Procurement Items	ID Code	Prior Years	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
X1020 ENVIRONMENTAL	N/A										
SHELTERS											
QTY		27	10	5							42
FUNDING		3.586	1.407	0.742							5.735
X1102 INSTRUMENT											
LANDING SYSTEM											
QTY		12	1		1		1		1	3	19
FUNDING		3.025	0.300		0.310		0.321		0.339	1.038	5.333
X1025 SHORE JPALS											
QTY									3	34	37
FUNDING									1.620	18.746	20.366
OTHER COSTS		12.367	2.864	4.546	4.814	5.433	5.187	5.646	3.806	CONT	CONT
TOTAL FUNDING		18.978	4.571	5.288	5.124	5.433	5.508	5.646	5.765	CONT	CONT

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System	DATE: **February 2000**
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY/ BA2-COMMUNICATIONS AND ELECTRONICS EQUIPMENT**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **LANDING SYSTEMS (LS) 42X1**

TOTAL COST IN THOUSANDS OF DOLLARS

COST CODE	ELEMENT OF COST	ID Code	Prior Years	FY 1999			FY 2000			FY 2001		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
X1017	OCIR/ECP	N/A	691	VAR		78	VAR		1,562	VAR		1,831
X1020	ENVIRONMENTAL SHELTERS	N/A	3,586	10	141	1,407	5	148	742			
X1102	INSTRUMENT LANDING SYSTEM	N/A	3,025	1	300	300				1	310	310
X1800	INTEGRATED LOGISTICS SUPPORT		495			208			387			169
X1830	PRODUCTION ENGINEERING		878			574			393			314
X1840	QUALITY ASSURANCE		98			50			128			70
X1900	INSTALLATION (NON-FMP)		7,046			1,954			2,076			2,430
	*VARIOUS		3,159									
			18,978			**4,571**			**5,288**			**5,124**

*The amount identified against this cost element reflects total prior year funding associated with cost elements no longer financed in FY 1996 and beyond.

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System		A. DATE February 2000		
B. APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY BA2 - COMMUNICATIONS AND ELECTRONICS EQUIPMENT					C. P-1 ITEM NOMENCLATURE LANDING SYSTEMS (LS)				SUBHEAD 42X1
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
X1020 ENVIRONMENTAL SHELTERS										
FY98	10	138	SPAWARSYSCEN SAN DIEGO, CA	02/98	C/CPFF	SANTA BARBARA APPLIED RESEARCH SANTA BARBARA, CA	07/98	10/98	Yes	
FY99	10	141	SPAWARSYSCEN SAN DIEGO, CA	02/98	OPTION	SANTA BARBARA APPLIED RESEARCH SANTA BARBARA, CA	11/98	04/99	Yes	
FY00	5	148	SPAWARSYSCEN SAN DIEGO, CA	02/98	OPTION	SANTA BARBARA APPLIED RESEARCH SANTA BARBARA, CA	11/99	04/00	Yes	
X1102 INSTRUMENT LANDING SYSTEM										
FY 99	1	300	SPAWARSYSCEN SAN DIEGO, CA	04/99	C/FFP	AIRSYS ATM, INC. SHAWNEE, KS	08/99	01/00	Yes	
FY 01	1	310	SPAWARSYSCEN SAN DIEGO, CA	11/00	C/FFP	TBD	2/01	07/01	Yes	

D. REMARKS

Previous contractor for environmental shelters, C/Systems of Amesbury, Mass., delivered 10 of 17 systems and filed a bankruptcy claim in December 1997. Funds for remaining systems were recovered and awarded to Santa Barbara Applied Research.

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: Landing Systems TYPE MODIFICATION: VARIOUS MODIFICATION TITLE: OCIR/ECP SUMMARY (X1017)

DESCRIPTION/JUSTIFICATION:

The Engineering Change Proposal (ECP)/Operational Capability Improvement Request (OCIR) program provides for the procurement and installation of critically needed equipment and modifications requir to modernize and ensure the safe, efficient, and reliable operation of Precision Approach Radar (PAR) systems, Tactical Air Navigation (TACAN) systems, Instrument Landing Systems (ILS), and other air navigation systems used at Navy/Marine Corps Air Traffic Control facilities worldwide.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: N/A

	FY 1998 & Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																				0.000
PROCUREMENT																				0.000
INSTALLATION KITS																				0.000
INSTALLATION KITS - UNIT COST																				0.000
INSTALLATION KITS NONRECURRING																				0.000
EQUIPMENT		0.691		0.078		1.562		1.831		2.137		2.200		2.174		0.656				11.329
EQUIPMENT NONRECURRING																				0.000
ENGINEERING CHANGE ORDERS																				0.000
DATA																				0.000
TRAINING EQUIPMENT																				0.000
SUPPORT EQUIPMENT																				0.000
OTHER																				0.000
OTHER																				0.000
OTHER																				0.000
INTERIM CONTRACTOR SUPPORT																				0.000
INSTALL COST	0	0.757	0	0.533	0	0.090	0	1.030	0	1.890	0	1.939	0	2.010	0	0.857	0	0.000	0	9.106
TOTAL PROCUREMENT		1.448		0.611		1.652		2.861		4.027		4.139		4.184		1.513		0.000		20.435

NOTE: The equipment and installation costs represented on this P-3A are a summary of individual ECP/OCIR modification programs that do not exceed $5 Million in either budget year or $10 Million in all years.

CLASSIFICATION: **UNCLASSIFIED**

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

MODELS OF SYSTEMS AFFECTED: LANDING SYSTEMS MODIFICATION TITLE: OCIR/ECP SUMMARY (X1017)

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: VARIOUS PRODUCTION LEADTIME: VARIOUS
CONTRACT DATES: FY 1999: N/A FY 2000: N/A FY 2001: N/A
DELIVERY DATE: FY 1999: N/A FY 2000: N/A FY 2001: N/A

($ in Millions)

Cost:	Prior Years		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS		0.757																	0	0.000
FY 1998 EQUIPMENT				0.533															0	0.533
FY 1999 EQUIPMENT						0.090													0	0.090
FY 2000 EQUIPMENT								1.030											0	1.030
FY 2001 EQUIPMENT										1.890									0	1.890
FY 2002 EQUIPMENT												1.939							0	1.939
FY 2003 EQUIPMENT														2.010					0	2.010
FY 2004 EQUIPMENT																0.857			0	0.857
FY 2005 EQUIPMENT																			0	0.000
TO COMPLETE																			0	0.000

INSTALLATION SCHEDULE:

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

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: Landing Systems TYPE MODIFICATION: Reliability/Maintainability MODIFICATION TITLE: Environmental Shelters (X1020)

DESCRIPTION/JUSTIFICATION:

Environmental Shelters to protect current Precision Approach Radar until Digital Global Positioning System can be fully deployed.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTON N/A

	FY 1998 & Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																				0.000
PROCUREMENT																				0.000
INSTALLATION KITS	27	3.586	10	1.407	5	0.742													42	5.735
INSTALLATION KITS - UNIT COST		0.268		0.141		0.148														0.000
INSTALLATION KITS NONRECURRING																				0.000
EQUIPMENT																				0.000
EQUIPMENT NONRECURRING																				0.000
ENGINEERING CHANGE ORDERS																				0.000
DATA																				0.000
TRAINING EQUIPMENT																				0.000
SUPPORT EQUIPMENT																				0.000
OTHER																				0.000
OTHER																				0.000
OTHER																				0.000
INTERIM CONTRACTOR SUPPORT																				0.000
INSTALL COST	12	1.578	10	1.196	11	1.386	9	1.153	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	42	5.313
TOTAL PROCUREMENT		5.164		2.603		2.128		1.153		0.000		0.000		0.000		0.000		0.000		11.048

CLASSIFICATION: **UNCLASSIFIED**

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

MODELS OF SYSTEMS AFFECTED: Landing Systems MODIFICATION TITLE: Environmental Shelters (X1020)

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: Alteration Installation Team (AIT)
ADMINISTRATIVE LEADTIME: 2 Months PRODUCTION LEADTIME: 5 Months/Varying Delivery
CONTRACT DATES: FY 1999: 11/98 FY 2000: 11/99 FY 2001: N/A
DELIVERY DATE: FY 1999: 4/99 FY 2000: 4/00 FY 2001: N/A

($ in Millions)

Cost:	Prior Years		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS	17	1.729																	0	0.000
FY 1998 EQUIPMENT			8	0.957															10	1.240
FY 1999 EQUIPMENT			2	0.239	4	0.504	4	0.512											10	1.255
FY 2000 EQUIPMENT							5	0.641											5	0.641
FY 2001 EQUIPMENT																			0	0.000
FY 2002 EQUIPMENT																			0	0.000
FY 2003 EQUIPMENT																			0	0.000
FY 2004 EQUIPMENT																			0	0.000
FY 2005 EQUIPMENT																			0	0.000
TO COMPLETE																			0	0.000

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	14	3	3	4	7	6	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42
Out	12	1	2	3	4	1	2	4	4	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42

Bankruptcy of original contractor caused delays in procurement and installation of FY97 assets.

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: Landing Systems TYPE MODIFICATION: Operational Capability Improvement MODIFICATION TITLE: Instrument Landing System (X1102)

DESCRIPTION/JUSTIFICATION:

Procurement and installation costs shown are for Wilcox Mark 1F Instrument Landing Systems (FY 97 & Prior years) and Commercial Non-Developmental Items (NDIs) Instrument Landing Systems (FY 99 & after). Systems being procured and installed FY 99 and after are the result of emerging requirements that have been identified and approved via the OCIR process. After installation, all ILS equipment is flight tested, approved and certified by the Federal Aviation Administration (FAA) for operational use by civil and DoD aviation communities.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTON Commercial-NDI

	FY 1998 & Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																				0.000
PROCUREMENT																				0.000
INSTALLATION KITS																				0.000
INSTALLATION KITS - UNIT COST																				0.000
INSTALLATION KITS NONRECURRING																				0.000
EQUIPMENT	12	3.025	1	0.300			1	0.310			1	0.321			1	0.339	3	1.038	19	5.333
EQUIPMENT NONRECURRING																				0.000
ENGINEERING CHANGE ORDERS																				0.000
DATA																				0.000
TRAINING EQUIPMENT																				0.000
SUPPORT EQUIPMENT																				0.000
OTHER																				0.000
OTHER																				0.000
OTHER																				0.000
INTERIM CONTRACTOR SUPPORT																				0.000
INSTALL COST	12	4.547	0	0.225	1	0.600	0	0.247	1	0.628	0	0.256	1	0.653	0	0.267	4	2.724	19	10.147
TOTAL PROCUREMENT		7.572		0.525		0.600		0.557		0.628		0.577		0.653		0.606		3.762		15.480

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

MODELS OF SYSTEMS AFFECTED: LANDING SYSTEMS MODIFICATION TITLE: Instrument Landing System (X1102)

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: Alteration Installation Team (AIT)
ADMINISTRATIVE LEADTIME: 11 Months* PRODUCTION LEADTIME: 5 Months
CONTRACT DATES: FY 1999: 8/99 FY 2000: N/A FY 2001: 2/01
DELIVERY DATE: FY 1999: 1/00 FY 2000: N/A FY 2001: 7/01

($ in Millions)

Cost:	Prior Years		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS	8	2.743																	4	1.804
FY 1996 EQUIPMENT																			8	2.743
FY 1997 EQUIPMENT																			0	0.000
FY 1998 EQUIPMENT																			0	0.000
FY 1999 EQUIPMENT			AP	0.225	1	0.600													1	0.825
FY 2000 EQUIPMENT																			0	0.000
FY 2001 EQUIPMENT							AP	0.247	1	0.628									1	0.875
FY 2002 EQUIPMENT																			0	0.000
FY 2003 EQUIPMENT											AP	0.256	1	0.653					1	0.909
FY 2004 EQUIPMENT																			0	0.000
FY 2005 EQUIPMENT															AP	0.267	1	0.681	1	0.948
TO COMPLETE																	3	2.043	3	2.043

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	12	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	3	19
Out	12	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	4	19

NOTE: Installation funds provided for advanced planning in the year of procurement perform site surveys, develop installation control drawings, and Base Electronic System Engineering Plans (BESEP).
* Subsequent years will have five (5) months Administrative Lead- time.

CLASSIFICATION:

BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: February 2000			
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY/BA2-COMMUNICATIONS AND ELECTRONICS EQUIPME**						P-1 ITEM NOMENCLATURE **Fleet Area Control and Surveillance Facility (FACSFAC)**				**NARM # 284700**	
Program Element for Code B Items: **Not Applicable**						Other Related Program Elements **Not Applicable**					
	Prior Years	ID Code	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY											
COST (In Millions)	$137.2		$3.7	$5.3	$4.3	$4.6	$4.6	$4.7	$4.8	CONT	CONT

DESCRIPTION:

Fleet Area Control and Surveillance Facilities (FACSFAC) are established to provide multi-mission Air Traffic Control and training area management services to the fleet. 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 be responsible for the management and protection of Navy training airspace.

Eight FACSFAC system supported sites have been established as follows: FACSFAC Virginia Capes, FACSFAC Jacksonville, FACSFAC Caribbean, FACSFAC Pensacola, FACSFAC San Diego, FACSFAC Pearl Harbor, NAS Fallon and NAWCAD St. Inigoes. In order to accomodate mission expansion and maintain a required interoperability with the FAA National Air Traffic Control System, FACSFACs must be periodically provided with new or upgraded capabilities.

Funding in FY 98 through FY 01 provides for procurement and installation of the following:

FY 98 provided funding to: procure 8 Radar Beacon Digitizer Replacements (TT175); procure 22 Display Replacements (TT176); procure miscellaneous enhancements for selected sites (OCIRs/ECPs) (TT145).

FY 99 provides funding to: procure 8 Display Replacements (TT176); procure miscellaneous enhancements for selected sites (OCIRs/ECPs) (TT145).

FY 00 provides funding to: procure 17 Display Replacements (TT176); procure 2 FACTS 3200 Radar Input Capacity Upgrades (TT177); procure miscellaneous enhancements for selected sites (OCIRs/ECPs) (TT145).

FY 01 provides funding to: procure 12 Display Replacements (TT176); procure 2 FACTS 3200 Radar Input Capacity Upgrades (TT177); procure miscellaneous enhancements for selected sites (OCIRs/ECPs) (TT145).

Items are usually procured in single inclusive lots to ensure commonality for logistics support and for component interchangeability. This is especially important, since these are Non-development Items (NDI) with limited model production runs. Economic benefits are also realized by single lot purchase.

BUDGET ITEM JUSTIFICATION SHEET FOR AGGREGATED ITEMS
P-40a

DATE: **February 2000**

APPROPRIATION/BUDGET ACTIVITY
OTHER PROCUREMENT, NAVY/BA2-COMMUNICATIONS AND ELECTRONICS EQUIPMENT

P-1 ITEM NOMENCLATURE
Fleet Area Control and Surveillance Facility (FACSFAC)

Procurement Items	ID Code	Prior Years	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
TT171 MODE S	N/A										
INTERFACE											
QTY							3	5			8
FUNDING							0.800	1.354			2.154
TT175 RADAR	N/A										
BEACON DIGITIZER											
QTY		10									10
FUNDING		1.595									1.595
TT176 DISPLAY	N/A										
REPLACEMENTS											
QTY		24	8	17	12	10				2	73
FUNDING		5.175	0.995	2.108	1.518	1.314				0.244	11.354
TT177 FACTS 3200	N/A										
RADAR INPUT											
CAPACITY											
QTY				2	2	2	2				8
FUNDING				0.862	0.874	0.900	0.910				3.546
TT179 GLOBAL POS	N/A										
SYSTEM INTERFACE											
QTY							4	4			8
FUNDING							0.736	0.752			1.488
TT180 COMM UPGRADE	N/A										
QTY									2	4	6
FUNDING									2.000	3.850	5.850
TT181 FLIGHT PLAN INTE	N/A										
QTY								4	2	2	8
FUNDING								0.500	0.250	0.250	1.000

BUDGET ITEM JUSTIFICATION SHEET FOR AGGREGATED ITEMS P-40a								DATE: February 2000			
APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA2-COMMUNICATIONS AND ELECTRONICS EQUIPME						P-1 ITEM NOMENCLATURE Fleet Area Control and Surveillance Facility (FACSFAC)					
Procurement Items	ID Code	Prior Years	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
TT182 PROCESSOR UPGR	N/A										
QTY									2	6	8
FUNDING									0.500	1.500	2.000
VARIOUS 1/	N/A	1.669									1.669
OTHER COSTS	N/A	128.712	2.677	2.364	1.923	2.341	2.154	2.096	2.072	CONT.	CONT.
TOTAL FUNDING		137.151	3.672	5.334	4.315	4.555	4.600	4.702	4.822	CONT.	CONT.
1/ The amount identified against this cost element reflects total prior year funding associated with cost elements no longer financed in FY 1997 and beyond.											

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System	DATE: **February 2000**
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY/BA2-COMMUNICATIONS AND ELECTRONICS EQUIPMENT**	ID Code	**Fleet Area Control and Surveillance Facility (FACSFAC) 42TT**

COST CODE	ELEMENT OF COST	ID Code	Prior Years	FY 1999			FY 2000			FY 2001		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
TT145	FACSFAC ECPs AND OCIRs	N/A	7,847	VAR		1,312	VAR		506	VAR		401
TT168	PORT RADAR RECORDER	N/A	218									
TT173	RADAR INPUT UNIT REPLACEMENTS	N/A	800									
TT174	LINK 11 SECURITY FILTER	N/A	651									
TT175	RADAR BEACON DIGITIZER (RBD) REPLACEMENTS	N/A	1,595									
TT176	DISPLAY REPLACEMENTS	N/A	5,175	8	124	995	17	124	2,108	12	127	1,518
TT177	FACTS 3200 RADAR INPUT CAPACITY UPGRADE	N/A					2	431	862	2	437	874
TT300	JARCC/CARIBROC UPGRADE	N/A	71,594									
TT800	INTEGRATED LOGISTICS SUPPORT	N/A	2,984			205			410			232
TT830	PRODUCTION ENGINEERING	N/A	7,512			638			440			400
TT900	INSTALLATION (NON-FMP)	N/A	8,905			397			1,008			890
	VARIOUS 1/	N/A	29,870									
TT990	INITIAL TRAINING	N/A				125						
	1/ The amount identified against this cost element reflects total prior year funding associated with cost elements no longer financed in FY 1997 and beyond.											
			137,151			**3,672**			**5,334**			**4,315**

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 2000

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
OTHER PROCUREMENT, NAVY/BA2-COMMUNICATIONS AND ELECTRONICS EQUIPMENT	Fleet Area Control and Surveillance Facility	42TT

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
TT175 RADAR BEACON DIGITIZER REP										
FY 98	8	125	NAWCAD ST INIGOES	11/97	C/OPTION	SENSIS MANASSAS, VA.	12/97	3/98	YES	
TT176 DISPLAY REPLACEMENT										
FY 98	22	116	NAWCAD ST INIGOES	11/97	C/OPTION	ALLIED SIGNAL TECH SERVICES CORP COLUMBIA, MD	3/98	3/99	YES	
FY99	8	124	NAWCAD ST INIGOES	11/98	C/OPTION	ALLIED SIGNAL TECH SERVICES CORP COLUMBIA, MD	1/99	1/00	YES	
FY00	17	124	NAWCAD ST INIGOES	11/99	C/OPTION	HONEYWELL COLUMBIA, MD	1/00	1/01	YES	
FY01	12	127	NAWCAD ST INIGOES	11/00	C/OPTION	HONEYWELL COLUMBIA, MD	1/01	1/02	YES	
TT177 FACTS 3200 RADAR INPUT CAPACITY UPGRADE										
FY 00	2	431	NAWCAD ST INIGOES	11/99	TBD	TBD	2/00	2/01	YES	
FY 01	2	437	NAWCAD ST INIGOES	11/00	TBD	TBD	2/01	2/02	YES	

D. REMARKS

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: FACSFAC TYPE MODIFICATION: CAPABILITY UPGRADE MODIFICATION TITLE: OCIRS/ECPS SUMMARY (TT145)

DESCRIPTION/JUSTIFICATION:

SUMMARY

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1998 & Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																				
PROCUREMENT																				
INSTALLATION KITS		7.847		1.312		0.506		0.401		0.889		0.544		0.559		0.513			0	12.571
INSTALLATION KITS - UNIT COST																			0	0.000
INSTALLATION KITS NONRECURRING																			0	0.000
EQUIPMENT																			0	0.000
EQUIPMENT NONRECURRING																			0	0.000
ENGINEERING CHANGE ORDERS																			0	0.000
DATA																			0	0.000
TRAINING EQUIPMENT																			0	0.000
SUPPORT EQUIPMENT																			0	0.000
OTHER																			0	0.000
OTHER																			0	0.000
OTHER																			0	0.000
INTERIM CONTRACTOR SUPPORT																			0	0.000
INSTALL COST	0	2.002	0	0.397	0	0.331	0	0.532	0	0.434	0	0.480	0	0.380	0	0.647	0	0.000	0	5.203
TOTAL PROCUREMENT		9.849		1.709		0.837		0.933		1.323		1.024		0.939		1.160		0.000		17.774

CLASSIFICATION: **UNCLASSIFIED**

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

MODELS OF SYSTEMS AFFECTED: FACSFAC MODIFICATION TITLE: OCIRS/ECPS SUMMARY (TT145)

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: N/A PRODUCTION LEADTIME: N/A
CONTRACT DATES: FY 1999: N/A FY 2000: N/A FY 2001: N/A
DELIVERY DATE: FY 1999: N/A FY 2000: N/A FY 2001: N/A

($ in Millions)

Cost:	Prior Years		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS		1.123																		1.123
FY 1998 EQUIPMENT		0.879																		0.879
FY 1999 EQUIPMENT				0.397																0.397
FY 2000 EQUIPMENT						0.331														0.331
FY 2001 EQUIPMENT								0.532												0.532
FY 2002 EQUIPMENT										0.434										0.434
FY 2003 EQUIPMENT												0.480								0.480
FY 2004 EQUIPMENT														0.380						0.380
FY 2005 EQUIPMENT																0.647				0.647
TO COMPLETE																				0.000

INSTALLATION SCHEDULE:

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

"The equipment and installation costs represented on this P-3A are for individual modification programs that do not exceed $5 million in either budget year or $10 million in all years."

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: FACSFAC TYPE MODIFICATION: RELIABILITY/MAINTAINABILITY MODIFICATION TITLE: RADAR BEACON DIGITIZER REPLACEMENT (TT175)

DESCRIPTION/JUSTIFICATION:

Replacement for current Radar Beacon Digitizers that are obsolete and do not work with the new radars.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: COTS

	FY 1998 & Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																				0.000
PROCUREMENT																				
INSTALLATION KITS																				0.000
INSTALLATION KITS - UNIT COST																				0.000
INSTALLATION KITS NONRECURRING																				0.000
EQUIPMENT	10	1.595																	10	1.595
EQUIPMENT NONRECURRING																				0.000
ENGINEERING CHANGE ORDERS																				0.000
DATA																				0.000
TRAINING EQUIPMENT																				0.000
SUPPORT EQUIPMENT																				0.000
OTHER																				0.000
OTHER																				0.000
OTHER																				0.000
INTERIM CONTRACTOR SUPPORT																				0.000
INSTALL COST	10	0.292	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	10	0.292
TOTAL PROCUREMENT		1.887		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		1.887

The total Quantity reflects the inventory objective for this item.

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

MODELS OF SYSTEMS AFFECTED: FACSFAC MODIFICATION TITLE: RADAR BEACON DIGITIZER REPLACEMENT (TT175)

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: 3 MONTHS PRODUCTION LEADTIME: 4 MONTHS
CONTRACT DATES: FY 1999: N/A FY 2000: N/A FY 2001: N/A
DELIVERY DATE: FY 1999: N/A FY 2000: N/A FY 2001: N/A

($ in Millions)

Cost:	Prior Years		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS	2	0.130																	2	0.130
FY 1998 EQUIPMENT	8	0.162																	8	0.162
FY 1999 EQUIPMENT																			0	0.000
FY 2000 EQUIPMENT																			0	0.000
FY 2001 EQUIPMENT																			0	0.000
FY 2002 EQUIPMENT																			0	0.000
FY 2003 EQUIPMENT																			0	0.000
FY 2004 EQUIPMENT																			0	0.000
FY 2005 EQUIPMENT																			0	0.000
TO COMPLETE																			0	0.000

INSTALLATION SCHEDULE:

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

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: FACSFAC TYPE MODIFICATION: CAPABILITY/MAINTAINABILITY MODIFICATION TITLE: DISPLAY REPLACEMENT (TT176)

DESCRIPTION/JUSTIFICATION:

Provides visual air traffic control display to controllers. Advanced technology display to replace obsolete, out of production display units.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: COTS

	FY 1998 & Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																				0.000
PROCUREMENT																				
INSTALLATION KITS																				0.000
INSTALLATION KITS - UNIT COST																				0.000
INSTALLATION KITS NONRECURRING																				0.000
EQUIPMENT	24	3.044	8	0.995	17	2.108	12	1.518	10	1.314							2	0.244	73	9.223
EQUIPMENT NONRECURRING		2.131																		2.131
ENGINEERING CHANGE ORDERS																				0.000
DATA																				0.000
TRAINING EQUIPMENT																				0.000
SUPPORT EQUIPMENT																				0.000
OTHER																				0.000
OTHER																				0.000
OTHER																				0.000
INTERIM CONTRACTOR SUPPORT																				0.000
INSTALL COST	2	0.050	0	0.000	30	0.677	17	0.234	12	0.220	10	0.187	0	0.000	0	0.000	2	0.038	73	1.406
TOTAL PROCUREMENT		5.225		0.995		2.785		1.752		1.534		0.187		0.000		0.000		0.282		12.760

The total Quantity reflects the inventory objective for this item.

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

MODELS OF SYSTEMS AFFECTED: FACSFAC MODIFICATION TITLE: DISPLAY REPLACEMENT (TT176)

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: 4 MONTHS PRODUCTION LEADTIME: 12 MONTHS
CONTRACT DATES: FY 1999: 1/99 FY 2000: 1/00 FY 2001: 1/01
DELIVERY DATE: FY 1999: 1/00 FY 2000: 1/01 FY 2001: 1/02

($ in Millions)

Cost:	Prior Years		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS	2	0.050																	2	0.050
FY 1998 EQUIPMENT					22	0.391													22	0.391
FY 1999 EQUIPMENT					8	0.286													8	0.286
FY 2000 EQUIPMENT							17	0.234											17	0.234
FY 2001 EQUIPMENT									12	0.220									12	0.220
FY 2002 EQUIPMENT											10	0.187							10	0.187
FY 2003 EQUIPMENT																			0	0.000
FY 2004 EQUIPMENT																			0	0.000
FY 2005 EQUIPMENT																			0	0.000
TO COMPLETE																	2	0.038	2	0.038

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	2	0	7	8	7	0	5	3	0	0	5	5	7	0	4	4	4	0	3	3	4	0	0	0	0	0	0	0	0	2	73
Out	2	0	0	0	0	15	9	5	1	0	5	5	7	0	4	4	4	0	3	3	4	0	0	0	0	0	0	0	0	2	73

"FY99 Installation funds reprogrammed for Higher Priority 42PN ACLS shipboard installation requirement. Funds restored in FY00 for Display Replacement Installation."

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: FACSFAC TYPE MODIFICATION: CAPABILITY UPGRADE MODIFICATION TITLE: FACTS 3200 CAPACITY UPGRADE (TT177)

DESCRIPTION/JUSTIFICATION:

Upgrade FACTS 3200 Radar Capacity from 10 to 30 sensors.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: COTS

	FY 1998 & Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																				0.000
PROCUREMENT																				
INSTALLATION KITS					2	0.862	2	0.874	2	0.900	2	0.910							8	3.546
INSTALLATION KITS - UNIT COST																				0.000
INSTALLATION KITS NONRECURRING																				0.000
EQUIPMENT																				0.000
EQUIPMENT NONRECURRING																				0.000
ENGINEERING CHANGE ORDERS																				0.000
DATA																				0.000
TRAINING EQUIPMENT																				0.000
SUPPORT EQUIPMENT																				0.000
OTHER																				0.000
OTHER																				0.000
OTHER																				0.000
INTERIM CONTRACTOR SUPPORT																				0.000
INSTALL COST	0	0.000	0	0.000	0	0.000	2	0.124	2	0.125	2	0.121	2	0.126	0	0.000	0	0.000	8	0.496
TOTAL PROCUREMENT		0.000		0.000		0.862		0.998		1.025		1.031		0.126		0.000		0.000		4.042

The total Quantity reflects the inventory objective for this item.

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

MODELS OF SYSTEMS AFFECTED: FACSFAC MODIFICATION TITLE: FACTS 3200 CAPACITY UPGRADE (TT177)

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: Navy Field Activity/Government Software
ADMINISTRATIVE LEADTIME: 5 Months PRODUCTION LEADTIME: 12 Months
CONTRACT DATES: FY 1999: N/A FY 2000: 2/00 FY 2001: 2/01
DELIVERY DATE: FY 1999: N/A FY 2000: 2/01 FY 2001: 2/02

($ in Millions)

Cost:	Prior Years		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																			0	0.000
FY 1998 EQUIPMENT																			0	0.000
FY 1999 EQUIPMENT																			0	0.000
FY 2000 EQUIPMENT							2	0.124											2	0.124
FY 2001 EQUIPMENT									2	0.125									2	0.125
FY 2002 EQUIPMENT											2	0.121							2	0.121
FY 2003 EQUIPMENT													2	0.126					2	0.126
FY 2004 EQUIPMENT																			0	0.000
FY 2005 EQUIPMENT																			0	0.000
TO COMPLETE																			0	0.000

INSTALLATION SCHEDULE:

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

BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: February 2000	
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY**							P-1 ITEM NOMENCLATURE **IDENTIFICATION SYSTEMS 285100**					
Program Element for Code B Items:							Other Related Program Elements **NOT APPLICABLE**					
	Prior Years	ID Code		FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)	**$110.4**			**$17.5**	**$9.2**	**$14.3**	**$19.1**	**$24.6**	**$26.7**	**$25.1**	**Cont**	**Cont**

DESCRIPTION: The Identification Systems program funds the following procurements: AN/UPX-37 Digital Interrogator (DI), Digital Transponder (DT), Combat Information Center (CIC), AN/UPX-29(V) Improvements, AN/UPM-155 Radar Test Set, and AN/UPX-34 Shipboard Advanced Radar Target Identification Systems (SARTIS)

The Air Traffic Control System, Identification Friend or Foe, MK XII System (AIMS) is a DOD directed tri-service program designated to provide a universal air traffic control radar beacon system compatible with the National Airspace Program. It provides a secure identification system for military use on all major combatant ships, selected auxiliaries, patrol craft, and selected Coast Guard ships by allowing all friendly forces to identify each other and neutral forces. The Air Traffic Control Radar System supports several missions such as Anti-Airwarfare, Aerial Bombardment, and Naval Attack.

The purpose of the AN/UPX-37 Digital Interrogator (DI), Common Transponder (CXP), and Combat Information Center (CIC) is to replace 20-25 year old equipment with a Reliability and Maintenance enhancement through the use of COTS/NDI form/fit/function equipment. These new systems will be enhanced with state-of-the-art technology and open systems architecture, and will be purchased with existing MK XII Improvements funding. The DI, CXP, and CIC systems have been included in the POM, and changes in FY99 realign funding to support the new systems.

The AN/UPX-29(V) Improvements program provides field changes to the AN/UPX-29(V) systems for improved reliability and maintenance.

The AN/UPX-24(V) Field Change 5 provides open systems architecture for increased expansion capability. The AN/UPX-24(V) Mode S provides improved Shipboard Combat Identification and increases the probability of identification of neutral aircraft.

The AN/UPM-155 Radar Test Set replaces the aging AN/UPM-136 and the AN/UPM-137A test sets as the prime support equipment for the MK-XII system in all services. It is intended to give the Fleet modern equipment that will allow more accurate alignments in less time, to increase the system's operational availability and reduce down time.

The purpose of the SARTIS is to provide non-cooperative target recognition of hostile and neutral aircraft as well as identifying cooperative military aircraft for air defense.

FY99 funds the procurement of 60 AN/UPX-37 Digital Interrogators in FY99 and 40 AN/UPX-37 Digital Interrogators in FY00.
FY00 funds the procurement of 10 CommonTransponders.
FY01 funds the procurement of 70 AN/UPX-37 Digital Interrogators and 36 CommonTransponders.

Installing Agent: Shipyard, Alteration Teams (AIT). When installation to be made: ROH/RAV/SRA.
Type Ship to receive equipment: An IFF system is on every ship in the fleet. SARTIS will be installed on CG-47 class.

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System		DATE: February 2000
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY**	**BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **IDENTIFICATION SYSTEMS NAVAIRSYSCOM**		**42MT**

TOTAL COST IN THOUSANDS OF DOLLARS

COST CODE	ELEMENT OF COST	ID Code	Prior Years				FY 1999			FY 2000			FY 2001		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
MT003	AN/UPM-155 MK XII RADAR TEST SET	A	23,693												
MT016	MK XII AIMS IMPROVEMENTS	A	16,679												
MT024	AN/UPX-25 INTERROGATOR SET (USCG)	A	2,716												
MT027	AN/UPX-27 HARDWARE	A	150												
MT031	MK XII DIGITAL INTERROGATOR	A	2,779				100	* 72	7,185				70	72	5,067
MT110	SARTIS	B	7,173												
MT700	AN/UPX-29(V) IMPROVEMENTS (N865)	A	17,619												
MT032	MK XII COMMON TRANSPONDER	A								10	150	1,500	36	45	1,620
MT033	MK XII CIC UPGRADE	A													
MT034	AN/UPX-24(V) FC5	A													
MT035	AN/UPX-24(V) Mode S	A													
MT800	INTEGRATED LOGISTICS SUPPORT	N/A	6,069						1,597			1,143			1,362
MT830	PRODUCTION ENGINEERING	N/A	13,668						3,513			2,178			2,865
MT840	QUALITY ASSURANCE	N/A	60												
MT850	PRODUCT IMPROVEMENT	N/A	398						1,611			586			519
MT860	ACCEPTANCE TEST & EVALUATION	N/A	4,296						975			455			436
MT870	DEPOT	N/A	633												
MT900	INSTALLATION OF EQUIPMENT (NON-FMP)	N/A	5,511						2,284			1,778			1,499
MT910	INSTALLATION OF EQUIPMENT (FMP)	N/A							250			695			280
MT990	INITIAL TRAINING	N/A	306						115			836			632
	VARIOUS 1/		8,616												
	*unit cost reflects average of FY99 and FY00 contract options														
			110,366						**17,530**			**9,171**			**14,280**

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

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE: February 2000

B. APPROPRIATION/BUDGET ACTIVITY		C. P-1 ITEM NOMENCLATURE	SUBHEAD
OTHER PROCUREMENT, NAVY	BA2 - Communications and Electronic Equipment	IDENTIFICATION SYSTEMS NAVAIRSYSCOM	42MT

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
MT031 MK XII DI *										
FY-99	60	68.8	NAVAIR	Jan-98	C/FP	HAZELTINE, GREENLAWN, NY	May-99	Apr-00	YES	
FY-99	40	74.9	NAVAIR	Oct-99	C/FP	HAZELTINE, GREENLAWN, NY	Jan-00	Dec-00	YES	
FY-01	70	72.4	NAVAIR	Oct-00	C/FP	HAZELTINE, GREENLAWN, NY	Dec-00	Nov-01	YES	
MT032 MK XII CXP										
FY-00	10	150.0	NAVAIR	Jun-99	C/FPI	TBD	Mar-00	Mar-01	NO	
FY-01	36	45.0	NAVAIR	Oct-00	C/FPI	TBD	Mar-01	Mar-02	NO	

D. REMARKS

* MT031 FY98 FIRST ARTICLE TESTING PROCUREMENT LEADTIME WILL BE EIGHT MONTHS VERSUS CONTRACTUAL LEADTIME OF ELEVEN MONTHS.

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AN/UPX-27 TYPE MODIFICATION: Reliability MODIFICATION TITLE: MK XII IMPROVEMENTS AN/UPX-27 FC 10 (MT016)

DESCRIPTION/JUSTIFICATION:

This modification enables the system to interface with new ships systems required for fleet operations.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **Fielded**

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.000
PROCUREMENT																					0	0.000
INSTALLATION KITS	674	0.860																			674	0.860
INSTALLATION KITS - UNIT COST																					0	0.000
INSTALLATION KITS NONRECURRING																					0	0.000
EQUIPMENT																					0	0.000
EQUIPMENT NONRECURRING																					0	0.000
ENGINEERING CHANGE ORDERS																					0	0.000
DATA																					0	0.000
TRAINING EQUIPMENT																					0	0.000
SUPPORT EQUIPMENT																					0	0.000
OTHER																					0	0.000
OTHER																					0	0.000
OTHER																					0	0.000
INTERIM CONTRACTOR SUPPORT																					0	0.000
INSTALL COST	541	0.541	67	0.067	66	0.066	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	674	0.674
TOTAL PROCUREMENT		1.401		0.067		0.066		0.000		0.000		0.000		0.000		0.000		0.000		0.000		1.534

NOTE: TOTAL QUANTITY REFLECTS THE INVENTORY OBJECTIVE FOR THIS ITEM.

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

MODELS OF SYSTEMS AFFECTED: AN/UPX-27 MODIFICATION TITLE: MK XII IMPROVEMENTS AN/UPX-27 FC 10 (MT016)

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: 9 Months PRODUCTION LEADTIME: 12 Months
CONTRACT DATES: FY 1999: N/A FY 2000: N/A
DELIVERY DATE: FY 1999: N/A FY 2000: N/A

($ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS	456	0.456	85	0.085	67	0.067	66	0.066															674	0.674
FY 1997 EQUIPMENT																							0	0.000
FY 1998 EQUIPMENT																							0	0.000
FY 1999 EQUIPMENT																							0	0.000
FY 2000 EQUIPMENT																							0	0.000
FY 2001 EQUIPMENT																							0	0.000
FY 2002 EQUIPMENT																							0	0.000
FY 2003 EQUIPMENT																							0	0.000
FY 2004 EQUIPMENT																							0	0.000
FY 2005 EQUIPMENT																							0	0.000
TO COMPLETE																							0	0.000

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	674	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	674
Out	608	17	17	16	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	674

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AN/UPA-59B TYPE MODIFICATION: Reliability MODIFICATION TITLE: MK XII IMPROVEMENT AN/UPA-59B FC3 (MT016)

DESCRIPTION/JUSTIFICATION:

This field change modifies decoder group AN/UPA-59B to use the gated range strobe from indicator group AN/SPA-25E and G indicators.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **Fielded**

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.000
PROCUREMENT																					0	0.000
INSTALLATION KITS	838	5.872																			838	5.872
INSTALLATION KITS - UNIT COST																					0	0.000
INSTALLATION KITS NONRECURRING																					0	0.000
EQUIPMENT																					0	0.000
EQUIPMENT NONRECURRING																					0	0.000
ENGINEERING CHANGE ORDERS																					0	0.000
DATA																					0	0.000
TRAINING EQUIPMENT																					0	0.000
SUPPORT EQUIPMENT																					0	0.000
OTHER																					0	0.000
OTHER																					0	0.000
OTHER																					0	0.000
INTERIM CONTRACTOR SUPPORT																					0	0.000
INSTALL COST	540	0.270	205	0.103	93	0.046	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	838	0.419
TOTAL PROCUREMENT		6.142		0.103		0.046		0.000		0.000		0.000		0.000		0.000		0.000		0.000		6.291

NOTE: TOTAL QUANTITY REFLECTS THE INVENTORY OBJECTIVE FOR THIS ITEM.

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

MODELS OF SYSTEMS AFFECTED: AN/UPA-59B MODIFICATION TITLE: MK XII IMPROVEMENTS AN/UPA-59B FC 3 (MT016)

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: 7 Months PRODUCTION LEADTIME: 12 Months
CONTRACT DATES: FY 1999: N/A FY 2000: N/A
DELIVERY DATE: FY 1999: N/A FY 2000: N/A

($ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS	406	0.203	134	0.067	205	0.103	24	0.011															769	0.384
FY 1997 EQUIPMENT							69	0.035															69	0.035
FY 1998 EQUIPMENT																							0	0.000
FY 1999 EQUIPMENT																							0	0.000
FY 2000 EQUIPMENT																							0	0.000
FY 2001 EQUIPMENT																							0	0.000
FY 2002 EQUIPMENT																							0	0.000
FY 2003 EQUIPMENT																							0	0.000
FY 2004 EQUIPMENT																							0	0.000
FY 2005 EQUIPMENT																							0	0.000
TO COMPLETE																							0	0.000

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999 1	2	3	4	FY 2000 1	2	3	4	FY 2001 1	2	3	4	FY 2002 1	2	3	4	FY 2003 1	2	3	4	FY 2004 1	2	3	4	FY 2005 1	2	3	4	TC	TOTAL
In	838	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	838
Out	745	23	23	23	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	838

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AN/UPA-59A TYPE MODIFICATION: Reliability MODIFICATION TITLE: MK XII IMPROVEMENT AN/UPA-59A FC 8 (MT016)

DESCRIPTION/JUSTIFICATION:

This change is required for the decoder group AN/UPA-59A to properly interface with the AN/SPA-25E and G indicators.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **Fielded**

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.000
PROCUREMENT																					0	0.000
INSTALLATION KITS	1149	7.469																			1149	7.469
INSTALLATION KITS - UNIT COST																					0	0.000
INSTALLATION KITS NONRECURRING																					0	0.000
EQUIPMENT																					0	0.000
EQUIPMENT NONRECURRING																					0	0.000
ENGINEERING CHANGE ORDERS																					0	0.000
DATA																					0	0.000
TRAINING EQUIPMENT																					0	0.000
SUPPORT EQUIPMENT																					0	0.000
OTHER																					0	0.000
OTHER																					0	0.000
OTHER																					0	0.000
INTERIM CONTRACTOR SUPPORT																					0	0.000
INSTALL COST	638	3.508	61	0.335	120	0.583	170	0.853	160	0.880	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	1149	6.159
TOTAL PROCUREMENT		10.977		0.335		0.583		0.853		0.880		0.000		0.000		0.000		0.000		0.000		13.628

NOTE: TOTAL QUANTITY REFLECTS THE INVENTORY OBJECTIVE FOR THIS ITEM.

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

MODELS OF SYSTEMS AFFECTED: AN/UPA-59A MODIFICATION TITLE: MK XII IMPROVEMENTS AN/UPA-59A FC 8 (MT016)

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: 4 Months PRODUCTION LEADTIME: 6 Months
CONTRACT DATES: FY 1999: N/A FY 2000: N/A
DELIVERY DATE: FY 1999: N/A FY 2000: N/A

($ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS	607	3.339	31	0.169	61	0.335	120	0.583	170	0.853	160	0.880											1149	6.159
FY 1997 EQUIPMENT																							0	0.000
FY 1998 EQUIPMENT																							0	0.000
FY 1999 EQUIPMENT																							0	0.000
FY 2000 EQUIPMENT																							0	0.000
FY 2001 EQUIPMENT																							0	0.000
FY 2002 EQUIPMENT																							0	0.000
FY 2003 EQUIPMENT																							0	0.000
FY 2004 EQUIPMENT																							0	0.000
FY 2005 EQUIPMENT																							0	0.000
TO COMPLETE																							0	0.000

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	1149	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1149
Out	699	30	30	30	30	43	43	42	42	40	40	40	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1149

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AN/UPX-27 TYPE MODIFICATION: Reliability MODIFICATION TITLE: AN/UPX-37 DIGITAL INTERROGATOR (MT031)

DESCRIPTION/JUSTIFICATION:

Current AN/UPX-27 is late 60's technology and no longer meets operational availability requirements due to use beyond its intended life cycle. High cost of ownership due to parts obsolescence, frequent labor intensive alignments and poor reliability continue to be problems associated with the current system. Further, the current system suffers upgrade integration problems due to its dated architecture and offers no growth capabilities. A more reliable system with the same functionality is required.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **Milestone III decision June 1998.**

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.000
PROCUREMENT																					0	0.000
INSTALLATION KITS																					0	0.000
INSTALLATION KITS - UNIT COST																					0	0.000
INSTALLATION KITS NONRECURRING																					0	0.000
EQUIPMENT			10	2.779	100	6.963	0	0.000	70	5.067	60	4.417	67	5.026	74	5.667	89	6.959	140	11.177	610	48.055
EQUIPMENT NONRECURRING					VAR	0.222															VAR	0.222
ENGINEERING CHANGE ORDERS																					0	0.000
DATA																					0	0.000
TRAINING EQUIPMENT																					0	0.000
SUPPORT EQUIPMENT																					0	0.000
OTHER																					0	0.000
OTHER																					0	0.000
OTHER																					0	0.000
INTERIM CONTRACTOR SUPPORT																					0	0.000
INSTALL COST	0	0.000	0	0.000	10	0.180	50	0.250	50	0.395	70	0.358	60	0.317	67	0.360	74	0.407	229	1.111	610	3.378
TOTAL PROCUREMENT		0.000		2.779		7.365		0.250		5.462		4.775		5.343		6.027		7.366		12.288		51.655

Ten (10) first article units are being procured in FY98.

NOTE: TOTAL QUANTITY REFLECTS THE INVENTORY OBJECTIVE PLUS TEN FIRST ARTICLE UNITS WHICH WILL NOT BE CONVERTED TO PRODUCTION UNITS.

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

MODELS OF SYSTEMS AFFECTED: AN/UPX-27 MODIFICATION TITLE: AN/UPX-37 DIGITAL INTERROGATOR (MT031)

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **AIT**
ADMINISTRATIVE LEADTIME: *** Months PRODUCTION LEADTIME: 11 Months
CONTRACT DATES: FY 1999: May-99 FY 2000: Jan-00 FY 2001: Dec-00
DELIVERY DATE: FY 1999: Apr-00 FY 2000: Dec-00 FY 2001: Nov-01

($ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																							0	0.000
FY 1997 EQUIPMENT																							0	0.000
FY 1998 EQUIPMENT							10	0.180															10	0.180
FY 1999 EQUIPMENT									50	0.250	50	0.395											100	0.645
FY 2000 EQUIPMENT																							0	0.000
FY 2001 EQUIPMENT													70	0.358									70	0.358
FY 2002 EQUIPMENT															60	0.317							60	0.317
FY 2003 EQUIPMENT																	67	0.360					67	0.360
FY 2004 EQUIPMENT																			74	0.407			74	0.407
FY 2005 EQUIPMENT																					89	0.499	89	0.499
TO COMPLETE																					140	0.612	140	0.612

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	5	5	0	0	0	30	30	20	18	2	0	18	18	17	17	15	15	15	15	17	17	17	16	19	19	18	18	229	610
Out	0	0	0	5	5	0	0	20	30	10	20	18	2	18	18	17	17	15	15	15	15	17	17	17	16	19	19	18	18	229	610

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*** 10 MONTHS FOR FY 98; 8 MONTHS FOR FY 99; 4 MONTHS FOR FY00

FY99 FUNDS ARE USED TO PROCURE 60 DIGITAL INTERROGATORS IN FY99 AND 40 DIGITAL INTERROGATORS IN FY00 FOR A GRAND TOTAL OF 100 UNITS.

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: CGs TYPE MODIFICATION: Upgrade MODIFICATION TITLE: SARTIS (MT110)

DESCRIPTION/JUSTIFICATION:

Congressional plus-up to complete production/deployment for remaining 22 cruisers and 3 shore sites.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **Contract award January 98**

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.000
PROCUREMENT																					0	0.000
INSTALLATION KITS																					0	0.000
INSTALLATION KITS - UNIT COST																					0	0.000
INSTALLATION KITS NONRECURRING																					0	0.000
EQUIPMENT	25	7.173																			25	7.173
EQUIPMENT NONRECURRING																					0	0.000
ENGINEERING CHANGE ORDERS																					0	0.000
DATA																					0	0.000
TRAINING EQUIPMENT																					0	0.000
SUPPORT EQUIPMENT																					0	0.000
OTHER																					0	0.000
OTHER																					0	0.000
OTHER																					0	0.000
INTERIM CONTRACTOR SUPPORT																					0	0.000
INSTALL COST	0	0.000	0	0.000	AP	0.250	8	0.875	2	0.280	0	0.000	0	0.000	0	0.000	0	0.000	15	2.339	25	3.744
TOTAL PROCUREMENT		7.173		0.000		0.250		0.875		0.280		0.000		0.000		0.000		0.000		2.339		10.917

NOTE: TOTAL QUANTITY REFLECTS THE INVENTORY OBJECTIVE FOR THIS ITEM.

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

MODELS OF SYSTEMS AFFECTED: CGs MODIFICATION TITLE: SARTIS (MT110)

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: PRODUCTION LEADTIME: 12 Months
CONTRACT DATES: FY 1999: N/A FY 2000: N/A
DELIVERY DATE: FY 1999: N/A FY 2000: N/A

($ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																							0	0.000
FY 1997 EQUIPMENT							AP	0.250	8	0.875	2	0.280									15	2.339	25	3.744
FY 1998 EQUIPMENT																							0	0.000
FY 1999 EQUIPMENT																							0	0.000
FY 2000 EQUIPMENT																							0	0.000
FY 2001 EQUIPMENT																							0	0.000
FY 2002 EQUIPMENT																							0	0.000
FY 2003 EQUIPMENT																							0	0.000
FY 2004 EQUIPMENT																							0	0.000
FY 2005 EQUIPMENT																							0	0.000
TO COMPLETE																							0	0.000

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	1	6	6	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
Out	0	0	0	0	0	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	25

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: IDENTIFICATION SYSTEMS TYPE MODIFICATION: Maintenance/Reliability MODIFICATION TITLE: AN/UPX-29 IMPROVEMENTS
OE-120/UPX FC 1 (MT700)

DESCRIPTION/JUSTIFICATION:

Adds capability of detecting interrogator side lobe suppression trigger loss from interrogator set which will result in the automatic inhibiting of the ISLS pulse from the transmitted pulse sequence. Also replaces obsolete microprocessor and improves build-in test equipment performance.

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

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.000
PROCUREMENT																					0	0.000
INSTALLATION KITS	53	0.963																			53	0.963
INSTALLATION KITS - UNIT COST		0.018																			0	0.000
INSTALLATION KITS NONRECURRING																					0	0.000
EQUIPMENT																					0	0.000
EQUIPMENT NONRECURRING																					0	0.000
ENGINEERING CHANGE ORDERS																					0	0.000
DATA																					0	0.000
TRAINING EQUIPMENT																					0	0.000
SUPPORT EQUIPMENT																					0	0.000
OTHER																					0	0.000
OTHER																					0	0.000
OTHER																					0	0.000
INTERIM CONTRACTOR SUPPORT																					0	0.000
INSTALL COST	45	0.636	8	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	53	0.636
TOTAL PROCUREMENT		1.599		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		1.599

NOTE: TOTAL QUANTITY REFLECTS THE INVENTORY OBJECTIVE FOR THIS ITEM.

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

MODELS OF SYSTEMS AFFECTED: IDENTIFICATION SYSTEMS MODIFICATION TITLE: AN/UPX-29 IMPROVEMENTS 0E-120/UPX FC 1 (MT700)

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **AIT**
ADMINISTRATIVE LEADTIME: N/A PRODUCTION LEADTIME: N/A
CONTRACT DATES: FY 1999: N/A FY 2000: N/A
DELIVERY DATE: FY 1999: N/A FY 2000: N/A

($ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS	35	0.636	10	**	8	**																	53	0.636
FY 1997 EQUIPMENT																							0	0.000
FY 1998 EQUIPMENT																							0	0.000
FY 1999 EQUIPMENT																							0	0.000
FY 2000 EQUIPMENT																							0	0.000
FY 2001 EQUIPMENT																							0	0.000
FY 2002 EQUIPMENT																							0	0.000
FY 2003 EQUIPMENT																							0	0.000
FY 2004 EQUIPMENT																							0	0.000
FY 2005 EQUIPMENT																							0	0.000
TO COMPLETE																							0	0.000

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53
Out	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53

** Funding provided for installations by NAVSEA

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CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: IDENTIFICATION SYSTEMS TYPE MODIFICATION: Maintenance/Reliability MODIFICATION TITLE: AN/UPX-29 IMPROVEMENTS
AN/UPX-24(V) FC4 (MT700)

DESCRIPTION/JUSTIFICATION:

Improve IFF Target Processing, improved interface to combat system and by-pass operations (back up mode to the main processor).

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

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.000
PROCUREMENT																					0	0.000
INSTALLATION KITS	52	4.015																			52	4.015
INSTALLATION KITS - UNIT COST		0.258																			0	0.000
INSTALLATION KITS NONRECURRING																					0	0.000
EQUIPMENT																					0	0.000
EQUIPMENT NONRECURRING																					0	0.000
ENGINEERING CHANGE ORDERS																					0	0.000
DATA																					0	0.000
TRAINING EQUIPMENT																					0	0.000
SUPPORT EQUIPMENT																					0	0.000
OTHER																					0	0.000
OTHER																					0	0.000
OTHER																					0	0.000
INTERIM CONTRACTOR SUPPORT																					0	0.000
INSTALL COST	1	0.051	0	0.000	30	1.409	11	0.495	4	0.184	6	0.272	0	0.000	0	0.000	0	0.000	0	0.000	52	2.411
TOTAL PROCUREMENT		4.066		0.000		1.409		0.495		0.184		0.272		0.000		0.000		0.000		0.000		6.426

NOTE: TOTAL QUANTITY REFLECTS THE INVENTORY OBJECTIVE FOR THIS ITEM.

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

MODELS OF SYSTEMS AFFECTED: IDENTIFICATION SYSTEMS MODIFICATION TITLE: AN/UPX-29 IMPROVEMENTS AN/PX-24(V) FC4 (MT700)

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: N/A PRODUCTION LEADTIME: N/A
CONTRACT DATES: FY 1999: N/A FY 2000: N/A
DELIVERY DATE: FY 1999: N/A FY 2000: N/A

($ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS			1	0.051			30	1.409	11	0.495	4	0.184	6	0.272									52	2.411
FY 1997 EQUIPMENT																							0	0.000
FY 1998 EQUIPMENT																							0	0.000
FY 1999 EQUIPMENT																							0	0.000
FY 2000 EQUIPMENT																							0	0.000
FY 2001 EQUIPMENT																							0	0.000
FY 2002 EQUIPMENT																							0	0.000
FY 2003 EQUIPMENT																							0	0.000
FY 2004 EQUIPMENT																							0	0.000
FY 2005 EQUIPMENT																							0	0.000
TO COMPLETE																							0	0.000

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52
Out	1	8	8	8	6	2	3	6	0	3	1	0	0	1	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: IDENTIFICATION SYSTEMS TYPE MODIFICATION: Maintenance/Reliability MODIFICATION TITLE: MK XII COMMON TRANSPONDER (MT032)

Current MK-XII transponder systems no longer meet operational Reliability and Maintainability (R&M) requirements due to use beyond their intended life cycle and suffer high cost of ownership due to parts obsolescence. Current surface ship MK-XII transponders will be replaced to continue incremental digital and R&M upgrades to the MK-XII IFF System. The common transponder will use an open systems architecture to allow future growth as requirements emerge.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: **Milestone III scheduled for October 2002**

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.000
PROCUREMENT																					0	0.000
INSTALLATION KITS																					0	0.000
INSTALLATION KITS - UNIT COST																					0	0.000
INSTALLATION KITS NONRECURRING																					0	0.000
EQUIPMENT							10	1.500	36	1.620	35	1.602	44	2.052	53	2.524	30	1.458	209	10.374	417	21.130
EQUIPMENT NONRECURRING																					0	0.000
ENGINEERING CHANGE ORDERS																					0	0.000
DATA																					0	0.000
TRAINING EQUIPMENT																					0	0.000
SUPPORT EQUIPMENT																					0	0.000
OTHER																					0	0.000
OTHER																					0	0.000
OTHER																					0	0.000
INTERIM CONTRACTOR SUPPORT																					0	0.000
INSTALL COST	0	0.000	0	0.000	0	0.000	0	0.000	10	0.040	36	0.072	35	0.071	44	0.092	53	0.113	239	0.518	417	0.906
TOTAL PROCUREMENT		0.000		0.000		0.000		1.500		1.660		1.674		2.123		2.616		1.571		10.892		22.036

NOTE: TOTAL QUANTITY REFLECTS THE INVENTORY OBJECTIVE PLUS FIVE FIRST ARTICLE UNITS WHICH WILL NOT BE CONVERTED TO PRODUCTION UNITS.

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

MODELS OF SYSTEMS AFFECTED: IDENTIFICATION SYSTEMS MODIFICATION TITLE: MK XII COMMON TRANSPONDER (MT032)

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **AIT**
ADMINISTRATIVE LEADTIME: 6 MONTHS PRODUCTION LEADTIME: 12 MONTHS
CONTRACT DATES: FY 1999: N/A FY 2000: Mar-00 FY 2001: Mar-01
DELIVERY DATE: FY 1999: N/A FY 2000: Mar-01 FY 2001: Mar-02

($ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																							0	0.000
FY 1997 EQUIPMENT																							0	0.000
FY 1998 EQUIPMENT																							0	0.000
FY 1999 EQUIPMENT																							0	0.000
FY 2000 EQUIPMENT											10	0.040											10	0.040
FY 2001 EQUIPMENT													36	0.072									36	0.072
FY 2002 EQUIPMENT															35	0.071							35	0.071
FY 2003 EQUIPMENT																	44	0.092					44	0.092
FY 2004 EQUIPMENT																			53	0.113			53	0.113
FY 2005 EQUIPMENT																					30	0.065	30	0.065
TO COMPLETE																					209	0.453	209	0.453

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	0	4	3	3	0	12	12	12	0	12	12	11	0	15	15	14	0	18	18	17	239	417
Out	0	0	0	0	0	0	0	0	0	0	4	3	3	0	12	12	12	0	12	12	11	0	15	15	14	0	18	18	17	239	417

BUDGET ITEM JUSTIFICATION SHEET

DATE February 2000

APPROPRIATION/BUDGET ACTIVITY
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE
ID SYSTEMS-SABER BLI 2851

SUBHEAD
52MT

	PY		FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY												
COST (in millions)				**$0.0***	**$0.0***							

PROGRAM COVERAGE: Procurement funding for this program has been zeroed . *FY99 funding $43K, FY00 funding $1K

JUSTIFICATION OF BUDGET YEAR REQUIREMENTS: The Situational Awareness Beacon with Reply (SABER) system provides critical battlefield/operating area situational awareness and friendly ID capabilities by uniting GPS and communications technologies. The SABER system consists of a GPS receiver and two-way radio capable of Over-The-Horizon (OTH) and Line-Of-Sight (LOS) secure and no secure communications, plus a Collection of Broadcast From Remote Assets (COBRA) transmitter. The GPS receiver provides an accurate position of the user which is broadcast over the various RF links fc reception by other SABER beacons. When a correctly encoded interrogation signal is received by the SABER, it transmits a reply via the radio of the users identification, position, heading, and speed. The interrogating system can be any member of the user's command and control structure. Additionally, SABER-equipped units who are preparing to launch an attack will send an intent-to-shoot LOS transmission indicating the target position and a kill radius. All SABER units on the network will compare the area with their own position. If an overlap exists, a "Don't Shoot" reply is sent to prevent fratricide.

IDENT CODE: B

BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: February 2000	
APPROPRIATION/BUDGET ACTIVITY: **OTHER PROCUREMENT, NAVY**							P-1 ITEM NOMENCLATURE: **SURFACE IDENTIFICATON SYSTEMS** **NARM # 285600** **42DB**					
Program Element for Code B Items:							Other Related Program Elements: **Not Applicable**					
	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)	**$13.1**	A	**$0.0**	**$2.6**	**$0.6**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**		

DESCRIPTION:

Surface Identification Systems funds procurement of the AN/SLQ-20(B) which provides a greater capability than the obsolete AN/SLQ-20A; Auto-ID prototype upgrades; and the installation of Shipboard Advanced Radar Target Identification System (SARTIS) AN/UPX-34 radar track discriminator ruggedized prototypes.

The AN/SLQ-20(B) capability is for AEGIS CG Class ships. SARTIS is Non-Cooperative Target Recognition (NCTR) System for AEGIS CG Class ships.

FY 1999 provides funding to adapt seven (7) AN/SLQ-20(B) systems which were procured for AEGIS DDG Class ships to systems for AEGIS CG Class ships (from AN/SPS-67 to AN/SPS-49 Radar Antenna Pedestals). FY 1999 funds will also install three (3) of the previously procured units.

FY 2000 provides funding to install the remaining four (4) of the previously procured units.

Installing Agent: Alteration Installation Team (AIT)
When Installation to be made: N/A
Ships or facilities to receive the equipment: CG-47 Class and CV/CVN Class

BUDGET ITEM JUSTIFICATION SHEET FOR AGGREGATED ITEMS P-40a							DATE: February 2000					
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY**							P-1 ITEM NOMENCLATURE **SURFACE IDENTIFICATION SYSTEMS**					
Procurement Items	ID Code	Prior Years	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
DB011 AN/SLQ-20(B)	A											
QTY		**7**										**7**
FUNDING		**$10,920**		**$435**								**$11,355**
* OTHER COSTS		**$2,137**		**$2,156**	**$587**							**$4,880**
TOTAL		**$13,057**		**$2,591**	**$587**							**$16,235**

* The amount identified against this cost element reflects total prior years funding associated with cost elements no longer financed in FY 1998 and beyond.

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System		DATE: February 2000
APPROPRIATION /BUDGET ACTIVITY **Other Procurement, Navy**	ID Code **A**	P-1 ITEM NOMENCLATURE/SUBHEAD **Surface Identification Systems 42DB**	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS Prior Years	FY 1998			FY 1999			FY 2000			FY 2001		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
DB010	AN/UPX-34 SARTIS	A	24												
DB011	AN/SLQ-20(B) NOTE: 1	A	10,920						435						
DB013	AUTO-ID UPGRADE	A	1,100												
DB800	INTEGRATED LOGISTICS SUPPORT	N/A	261						50						
DB830	PRODUCTION ENGINEERING	N/A	288						1,585						
DB840	QUALITY ASSURANCE	N/A	53												
DB860	ACCEPTANCE, TEST & EVALUATION	N/A													
DB900	INSTALLATION (NON-FMP)	N/A							29						
DB910	INSTALLATION (FMP)	N/A	411						492			587			
DB990	INITIAL TRAINING	N/A													
	NOTE: 1 - Related RDT&E Elements W0676 Improved ID Developments														
			13,057			**0**			**2,591**			**587**			**0**

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

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UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 2000

B. APPROPRIATION/BUDGET ACTIVITY		C. P-1 ITEM NOMENCLATURE	SUBHEAD
Other Procurement, Navy	BA-2 Communications and Electronics Equipment	Surface Identification Systems	42DB

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
DB011 AN/SLQ-20(B) EW SYSTEM UPGRADE										
FY95	2	2,061.0	SPAWARSYSCEN San Diego, CA	12/96	C/FP	SPAWARSYSCEN San Diego, CA	05/97	3/99	YES	
FY96	5	1,359.6	SPAWARSYSCEN San Diego, CA	12/96	C/OPTION	SPAWARSYSCEN San Diego, CA	05/97	6/99	YES	

D. REMARKS

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: SURFACE ID TYPE MODIFICATION: UPGRADE MODIFICATION TITLE: AN/SLQ-20(B) - DB011

DESCRIPTION/JUSTIFICATION:

Improves the capacity of the Vietnam-era AN/SLQ-20A EW System for AEGIS class ships.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E	2	23.600																			2	23.600
PROCUREMENT																						
INSTALLATION KITS																						
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						
EQUIPMENT	7	8.225																			7	8.225
EQUIPMENT NONRECURRING		2.695				0.435																3.130
ENGINEERING CHANGE ORDERS																						
DATA																						
TRAINING EQUIPMENT																						
SUPPORT EQUIPMENT																						
OTHER																						
OTHER																						
OTHER																						
INTERIM CONTRACTOR SUPPORT																						
INSTALL COST	AP	0.035			3	0.521	4	0.587													7	1.143
TOTAL PROCUREMENT		10.955				0.956		0.587														12.498

Total I/O: 19 Systems.

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

MODELS OF SYSTEMS AFFECTED: SURFACE ID MODIFICATION TITLE: AN/SLQ-20(B) - DB011

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: AIT
ADMINISTRATIVE LEADTIME: N/A PRODUCTION LEADTIME: N/A
CONTRACT DATES: FY 1999: N/A FY 2000: N/A
DELIVERY DATE: FY 1999: N/A FY 2000: N/A

($ in Millions)

Cost:	Prior Years		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS	AP	0.035					3	0.521	4	0.587													7	1.143
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT																								
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
FY 2004 EQUIPMENT																								
FY 2005 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE:

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

BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: February 2000	
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY,** **BA-2-Communications and Electronics Equipment**					P-1 ITEM NOMENCLATURE **Naval Mission Planning Systems(NavMPS) formerly** **Tactical Automated Mission Planning System(TAMPS)**							
Program Element for Code B Items:							Other Related Program Elements					
	Prior * Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)	64.1		**$15.3**	**$23.2**	**$20.7**	**$12.0**	**$17.4**	**$10.7**	**$11.6**	**$12.4**	**Cont**	**Cont**

Naval Mission Planning System (NavMPS)

This line item provides funding to procure NavMPS 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:

Work Station Components - NavMPS 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.

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.

Software Releases - NavMPS 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 NavMPS. **Software releases are independent of hardware buys**.

The hardware mix has changed due to N62/N88 direction to accelerate migration to GCCS/DII-COE based environment. PMA-233 will provide installed Mission Planning hardware, servers and planning stations, on a 3 year replacement cycle. The hardware mix has changed to reduce seat costs and support thruput requirements of servers and laptop PCs.

BUDGET ITEM JUSTIFICATION SHEET FOR AGGREGATED ITEMS P-40a								DATE: February 2000				
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY, BA-2-Communications and Electronics Equipment**								P-1 ITEM NOMENCLATURE **Naval Mission Planning Systems(NavMPS) formerly Tactical Automated Mission Planning System(TAMPS)**				
Procurement Items	ID Code	Prior Years	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
New Workstations	A											
Quantity		318										318
Funding		18.5										18.5
Enterprise Server	A											
Quantity			8		1	3	3	5			Cont	Cont
Funding			2.0		0.2	0.7	0.7	1.2				
Local Server	A											
Quantity			40	80	102	21	144	37	110	144	Cont	Cont
Funding			2.0	4.6	6.1	1.2	1.8	0.5	1.5	1.9		
Unit LevelSystem	A											
Quantity			175	720	270	400	565	425	690	565	Cont	Cont
Funding			0.9	2.7	1.2	2.0	2.9	2.3	3.8	3.1		
Force Level System	A											
Quantity			4	19	46		42	58	12	42	Cont	Cont
Funding			0.2	1.1	2.7		0.5	0.8	0.2	0.6		
Trusted System	A											
Quantity			15	45			60			60	Cont	Cont
Funding			0.8	2.6			0.8			0.8		
Other Costs		45.6	9.5	12.4	10.5	8.0	10.6	6.0	6.2	5.9	Cont	Cont
Total P-1 Funding	**	64.1	15.3	23.2	20.7	12.0	17.4	10.7	11.6	12.4	Cont	Cont

** Numbers may not add due to rounding.

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS **P-5**	Weapon System Various		DATE: **February 2000**
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy** **BA-2-Communications and Electronics Equipment**	ID Code **A**	P-1 ITEM NOMENCLATURE/SUBHEAD **Naval Mission Planning Systems(NavMPS) formerly** **Tactical Automated Mission Planning System(TAMPS)**	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years	FY 1998			FY 1999			FY 2000			FY 2001		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
S7400	New Workstations		18,479												
S7401	Enterprise Server			8	245	1,960				1	241	241	3	237	712
S7402	Local Server			40	50	2,000	80	57	4,564	102	59	6,052	21	58	1,226
S7403	Unit Level System			175	5	875	720	4	2,664	270	4	1,153	400	5	2,035
S7406	Force Level System			4	43	172	19	57	1,084	46	59	2,730			
S7407	Trusted System			15	50	750	45	57	2,567						
S7410	Software Release		33,494			4,371			4,227			5,511			2,961
S7430	Production Support		10,823			4,715			6,021			3,226			4,293
S7900	Non-FMP Installation		1249			437			1,739			1,364			753
S7910	FMP-Installation								374			376			
			64,045			**15,280**			**23,240**			**20,653**			**11,980**

Numbers may not add due to rounding.

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System Various		A. DATE February 2000		
B. APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy BA-2-Communications and Electronics Equipment				C. P-1 ITEM NOMENCLATURE Naval Mission Planning Systems(NavMPS) formerly Tactical Automated Mission Planning System(TAMPS)				SUBHEAD Y2S7	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FY99			NAVAIR CAD2	N\A	C/FP	Corcant, Inc., Reston, Va. Intergraph Corp. Huntsville, Al	1/99	4/99	N/A	N/A
Local Server	80	57								
Unit Level System	720	4								
Force Level System	19	57								
Trusted System	45	57								
FY00			NAVAIR CAD2	N\A	C/FP	Corcant, Inc., Reston, Va. Intergraph Corp. Huntsville, Al	1/00	4/00	N/A	N/A
Enterprise Server	1	241								
Local Server	102	59								
Unit Level System	270	4								
Force Level System	46	59								
FY01			NAVAIR CAD2	N\A	C/FP	TBD	1/01	4/01	N/A	N/A
Enterprise Server	3	237								
Local Server	21	58								
Unit Level System	400	5								
D. REMARKS										

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: **Aviation Capable Ships, Air Stations, Aviation Units, Aviation Training/Support Fac** TYPE MODIFICATIO Added Capability

MODIFICATION TITLE: Naval Mission Planning Systems(NavMPS) formerly Tactical Automated Mission Planning System(TAMPS)

DESCRIPTION/JUSTIFICATION:

NavMPS 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: **NavMPS is post milestone III**

N/A

	FY 1996 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E 0604231N		7.7		5.8		12.4		11.1		17.6		11.4		11.9		12.4		12.6		CONT	CONT	CONT
PROCUREMENT																						
HARDWARE																						
NEW	318	18.5																			318	18.5
UPGRADE																						
ENTERPRISE SERVER																						
Initial Issue			8	2.0			1	0.2											81	20.7	90	25.6
Replacement									3	0.7	3	0.7	5	1.2					CONT	CONT	CONT	CONT
LOCAL SERVER																						
Initial Issue			40	2.0	80	4.6							22	0.3					148	2.0	290	21.5
Replacement							102	6.1	21	1.2	144	1.8	15	0.2	110	1.5	144	1.9	CONT	CONT	CONT	CONT
UNIT LEVEL SYSTEM																						
Initial Issue			175	0.9	720	2.7	270	1.2	225	1.1					330	1.8			1033	5.6	2,753	24.5
Replacement									175	0.9	565	2.9	425	2.3	360	2.0	565	3.1	CONT	CONT	CONT	CONT
FORCE LEVEL SYSTEM																						
Initial Issue			4	0.2	19	1.1	46	2.7			19	0.2	12	0.2					182	2.4	282	8.4
Replacement											23	0.3	46	0.6	12	0.2	42	0.6	CONT	CONT	CONT	CONT
TRUSTED SYSTEM																						
Initial Issue			15	0.8	45	2.6														0.0	60	4.9
Replacement											60	0.8					60	0.8	CONT	CONT	CONT	CONT
SOFTWARE		33.5		4.4		4.2		5.5		3.0		5.8		3.1		2.8		1.2		CONT		CONT
PRODUCTION SUPPORT		10.8		4.7		6.0		3.2		4.3		4.0		2.0		2.6		3.8		CONT		CONT
INSTALL COST	318	1.2	242	0.4	864	2.1	419	1.7	424	0.8	814	0.8	525	0.8	812	0.8	811	0.9	CONT	CONT		CONT
TOTAL PROCUREMENT		64.1		15.3		23.2		20.7		12.0		17.4		10.7		11.6		12.4		CONT		CONT

Numbers may not add due to rounding.

CLASSIFICATION: **UNCLASSIFIED**

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

MODELS OF SYSTEMS AFFECTED: **Aviation Capable Ships, Air Stations, Aviation Units, Aviation Training/Support Facilities**

MODIFICATION TITLE: Naval Mission Planning Systems(NavMPS) formerly Tactical Automated Mission Planning System(TAMPS)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **Field Installation Team**

ADMINISTRATIVE LEADTIME: 3 to 4 Months

PRODUCTION LEADTIME: N/A Months

CONTRACT DATES: FY 1999: Jan-99 FY 2000: Jan-00 FY 2001: Jan-01

DELIVERY DATE: FY 1999: Mar-99 FY 2000: Mar-00 FY 2001: Mar-01

($ in Millions)

Cost:	Prior Years				FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty				Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$			Qty	$	Qty	$
PRIOR YEARS	**318**	**1.2**																					318	1.2
FY 1998 EQUIPMENT					242	0.4																	242	0.4
FY 1999 EQUIPMENT							864	2.1															864	2.1
FY 2000 EQUIPMENT									419	1.7													419	1.7
FY 2001 EQUIPMENT											424	0.8											424	0.8
FY 2002 EQUIPMENT													814	0.8									814	0.8
FY 2003 EQUIPMENT															525	0.8							525	0.8
FY 2004 EQUIPMENT																	812	0.8					812	0.8
FY 2005 EQUIPMENT																			811	0.9			811	0.9
TO COMPLETE																					Cont	Cont		Cont
TOTAL	318	1.2			242	0.4	864	2.1	419	1.7	424	0.8	814	0.8	525	0.8	812	0.8	811	$0.9	Cont	Cont	Cont	Cont

INSTALLATION SCHEDULE:

	FY 1998 & Prior	FY 1999 1	2	3	4	FY 2000 1	2	3	4	FY 2001 1	2	3	4	FY 2002 1	2	3	4	FY 2003 1	2	3	4	FY 2004 1	2	3	4	FY 2005 1	2	3	4	TC	TOTAL
In	560		864				419				424				814				525				812				811				CONT	5229
Out	560			432	432			212	207			215	209			414	400			269	256			413	399			412	399		CONT	5229

								DATE February 2000		
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						**P-1 ITEM NOMENCLATURE** GCCS-M Ashore (LI #2804)			**SUBHEAD** 52JH	
	PY	**FY 1999**	**FY 2000**	**FY 2001**	**FY 2002**	**FY 2003**	**FY 2004**	**FY 2005**	**TO COMP**	**TOTAL**
QUANTITY										
COST (in millions)		**$4.0**	**$9.4**							

NOTE: GCCS-M Ashore transfers to the GCCS-M (BLI 2608) in FY01. Detail budget justification material for FY99 and FY00 is included in the GCCS-M P-1 for budget comparability.
PROGRAM COVERAGE:
JUSTIFICATION OF BUDGET YEAR REQUIREMENTS: The Global Command and Control System - Maritime Ashore program (formerly JMCIS Ashore) provides evolutionary systems and ancillary equipment upgrades to support the CNO, Fleet Commanders in Chief, Unified Commanders, Type Commanders, Force Anti-Submarine Warfare (ASW) Commander, and Submarine Operating Authorities worldwide. The Command, Control, Communications, Computers, and Intelligence (C4I) services provide a single system to receive, process, display, maintain and/or assess the unit characteristics, employment scheduling, material condition, combat readiness, warfighting capabilities, positional information and disposition of own and Allied forces, and to optimize the allocation of those resources. GCCS-M Ashore will provide current geolocational information on hostile land, sea and air forces integrated with environmental and other nationally derived information. GCCS-M Ashore will provide the tools necessary for operational commanders to execute plans, and to transmit tasking and tactical information to forces. The Joint Maritime Command Information System (JMCIS) OSIS Baseline Upgrade (OBU) Evolutionary Development (OED) program (previously OBU and included in LI 2906 NCCS Ashore) provides evolutionary systems and ancillary equipment upgrades to support three Joint Intelligence Centers (JIC), one JIC Detachment, one Training Center and one Software Support Activity. JMCIS OED provides for the analysis of multi-source intelligence to produce comprehensive reports of foreign forces and potential hostile activity. It also provides near-real-time all-source fusion, correlation and analysis tools, directly feeding automated reporting capabilities. JMCIS OED maintains characteristics and performance data on weapons platforms, collecting non-organic data from ashore and afloat sensors, and developing an all-source tactical picture. This data is disseminated to the operating forces for tactical threat warnings, decision making support, and support of Over-the-Horizon-Targeting. This line item contains equipment to support the Joint Global Command and Control System (GCCS). GCCS (Joint) is an operational multi-service/agency C4I program encompassing both strategic and tactical C4I functions. GCCS (Joint) supports the National Command Authority and the CINCs by providing C4I 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 (Joint) Automated Data Processing Equipment configuration.

JH031. GCCS-M Ashore . Provides the Navy Command Center and Fleet, Unified and TYCOM Command Centers with a common C4I capability. Using iterative hardware/software releases, GCCS-M Ashore implements incremental changes in an evolutionary manner using modular segments as operational requirements dictate and as funding and technology allow. Hardware suites to support GCCS-M Ashore follow an iterative hardware and software release along with IT-21 compatible client/server design implementing LAN and WAN architecture, serial and parallel processors, communications and database servers. GCCS-M Ashore also offers distributed briefing capabilities among commands using video and large screen displays.

JH011. JMCIS OED Upgrade. Ocean Surveillance Information System Baseline Upgrade (OBU) Evolutionary Development (OED) provides for the analysis of intelligence information from multiple sources to produce a comprehensive report of activities. OED provides positional data and operational intelligence to commanders at all levels.

JH036. GCCS (Joint). All procurements will directly support GCCS (Joint) and is in accordance with Joint Staff direction. GCCS (Joint) consists of standard hardware, standard software, and service/site unique software. GCCS (Joint) is an open systems client-server environment using COTS and NDI software and hardware and service/site unique software. Procurements will include Workstations to replace Database and Application Servers, Local Area Network (LAN) hardware, and software communications equipment. GCCS-T has the same hardware and additional encryption equipment.

BUDGET ITEM JUSTIFICATION SHEET		DATE February 2000
APPROPRIATION/BUDGET ACTIVITY	**P-1 ITEM NOMENCLATURE**	**SUBHEAD**
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	GCCS-M Ashore (LI #2804)	52JH

PROGRAM COVERAGE:

JH776. Installation of Equipment. Provides for installation of equipment at the shore sites listed below.

The FY 99 Budget Request Procures: 1. GCCS-M Ashore Command Center Equipment 2. Installation of Equipment
The FY 00 Budget Request Procures: 1. GCCS-M Ashore Command Center Equipment; JMCIS OED upgrades; GCCS (JOINT) Workstations, Servers, LAN hardware and software, communications
equipment. 2. Installation of Equipment.

INSTALLATION DATA: GCCS-M Ashore equipment installation sites include the Navy Command Center Pentagon, Alternate National Command Center (Site R), USCINCPAC, CINCLANTFLT, CINCPACFLT, CINCUSNAVEUR (London UK and Naples IT); Software Support Activity SSC San Diego; 2 Training sites at Fleet Computer Training Centers sites Dam Neck and San Diego; 8 Submarine Operating Command Center sites: SUBLANT at Norfolk, SUBGRU8 at Naples, SUBPAC at Pearl Harbor, SUBGRU7 at Yokosuka, COMSUBGRU9 at Bangor, COMSUBGRU10 at Kings Bay, COMSUBLANT REP UK at Northwood UK; and SUBPACREP at San Diego; 4 ASW Command Center sites: CTF84 at Norfolk; CTF67 at Naples, CTF12 at Pearl Harbor, and CTF72 at Kamiseya, 6 TYCOM Command Center sites: SUBLANT, SURFLANT, and AIRLANT at Norfolk; SUBPAC at Pearl Harbor; SURFPAC and AIRPAC at San Diego; and 5 Integrated Underwater Surveillance System (IUSS) Command Center sites at NAVOCEANPROFACs at Whidbey Island and Dam Neck; JOINT MARITIME FACILITY at St. Mawgans UK, and sites 7900 and 5200; and 24 GCCS (Joint) collocated/remote sites. JMCIS OED equipment installation sites include ONI, JICPAC, JICPAC DETACHMENT, AIC, NMITC, and JAC MOLESWORTH. All GCCS (Joint) equipment is scheduled for installation at Navy supported sites: USACOM (4), USPACOM, and US FORCES JAPAN. GCCS-T equipment is installed at 1 Host Site and 8 Remote Sites: CINCPACFLT/GSF(Host), USACOM(Remote), COMSOCACOM(Remote), CTF-69(Remote), COMICEDEFOR(Remote), USCINCPAC(Remote), CINCLANTFLT(Remote), CINCUSNAVEUR(Remote), US Forces Japan(Remote).

								DATE	February 2000	
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						**P-1 ITEM NOMENCLATURE** JMCIS OED (LI# 2805)			**SUBHEAD** 52JJ	
	PY	**FY 1999**	**FY 2000**	**FY 2001**	**FY 2002**	**FY 2003**	**FY 2004**	**FY 2005**	**TO COMP**	**TOTAL**
QUANTITY										
COST (in millions)		**$0.9**								

Note: JMCIS OED transfers to the GCCS-M (BLI 2608) in FY01. Detail budget justification material for FY99 is included in the GCCS-M P-1 for budget comparability purposes.

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-Targetin

JJ011. JMCIS OED Upgrade. Ocean Surveillance Information System (OSIS) Baseline Upgrade (OBU) provides for the analysis of intelligence information from multiple sources covering a number of different events to produce a comprehensive report of activities that assesses its significance. OBU provides positional data and operational intelligence to commanders at all levels.

JJ776. Installation of Equipment. Provides for installation of equipment at the shore sites listed below.

The FY 99 Budget Request Procures: 1. JMCIS OED upgrades; 2. Installation of Equipment.

INSTALLATION DATA: JMCIS OED equipment installation sites include ONI, JICPAC, JICPAC DETACHMENT, AIC, NMITC, and JAC MOLESWORTH

BUDGET ITEM JUSTIFICATION SHEET

DATE February 2000

APPROPRIATION/BUDGET ACTIVITY	**P-1 ITEM NOMENCLATURE**	**SUBHEAD**
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	TADIX- B 2900	52DH

	PY	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005		TO COMP	TOTAL
QUANTITY											
COST (in millions)		**$4.3**	**$18.8**	**$0.03**	**$0.0**						**$23.2**

PROGRAM COVERAGE:

Narrative Description/Justification: Commanders Tactical Terminals/Joint Tactical Terminals (CTTs/JTTs) provide designated platforms with the critical capability to receive near-real-time (NRT) contact data reports via Ultra High Frequency (UHF) communications links called Tactical Data Information Exchange Subsystem (TADIXS) B and Tactical Related Applications (TRAP) Data Dissemination System (TDDS) and to receive and transmit tactical intelligence dissemination networks, such as Tactical Information Broadcast Service (TIBS) and Tactical Reconnaissance Intelligence Exchange System (TRIXS). This data provides over-the-horizon targeting (OTH-T) for the targeting and retargetting of missiles, global detection and cueing information from multiple sources to tactical users worldwide, theater information with tracking accuracy of fast moving targets to joint operational users, and direct dedicated links for critical time sensitive surveillance information to battlefield commanders. The CTT, one of the two migration systems identified in the DOD approved Integrated Broadcast Service (IBS) Plan presented to the House Permanent Select Committee on Intelligence (HPSCI), is undergoing in-depth testing and operational assessment by all services. Successful developmental tests have been conducted both in the lab and aboard ship. The JTT, as required by the IBS Plan, will evolve from the CTT and OPTEVFOR will conduct Follow-on Operational Test and Evaluation (FOT&E), if required, on any functional differences between the CTT and JTT. Common IBS Modules (CIBS-M) provide expanded capability for JTT to meet outyear and emergent requirements and allow JTT functionality to be incorporated into other open architecture systems.

JUSTIFICATION OF BUDGET YEAR REQUIREMENTS: The last year of CTT procurement was FY 97; installs continue through FY 99. FY99 funds are for production support and installation of CTTs and procurement of JTTs. FY00 funds are for procurement, production support and installation of JTTs. FY01 funds are for production support
.

INSTALLATION AGENT: SPAWARSYSCEN Charleston and SPAWARSYSCEN San Diego will install systems on Navy surface ships, submarines and Navy Shore stations. Shipboard installations will be accomplished by Alteration Installation Teams (AITs)

COST ANALYSIS														DATE February 2000		
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE TADIX- B 2900							SUBHEAD 52DH		
			TOTAL COST IN THOUSANDS OF DOLLARS													
				PY			FY 1999			FY 2000			FY 2001			
COST CODE	ELEMENT OF COST	ID CODE	QTY	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
DH555	Production Support									1,015			4,111			32
DH520	JTT Systems	B						10	254.2	2,542	31	254	7,874			
DH777	Installation	F								791			6,827			
DH777	CTT FMP Installation	F								741						
DH777	JTT FMP Installation	F											5,125			
DH777	DSA	F								50			1,002			
DH776	Non FMP Installation Equipment	F											700			
	TOTAL CONTROL									**4,348**			**18,812**			**32**

Remarks:

PROCUREMENT HISTORY AND PLANNING

A. DATE February 2000

B. APPROPRIATION/BUDGET ACTIVITY
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

C. P-1 ITEM NOMENCLATURE
TADIX- B 2900

SUBHEAD
52DH

COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
DH520	JTT Systems	97	E-Systems; St. Petersburg, FL	FFP	Army; PM JSTAR		Sep-97	Apr-00	30	418	YES	
		98	E-Systems; St. Petersburg, FL	FFP	Army; PM JSTAR		Apr-98	Dec-00	11	320	YES	
		99	E-Systems; St. Petersburg, FL	FFP	Army; PM JSTAR		Jun-01	Aug-02	10	254.2	YES	
		00	E-Systems; St. Petersburg, FL	FFP	Army; PM JSTAR		Jun-01	Oct-02	31	254	YES	

D. REMARKS
- Unit cost drops due to contract entering full production and completion of much NRE.

P-1 Shopping List Item No 84-3 of 84-7

February-00

MODIFICATION TITLE: TADIXS B 2900
COST CODE DH520
MODELS OF SYSTEMS AFFECTED: Commander's Tactical (CTT)
DESCRIPTION/JUSTIFICATION: This display includes installation of both shipboard (FMP) and Shore (Non-FMP) equipment.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: ($ in millions)

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	6	2.2	0	0.0																	6	2.2
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.0	0	0.0	6	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	6	0.7
PRIOR YR EQUIP					6	0.7															6	0.7
FY 98 EQUIP																					0	0
FY 99 EQUIP																					0	0
FY 00 EQUIP																					0	0
FY 01 EQUIP																					0	0
FY 02 EQUIP																					0	0
FY 03 EQUIP																					0	0
FY 04 EQUIP																					0	0
FY 05 EQUIP																					0	0
FY 06 EQUIP																					0	0
FY TC EQUIP																					0	0
TOTAL INSTALLATION COST		0.0		0.0		0.7		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.7
TOTAL PROCUREMENT COST		2.2		0.0		0.7		0.0		0.0		0.0		0.0		0.0		0.0		0.0		2.9

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 8 Mo. PRODUCTION LEADTIME: 12 mos.

CONTRACT DATES: FY 1999: FY 2000: FY 2001:

DELIVERY DATES: FY 1999: FY 2000: FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT	0		6														
OUTPUT	0				6												

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT														6
OUTPUT														6

Notes/Comments

P-1 Shopping List Item No 84-4 of 84-7

February-00

MODIFICATION TITLE: TADIXS B 2900
COST CODE DH520
MODELS OF SYSTEMS AFFECTED: Joint Tactical Terminals (JTT)
DESCRIPTION/JUSTIFICATION: Army is the lead service for JTT procurement per OSD direction in PBD77720 dtd 22 Jan 1996.
This display includes installation of both shipboard (FMP) and Shore (Non-FMP) equipment.
Ancillary equipment being procured in same year as installation.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	30	12.5	11	3.5	10	2.5	31	7.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	82	26.4
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.0	0	0.0	0	0.0	41	5.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	41	5.8	82	11.6
PRIOR YR EQUIP							30	4.2	0	0.0											30	4.2
FY 98 EQUIP							11	1.6													11	1.6
FY 99 EQUIP																			10	1.4	10	1.4
FY 00 EQUIP																			31	4.4	31	4.4
FY 01 EQUIP																					0	0.0
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY 06 EQUIP																					0	0.0
FY TC EQUIP																			41	5.8	41	5.8
TOTAL INSTALLATION COST		0.0		0.0		0.0		5.8		0.0		0.0		0.0		0.0		0.0		5.8		11.6
TOTAL PROCUREMENT COST		12.5		3.5		2.5		13.7		0.0		0.0		0.0		0.0		0.0		5.8		38.0

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 8 Mo. PRODUCTION LEADTIME: 14 Mo.

CONTRACT DATES: FY 1999: Jun-01 FY 2000: Jun-01 FY 2001:

DELIVERY DATES: FY 1999: Aug-02 FY 2000: Aug-02 FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT								6	7	7	7	7	7				
OUTPUT								3	4	3	3	7	7	7	7		

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT													41	82
OUTPUT													41	82

Notes/Comments: Initial 7 installations in FY00 are to labs and test platforms supporting acceptance testing. These installations will be completed quickly using all available installation activities to support product acceptance and familiarizing installers with equipment and process. Later installs are started as soon as possible following equipment availability. Completion quarter is dependent on ship availability and battlegroup schedules

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February 2000

APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: TADIX- B 2900

SUBHEAD NO.: 52DH

COST CODE	ITEM/MANUFACTURER	FY	SERV	PROC QTY	ACCEP PRIOR TO 1-Oct	BAL DUE AS OF 1-Oct	FISCAL YEAR 99																FISCAL YEAR 00														FISCAL YEAR 01												
							PY98			CALENDAR YEAR 99													CALENDAR YEAR 00														CALENDAR YEAR 01												
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
DH520	JTT Systems	97		30		30																			2	2	2	2	2	3	2	3	2	2	3	2	1	1	1			
		98		11		11																																1	1	2	2	2	3
		99		10		10																																		A			
		00		31		31																																		A			

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

P-1 Shopping List Item No 84-6 of 84-7

UNCLASSIFIED
CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE February 2000

APPROPRIATION/BUDGET ACTIVITY
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE
TADIX- B 2900

SUBHEAD NO.
52DH

COST CODE	ITEM/MANUFACTURER	FY	SERV	CARRY OVER	FISCAL YEAR 02												FISCAL YEAR 03												FISCAL YEAR 04												LATER
					CY01			CALENDAR YEAR 02												CALENDAR YEAR 03												CALENDAR YEAR 04									
					OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
DH520	JTT Systems	97		0																																					0
		98		0																																					0
		99		10											5	5																									0
		00		31													4	4	4	4	4	4	4	3																	0
																																									0
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG

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

P-1 Shopping List Item No 84-7 of 84-7

Exhibit P-21A, Production Schedule
Unclassified
Classification

NAVMAT FORM 7110/4 Revised 11/77

									DATE	February 2000	
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE BLI 2901 NAVAL SPACE SURVEILLANCE SYSTEMS (NSS)				SUBHEAD 52WV
	PY	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY											
COST (in millions)				$7.8	$2.7	$4.9	$8.1	$22.5	$30.9	Continuing	Continuing

The Naval Space Command has operated the Navy Space Surveillance Network, commonly known as "the Fence", since 1961. Headquartered at Dalgren, VA, the Fence and associated mission processing systems are a critical part of the overall national space surveillance network. The Fence is the only dedicated, uncued sensor in the world. The Fence provides collision avoidance, maneuver detection, NASA requirements for the shuttle, MIR and International Space Station-launch protection and orbit analysis, and Alternate Space Control Center (ASCC) backup to Space Control Center in Cheyenne, Mountain, CO. Aging Components have risked ability to "maintain a constant surveillance." Procurement of computer system hardware and software is necessary to adequately manage catalog growth and handle workload caused by lack of ephemeredes [a computerized listing, tracking and prediction of locations of both space junk (such as older orbital objects and other national launches which failed to properly return from orbit) and current active in-use satellites] as the volume of orbital objects increases. This Service Life Extension Program of the Naval Space Surveillance "Fence' is necessary in order to ensure continued operation of the nation's only unalerted space sensor.

The surveillance mission is accomplished by systems performing four operational functions as follows:
1. Sensor: Data acquisition of satellites "radar" signals is performed by a network of three transmitting and six receiving stations located on the great circle across the southern United States.
2. C2 Connectivity: Each receiver station is connected to the Dalgren Center by dedicated phone line for data transfer. In addition, a command and control network links all field stations and the Dahlgren Center in a "party line" manner for network operational and administrative coordination.
3. Command Center: Satellite detection and correlation with predictions is performed by digital computers at the Dalgren Virginia Center.
4. Processing: Storage, retrieval ,and updating of orbital elements of past, present, and future paths of all known orbital objects are performed at the computer center in Virginia.

The Fence program maximizes the use of Commercial of the Shelf (COTS) software and hardware.

Fiscal Year 2000 inlcudes a congressional add of $1.2M for the procurement of super span ultimate building machines, which enable Naval facilities to construct rapid shelters for equipment.

COST ANALYSIS

DATE February 2000

APPROPRIATION ACTIVITY
OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE
BLI: 2901 Naval Space Surveillance System (NSSS)

SUBHEAD
52WV

TOTAL COST IN THOUSANDS OF DOLLARS

COST CODE	ELEMENT OF COST	ID CODE	PY QTY	PY TOTAL COST	FY 1999 QTY	FY 1999 UNIT COST	FY 1999 TOTAL COST	FY 2000 QTY	FY 2000 UNIT COST	FY 2000 TOTAL COST	FY 2001 QTY	FY 2001 UNIT COST	FY 2001 TOTAL COST
	Naval Space Surveillance Fence:												
WV001	C2 Connectivity - Hardware & Software							VAR	N/A	1,822	VAR	N/A	350
WV002	Command Center - Hardware & Software							VAR	N/A	450	VAR	N/A	250
WV003	Processing - Hardware & Software							VAR	N/A	2,685	VAR	N/A	2,135
WV004	Sensor - Hardware & Software							VAR	N/A	1,633	VAR	N/A	0
WV005	Super Span Ultimate Bldg Machine							VAR	N/A	1,200			
	SPAWAR TOTAL CONTROL									7,790			2,735

Remarks:
1) Unit cost are various due to procurement of various types of equipment required to upgrade the Fence.

PROCUREMENT HISTORY AND PLANNING

A. DATE: February 2000

B. APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

C. P-1 ITEM NOMENCLATURE: BLI: 2901 Naval Space Surveillance System (NSSS)

SUBHEAD: 52WV

COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
	Naval Space Surveillance Fence:											
WV001	C2 Connectivity - Hardware & Software	00	Various	WX/MIPR/*	Various	Various	Dec-99	Jan-00	Var	Var		
		01	Various	WX/MIPR/*	Various	Various	Dec-00	Mar-01	Var	Var		
WV002	Command Center - Hardware & Software	00	Various	WX/MIPR/*	Various	Various	Dec-99	Jan-00	Var	Var		
		01	Various	WX/MIPR/*	Various	Various	Dec-00	Mar-01	Var	Var		
WV003	Processing - Hardware & Software	00	Various	WX/MIPR/*	Various	Various	Dec-99	Jan-00	Var	Var		
		01	Various	WX/MIPR/*	Various	Various	Dec-00	Mar-01	Var	Var		
WV004	Sensor - Hardware & Software	00	Various	WX/MIPR/*	Various	Various	Dec-99	Jan-00	Var	Var		
		01	N/A	N/A	N/A							

D. REMARKS

Contract awards will be by various contract offices authorized to procure systems for the Navy.

*deleted information under Sensor for FY 01 as no money is currently planned under this category for FY 01 at this time.

BUDGET ITEM JUSTIFICATION SHEET

DATE February 2000

APPROPRIATION/BUDGET ACTIVITY	**P-1 ITEM NOMENCLATURE**	**SUBHEAD**
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	GCCS-M Tactical Mobile (#2906)	52T4

	PY		FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY											
COST (in millions)			**$24.6**	**$14.0**							

NOTE: GCCS-M Tactical Mobile transfers to the GCCS-M line item (BLI 2608) beginning in FY01. Detail budget justification material for FY99 and FY00 is included in the GCCS-M P-1 for budget comparability purposes.

Narrative Description/Justification: The Global Command and Control System - Maritime (GCCS-M) Tactical/Mobile program provides evolutionary systems and ancillary equipment upgrades to support the Unified Commanders, Fleet Commanders, Navy Component Commanders, the Maritime Sector Commanders (Ashore), the Theater Commanders (Ashore) and the Naval Liaison Element Commanders (Ashore) with the capability to plan, direct and control the tactical operations of Joint and Naval Expeditionary Forces and other assigned units within their respective area of responsibility. These operations include littoral, open ocean, and over land all sensor (i.e. EO, IR, ISAR, etc.) surveillance, anti-surface warfare, over-the-horizon targeting, counter-drug operations, power projection, antisubmarine warfare, mining, search and rescue, and special operations. Between FY97 and FY99, this program was known as the Joint Maritime Command Information System (JMCIS) Tactical/Mobile (JTM) program. Prior to FY97, this program was part of the Navy Command and Control System (NCCS) Ashore program.

GCCS-M Tactical/Mobile Systems include fixed site Tactical Support Centers (TSCs) and mobile components which are the Mobile Operations Control Centers (MOCCs), Mobile Ashore Sup Terminals (MASTs) and Mobile Integrated Command Facilities (MICFACs). 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 ocean surveillance positional data and threat alerts to operational users ashore and afloat. All Tactical/Mobile variants include C4I systems based on the GCCS-Maritime architecture which is Defense Information Infrastructure (DII) Common Operating Environment (COE) compliant.

TSC's provide C4I capability, air-ground, satellite and point-to-point communications systems; sensor analysis capabilities; avionics and weapons system interfaces and facilities equipment. MOCC is a scalable and mobile version of the TSC for contingency operations. For example, a MOCC has been deployed to Bosnia for support of P-3 operations and to provide an on-site C4I capability. MAST and MICFAC are mobile facilities designed to support a theater commander or naval liaison element ashore. MAST provides a basic deployable C4I capability for rapid deployment to remote locations. Support of the Liberian contingency operations is an example. The MICFAC is a robust deployable C4I system that can support a numbered fleet commanders staff ashore. MICFAC Bahrain has acted as the COMUSNAVCENT C4I command center when the hard site was undergoing upgrades. This program assures that through the implementation of evolutionary acquisition, the existing TSCs, MOCCs, MASTs and MICFACs are modernized to fulfill their operational requirements. Beginning in FY01, the MAST and MICFAC systems will begin to transition into the Joint Mobile Ashore Support terminal (JMAST) system which is a consolidation and upgrade of the MAST and MICFAC.

This budget also includes funds for the MIUW Van Upgrades.

BUDGET ITEM JUSTIFICATION SHEET		DATE February 2000
APPROPRIATION/BUDGET ACTIVITY	**P-1 ITEM NOMENCLATURE**	**SUBHEAD**
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	GCCS-M Tactical Mobile (#2906)	**52T4**

Narrative Description/Justification: (continued)

T4371. Upgrade Equipment. This line procures various types of C4I Equipment in order to provide a new or an increased capability to the present TSC and MOCC systems and to replace the equipment when it has reached the end of service life, assuring the existing system remains interoperable with updated aircraft, sensors, and weapons systems.

T4500. Mobile Ashore Support Terminal/Mobile Integrated Command Facility (MAST/MICFAC). This line procures various types of C4I equipment in order to provide a new or increased capability to the present MAST and MICFAC systems, and to replace the equipment when it has reached the end of service life, assuring interoperability with other C4I systems. These facilities were established and will be upgraded using the evolutionary acquisition approach.

T4600. MIUW Van Upgrades. This budget includes funding for the MIUW Van Upgrades.

T4776. Installation of Equipment. Provides for installation of T4371 and T4500 equipment at the shore sites listed below.

The FY99 Budget Request Procures: 1. TSC Upgrade Equipment; 2. MAST/MICFAC Equipment; 3. Installation of Equipment; and 4. MIUW Van upgrades
The FY00 Budget Request Procures: 1. TSC Upgrade Equipment; 2. MAST/MICFAC Equipment; and 3. Installation of Equipment.

INSTALLATION DATA: 15 TSC systems (14 in FY 00) at 13 operational sites (12 in FY00) (located at Keflavik, Iceland; Brunswick, ME; Jacksonville, FL; Sigonella, Italy; Rota, Spain; Kaneohe Bay, HI; Whidbey Island, WA; Kadena, Japan; Misawa, Japan; North Island, CA; Diego Garcia, Indian Ocean; Roosevelt Roads, Puerto Rico, and Masirah, Oman); 1 training site at Fleet Combat Training Center (FCTC) Dam Neck, VA and 1 ISEA site at SSC CHARLESTON DET Patuxent River.
8 MOCCs (Homeported at Brunswick, ME; Jacksonville, FL; Sigonella, Italy; Barbers Point/Kaneohe Bay, HI; Misawa, Japan; Whidbey Island, WA; Willow Grove, PA; and Point Mugu, CA.
C2 Engineering Development, Software Support Facility (SSC CHARLESTON).
5 MICFACs (homeported at Bahrain; Sigonella, Sicily; Pearl Harbor, HI; St. Juliens Creek, VA; and Corpus Christi, TX)
4 MASTS (homeported at Bahrain; Rota, Spain; Pearl Harbor, HI; and St. Juliens Creek, VA)

BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: February 2000	
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY** **BA 2/Communications and Electronics Equipment**							P-1 ITEM NOMENCLATURE **Common Imagery Ground Surface Systems (CIGSS) (J25E)** **(PEO(CU))(BLI: 291400)**					
Program Element for Code B Items: **Not Applicable**							Other Related Program Elements **0204229N**					
	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)	*		*	**65.2**	**41.0**	**47.0**	**45.8**	**44.6**	**72.6**	**73.6**	**Cont.**	*

*Note: All previous procurement budgets for this item were submitted in the Procurement, Defense-Wide appropriation as Distributed Common Ground Systems (DCGS), PE 0305208D8Z. OSD Program Decision Memorandum of 18 August 1998 transferred all funding for this family of programs to the services beginning with FY 1999

The Joint Services Imagery Processing System – Navy (JSIPS-N) is the Navy's portion of the Distributed Common Ground System (DCGS). DCGS is a cooperative effort between the services, agencies, and DoD to provide systems capable of receiving, processing, exploiting, and disseminating data from airborne and national reconnaissance platforms. DCGS is further subdivided into systems which process, exploit, and disseminate Measurements Analysis and Signatures Intelligence (MASINT) data, Signals Intelligence (SIGINT) data, Multi-Intelligence Reconnaissance data, and Imagery data. Cooperative imagery processing systems are collected under the general heading, Common Imagery Ground/Surface Systems (CIGSS). JSIPS-N is the Navy CIGSS component.

JSIPS-N has a capability to receive, process, exploit, store, and disseminate imagery, imagery-derived products, and Imagery Intelligence (IMINT) reports based on multi-source from multiple inputs. The primary mission of JSIPS-N is to assist strike planners, tactical aviators, and Marine Corps amphibious planners in the delivery of precision ordnance (including Tomahawk Cruise Missiles) on target.

JSIPS-N includes three major components:
Softcopy Exploitation Segment (SES)- consisting of the Digital Imagery Workstation Suite Afloat (DIWSA), Strike Planning Archive (SPA) and the Precision Targeting Workstation (PTW).
National Input Segment (NIS) - equipment which processes imagery from national sensors
Tactical Input Segment (TIS) - equipment which processes imagery from tactical sensors. FY99 TIS funds will procure integration efforts for the Navy Input Segment (NAVIS) and Common Imagery Processor (CIP) as risk mitigation for Shared Airborne Recognizance Pod (SHARP) and Real-time Execution Decision Support (REDS) for the Time Critical Strike (TCS) demonstrations.

JSIPS-N is being installed onboard aircraft carriers (CV/CVN), amphibious assault ships (LHA/LHD), select fleet flag ships (AGF/LCC) and shore sites.

Secondary missions of the system are to provide near-real-time imagery and support to fleet intelligence assets, Special Operations Forces, and to support primary exploitation and dissemination of tactical organic and theater IMINT products.

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS **P-5**	Weapon System		DATE: February 2000
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy** **BA 2/Common Imagery Ground/Surface System**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **Common Imagery Ground Surface Systems (CIGSS) (J25E)** **(PEO(CU))(BLI: 291400)**	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years	FY 1998			FY 1999			FY 2000			FY 2001		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost			
	Joint Services Imagery Processing System Navy		*			*									
01000	Tactical Input Segment (TIS)								16,000				2	4,000	8,000
01500	TIS Retrofit						2	2,000	4,000						
02000	SPA/PTW						10	273	2,729	8	336	2,688	16	365	5,840
03000	Procurement Support								12,800			9,973			9,232
04000	Product Improvements								11,000			15,026			12,161
05000	Battle Group H/W and S/W Integration								13,042			6,567			6,089
06000	Equipment Support								5,657			6,771			5,700
	TOTAL								65,228			41,025			47,022

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

ITEM NO. 87 PAGE NO. 2

*Note: All previous procurement budgets for this item were submitted in the Procurement, Defense-Wide appropriation as Distributed Common Ground Systems (DCGS), PE 0305208D8Z. OSD Program Decision Memorandum of 18 August 1998 transferred all funding for this family of programs to the services beginning with FY 1999.

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A) | A. DATE: February 2000

B. APPROPRIATION/BUDGET ACTIVITY
Other Procurement, Navy
BA 2/Communications and Electronics Equipment

C. P-1 ITEM NOMENCLATURE
Common Imagery Ground Surface Systems (CIGSS) (J25E)
(PEO(CU))(BLI: 291400)

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
JSIPS-N Components										
01000 Tactical Input Segment (TIS)										
FY 2001	2	$ 4,000	ESC Hanscom AFB	N/A	SS/FFP	Lockheed Martin Gaithersburg, MD	Jan 01	Jan 02	Yes	N/A
01500 TIS RETROFIT										
FY 1999	2	$ 2,000	ESC Hanscom AFB	N/A	SS/FFP	Lockheed Martin Gaithersburg, MD	Oct 99	Apr 00	Yes	N/A
02000 SPA/PTW										
FY 1999	10	$273	SPAWAR, San Diego CA	N/A	SS/FFP	Various	Feb 99	May 99	Yes	N/A
FY 2000	8	$ 336	SPAWAR, San Diego, CA	N/A	SS/FFP	Various	Feb 00	May 00	Yes	N/A
FY 2001	16	$ 365	SPAWAR, San Diego, CA	N/A	SS/FFP	Various	Feb 01	May 01	Yes	N/A

D. REMARKS

FY 2000/01 BUDGET PRODUCTION SCHEDULE, P-21					DATE February 2000	
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy BA 2**			Weapon System **JSIPS-N**		P-1 ITEM NOMENCLATURE **Joint Services Imagery Processing System - Navy**	
		Production Rate			Procurement Leadtimes	
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
Tactical Input Segment (TIS)	Lockheed Martin									
	Gaithersburg, MD	N/A	N/A	N/A	0	3	12	12	24	LOC
Strike Planning Archive (SPA) /	Various	N/A	N/A	N/A	0	4	3	3	7	LOC
Precision Targetting Workstation (PTW)										

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 1998												FISCAL YEAR 1999										BAL
						1997	CALENDAR YEAR 1998												CALENDAR YEAR 1999										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Tactical Input Segment Retrofit	99	N	2	0	2																								2
Lockheed, Gaithersburg, MD																													
SPA/PTW	99	N	10	0	10																	A			10				0
Various																													

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2000												FISCAL YEAR 2001										BAL
						1999	CALENDAR YEAR 2000												CALENDAR YEAR 2001										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Tactical Input Segment																													
Lockheed, Gaitherburg, MD	01	N	2	0	2																A								2
Tactical Input Segment Retrofit	99	N	2	0	2	A						2																	0
Lockheed, Gaithersburg, MD																													
SPA/PTW	00	N	8	0	8					A			8																0
Various	01	N	16	0	16																	A			16				0

Remarks: LOC: Lines of Code. TIS and SPA/PTW are classified as software products.

FY 2000/01 BUDGET PRODUCTION SCHEDULE, P-21					DATE February 2000	
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy BA 2**			Weapon System **JSIPS-N**		P-1 ITEM NOMENCLATURE **Joint Services Imagery Processing System - Navy**	
		Production Rate			Procurement Leadtimes	
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
Tactical Input Segment (TIS)	Lockheed Martin									
	Gaithersburg, MD	N/A	N/A	N/A	0	12 *	12	12	24	LOC
	*ALT for subsequent buys 3 mos									

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2002												FISCAL YEAR 2003										BAL
						2001			CALENDAR YEAR 2002									CALENDAR YEAR 2003										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Tactical Input Segment	01	N	2	0	2				2																				0
Lockheed, Gaitherburg, MD																													

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2004												FISCAL YEAR 2005										BAL
						2003			CALENDAR YEAR 2004									CALENDAR YEAR 2005										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Remarks: LOC: Lines of Code. TIS and SPA/PTW are classified as software products.

BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: **February 2000**	
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY/BA-2 Communications and Electronics**							P-1 ITEM NOMENCLATURE **RADIAC BLI: 292000 SBHD: 82M2**					
Program Element for Code B Items:							Other Related Program Elements					
	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)				**$4.0**	**$4.3**	**$8.3**	**$7.9**	**$8.2**	**$8.7**	**$8.7**	**N/A**	**$50.1**
SPARES COST (In Millions)												

The NAVSEA RADIAC Program is responsible for ensuring the availability of radiation monitoring instruments to support uses ranging from operation and maintenance of nuclear propulsion plants in ships and submarines to industrial radiography as well as medical applications and the radiological leg of chemical, biological and radiological defense. The program provides centrally managed acquisition of equipment to detect and measure radiation and convert these measurements into meaningful terms so that Navy personnel can adequately control radiation exposure. The instruments are used to ensure the safety of personnel and the environment. The Multifunction Radiac (MFR) and Dosimetry System replace older systems with equipment with increased capability that can be operated and maintained at a lower life cycle cost.

REQUIREMENTS:

1. Nuclear Propulsion Program: Field changes, Items under $200K, MFR and Dosimetry System.
2. Nuclear Weapons Program: Items under $200K, MFR.
3. Radiological Affairs Support Program: Items under $200K, MFR.
4. Chemical, Biological and Radiological Program/Nuclear Warfare, Items under $200K, MFR.
5. Naval Medical Radiation Safety Program: Field Changes, Items under $200K, MFR.
6. EOD: Underwater Radiac (UWR).

WEAPONS SYSTEM COST ANALYSIS **P-5**	Weapon System		DATE: **February 2000**
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy** **BA-2 Communications and Electronics Equipment**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **RADIAC BLI: 292000 SBHD: 82M2**	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years				FY 1999			FY 2000			FY 2001		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
M2100	MULTIFUNCTION RADIACS														
	MFR CONTROL UNIT	A					1,587	1.294	2,053	929	1.183	1,099	1,011	1.284	1,299
	GAMMA/BETA PROBE	A					799	0.606	485	1,014	0.606	615	667	0.692	462
	BETA PROBE INTERFACE	A					375	0.626	235						
	IM-260 EXTENDER	A											131	0.516	68
	DIR. GAMMA INTERFACE	A											226	1.032	233
	ALPHA PROBE	A											218	2.098	457
	MFR CHECKSOURCE KITS	A											124	1.049	130
	FRISKER STATION	A											142	1.573	223
M2200	DOSIMETRY SYSTEM														
	TLD CHIP READER									20	26.924	538			
	DOSIMETER SYSTEM												17,105	0.045	770
	SHIPBOARD READER												40	54.193	2,168
	SHOREBASED READER												6	92.903	557
	DOSIMETER IRRADIATOR												28	7.742	217
	DOSIMETER CTR EQUIPMENT											516			116
M2300	UNDERWATER RADIAC	B					11	24.180	266						
M2400	OTHER RADIAC														
	ACCEPTANCE TESTING	A							441			626			658
	ITEMS UNDER 200K	A							11			153			192
	FIELD CHANGES								62			80			100
	PRODUCTION SUPPORT	A							441			627			658
									3,994			**4,254**			**8,308**

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System	DATE: **February 2000**
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy** **BA-2 Communications and Electronics Equipment**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **RADIAC BLI: 292000 SBHD: 82M2**

COST CODE	ELEMENT OF COST	FY 2002			FY 2003			FY 2004			FY 2005			To Complete		Total	
		Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Cost	Quantity	Cost
M2100	MULTIFUNCTION RADIACS																
	MFR CONTROL UNIT	798	1.318	1,052	921	1.342	1,236	875	1.369	1,198	865	1.396	1,208				
	GAMMA/BETA PROBE	227	0.702	159	156	0.715	112	77	0.729	56							
	IM-260 EXTENDER	131	0.524	69													
	DIR. GAMMA INTERFACE	226	1.049	237													
	NEUTRON INTERFACE							64	5.445	348	68	5.554	378				
	ALPHA PROBE	253	2.132	539	222	2.170	482	259	2.213	573	252	2.257	569				
	MFR CHECKSOURCE KITS	124	1.066	132	124	1.085	135	124	1.107	137	124	1.129	140				
	FRISKER STATION	287	1.598	459	285	1.627	464	287	1.660	476	287	1.693	486				
M2200	DOSIMETRY SYSTEM																
	CP-1112 UPGRADES				9	8.008	72	9	8.168	74							
	DOSIMETER SYSTEM	17,105	0.046	787	17,105	0.047	804	17,105	0.048	821	17,105	0.049	838				
	SHIPBOARD READER	38	55.060	2,092	38	56.051	2,130	38	57.172	2,173	38	58.315	2,216				
	SHOREBASED READER	6	94.389	566	6	96.088	577	6	98.010	588	6	99.970	600				
	DOSIMETER IRRADIATOR	28	7.866	220	28	8.008	224	28	8.168	229	28	8.331	233				
M2400	OTHER RADIAC																
	ACCEPTANCE TESTING			690			726			762			799				
	ITEMS UNDER 200K			94			430			431			369				
	FIELD CHANGES			100			100			100			100				
M2830	PRODUCTION SUPPORT			691			726			762			800				
				7,887			**8,217**			**8,727**			**8,736**				

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 2000

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Other Procurement, Navy BA-2 Communications and Electronics Equipment	RADIAC BLI: 292000	82M2

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FY 1999										
MFR CONTROL UNIT	1587	1.294	SPAWARSYSCEN		OPT	SAIC/SAN DIEGO	1/99	4/01	YES	
GAMMA/BETA PROBE	799	0.606	SPAWARSYSCEN		OPT	SAIC/SAN DIEGO	2/99	1/00	YES	
BETA PROBE INTERFACE	375	0.626	SPAWARSYSCEN		OPT	SAIC/SAN DIEGO	2/99	1/00	YES	
UNDERWATER RADIAC	11	24.180	SPAWARSYSCEN		C/FP	SPAWARSYSCEN, SD	9/99	6/00	YES	
FY 2000										
MFR CONTROL UNIT	929	1.183	SPAWARSYSCEN		OPT	SAIC/SAN DIEGO	1/00	10/01	YES	
GAMMA/BETA PROBE	1014	0.606	SPAWARSYSCEN		OPT	SAIC/SAN DIEGO	1/00	4/01	YES	
TLD CHIP READER	20	26.924	SPAWARSYSCEN	4/00	C/FP	TBD	8/00	10/00	YES	
FY2001										
MFR CONTROL UNIT	1011	1.284	SPAWARSYSCEN		OPT	SAIC/SAN DIEGO	1/01	10/01	YES	
GAMMA/BETA PROBE	667	0.692	SPAWARSYSCEN		OPT	SAIC/SAN DIEGO	1/01	10/01	YES	
260 EXTENDER	131	0.516	SPAWARSYSCEN	9/00	C/FP	TBD	9/01	6/02	YES	
DIR GAMMA INTERFACE	226	1.032	SPAWARSYSCEN	9/00	C/FP	TBD	1/01	10/01	YES	
ALPHA PROBE	218	2.098	SPAWARSYSCEN	3/00	C/FP	TBD	1/01	10/01	YES	
MFR CHECKSOURCE KITS	124	1.049	SPAWARSYSCEN	9/00	C/FP	TBD	1/01	10/01	YES	
FRISKER STATION	142	1.573	SPAWARSYSCEN	9/00	C/FP	TBD	3/01	12/01	YES	
DOSIMETER SYSTEM	17105	0.045	SPAWARSYSCEN	8/00	C/FP	TBD	8/01	5/02	YES	
SHIPBOARD READER	40	54.193	SPAWARSYSCEN	8/00	C/FP	TBD	8/01	5/02	YES	
SHOREBASED READER	6	92.903	SPAWARSYSCEN	8/00	C/FP	TBD	8/01	5/02	YES	
DOSIMETER IRRADIATOR	28	7.742	SPAWARSYSCEN	8/00	C/FP	TBD	8/01	5/02	YES	

D. REMARKS

BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: February 2000	
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY, BA2**							P-1 ITEM NOMENCLATURE **General Purpose Electronic Test Equipment GPETE)/2940**					
Program Element for Code B Items:							Other Related Program Elements					
		ID Code		FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)				**$9.5**	**$7.7**	**$7.4**	**$7.3**	**$7.2**	**$7.8**	**$8.1**		**$55.0**
SPARES COST (In Millions)												**$0.0**

This program provides for the initial procurement and distribution of General Purpose Electronic Test Equipment (GPETE). This equipment is essential to the operational readiness of the Navy for repair, installation, and maintenance (preventive and routine) of electronic systems and equipments, both afloat and ashore. The GPETE procured must meet rigid technical requirements, be cost effective and satisfy valid deficiencies in authorized allowance.

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System		DATE: February 2000
APPROPRIATION/BUDGET ACTIVITY: **Other Procurement, Navy, BA2**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD: **General Purpose Electronic Test Equipment (GPETE)/2940**	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
							FY 1999			FY 2000			FY 2001		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	N091 TEST AND EVAL														
M6000	FIBER OPTICS AND DATA COMM	A													
M6001	SIGNAL GENERATORS & ANALYZERS	A					126	1,008	127	57	2,177	124	64	2,001	128
M6002	OSCILLSCPS, METERS & COUNTERS	A													
M6003	PROC ENGR AND DOCUMENTATION	A							38			23			23
	N096 OCEANOGRAPHY														
M6000	FIBER OPTICS AND DATA COMM	A					3	9,325	28						
M6001	SIGNAL GENERATORS & ANALYZERS	A					62	5,970	370	184	2,195	404	162	1,958	317
M6002	OSCILLSCPS, METERS & COUNTERS	A											17	5,809	99
M6003	PROC ENGR AND DOCUMENTATION	A							143			71			66
	N6 SEW & C4														
M6000	FIBER OPTICS AND DATA COMM	A					40	12,233	489	30	2,400	72			
M6001	SIGNAL GENERATORS & ANALYZERS	A					189	3,788	716	451	2,184	985	555	1,643	912
M6002	OSCILLSCPS, METERS & COUNTERS	A													
M6003	PROC ENGR AND DOCUMENTATION	A							436			188			179
	N86- SURFACE WARFARE														
M6000	FIBER OPTICS AND DATA COMM	A					40	32,030	1,281	140	5,507	771			
M6001	SIGNAL GENERATORS & ANALYZERS	A					436	3,745	1,633	820	2,135	1,751	1,201	1,648	1,979
M6002	OSCILLSCPS, METERS & COUNTERS	A											61	6,003	366
M6003	PROC ENGR AND DOCUMENTATION	A							815			450			408
			0						6,076			4,839			4,477

WEAPONS SYSTEM COST ANALYSIS **P-5**	Weapon System		DATE: **February 2000**
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy, BA2**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **General Purpose Electronic Test Equipment (GPETE)/2940**	

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
							FY 1999			FY 2000			FY 2001		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	Cont'd from P-5								6,076			4,839			4,477
	N87 -SUBMARINE WARFARE														
M6000	FIBER OPTICS AND DATA COMM	A					24	11,805	283	20	9,600	192			
M6001	SIGNAL GENERATORS & ANALYZERS	A					284	2,331	662	329	2,168	713	351	1,953	686
M6002	OSCILLSCPS, METERS & COUNTERS	A											41	5,976	245
M6003	PROC ENGR AND DOCUMENTATION	A							374			161			148
	N88 AIR WARFARE														
M6000	FIBER OPTICS AND DATA COMM						24	10,459	251	15	10,600	159			
M6001	SIGNAL GENERATORS & ANALYZERS						331	4,021	1,331	659	2,021	1,332	537	1,925	1,033
M6002	OSCILLSCPS, METERS & COUNTERS												82	6,037	495
M6003	PROC ENGR AND DOCUMENTATION								537			267			272
			0						9,514			7,663			7,356

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 2000
B. APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy, BA2**	C. P-1 ITEM NOMENCLATURE **General Purpose Electronic Test Equipment (GPETE)/2940**	SUBHEAD **82M6**

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FY-99										
M6000	131	SEE NOTE 3	NSWC-PHD	N/A	RCP	NSWC-PHD	7/99	10/99	YES	
M6001	1,428	SEE NOTE 4	NSWC-PHD	N/A	RCP	NSWC-PHD	7/99	10/99	YES	
M6002	N/A	-	-	-	-	-	-	-	-	
FY-00										
M6000	205	SEE NOTE 5	NSWC-PHD	N/A	RCP	NSWC-PHD	11/99	2/00	YES	
M6001	2,500	0.002	NSWC-PHD	N/A	RCP	NSWC-PHD	11/99	2/00	YES	
M6002	N/A	-	-	-	-	-	-	-	-	
FY-01										
M6000	N/A	-	-	-	-	-	-	-	-	
M6001	2,870	SEE NOTE 6	NSWC-PHD	N/A	RCP	NSWC-PHD	11/00	2/01	YES	
M6002	201	SEE NOTE 7	NSWC-PHD	N/A	RCP	NSWC-PHD	11/00	2/01	YES	

D. REMARKS

NOTE 1: Unit costs are 3,755/6,740/7,092/7,755/6,372/8,770 respectively for Resource Sponsors N091, N096, N6, N86, N87, and N88.
NOTE 2: Unit costs are 3,503/2,222/5,975/3,378/2,850/5,295 respectively for Resource Sponsors N091, N096, N6, N86, N87, and N88.
NOTE 3: Unit costs are 9,325/12,233/32,030/11,805/10,459 respectively for Resource Sponsors N096, N6, N86, N87 and N88.
NOTE 4: Unit costs are 1,089/6,451/4,000/3,860/2,436/4,143 respectively for Resource Sponsors N091, N096, N6, N86, N87, and N88.
NOTE 5: Unit costs are 2,400/5,507/9,600/10,600 respectively for Resource Sponsors N096, N6, N86, N87, and N88.
NOTE 6: Unit costs are 2,001/1,9581,643/1,648/1,953/1,925 respectively for Resource Sponsors N091, N096, N6, N86, N87, and N88.
NOTE 7: Unit costs are 5,809/6,003/5,976/6,307 respectively for Resource Sponsors N096, N86, N87, and N88.

BUDGET ITEM JUSTIFICATION SHEET P-40												DATE: February 2000
APPROPRIATION/BUDGET ACTIVITY: **OTHER PROCUREMENT, NAVY BA-2: Communication and Electronic Equipment**							P-1 ITEM NOMENCLATURE: **Integrated Combat Systems Test Facility (ICSTF)/296000**					
Program Element for Code B Items:							Other Related Program Elements					
	Prior Years	ID Code		FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)	**$3.7**			**$6.4**	**$4.3**	**$4.4**	**$4.6**	**$4.6**	**$4.7**	**$4.8**	**Cont.**	**$33.8**
SPARES COST (In Millions)	**$0.5**			**$0.2**	**$0.5**	**$0.4**	**$0.5**	**$0.4**	**$0.5**	**$0.5**	**Cont.**	**$3.0**

PROGRAM DESCRIPTION/JUSTIFICATION

Naval Surface Warfare Center, Port Hueneme Division, San Diego Detachment (NSWC PHD DET SD), formally known as ICSTF, is the Navy owned and operated combat systems program integration test site in San Diego at SPAWAR SYSTEMS CENTER. NSWC PHD DET SD performs an essential role in promoting the readiness of surface combatant computer program networks. NSWC PHD DET SD's mission is to perform certification testing of computer programs prior to delivery to the Fleet. The threat driven requirement of inter-system data exchange has continued to grow exponentially since the USS CALIFORNIA's protracted pierside recovery program in the 1970's. NSWC PHD DET SD has been used efficiently to detect combat system computer program problems on most configurations of surface combatants, providing knowledge of and corrective action for the remaining problems. The cost of fixing the problems increase significantly with time, either in dollars and/or ship operations days. The cost of detecting the problems during deployment may be measured in harsher terms.

NSWC PHD DET SD is the only permanent Navy facility for testing CV/CVN, LHD, LHA, LSD, LPD-17, DD 963 and FFG ship class shipboard combat system computer networks and for providing combat system in-service engineering support for Fleet identified problems. The site can support basic testing of the current combat system configurations. As existing combat subsystems are upgraded and/or new subsystems are added to the CV/CVN and amphibious ship class combat system configurations, NSWC PHD DET SD must upgrade its testbeds to perform computer network integration testing. In addition, with the issuance of CNO msg. DTG021648Z May 98 on Battle Group Interoperability (BGI), NSWC PHD DET SD must expand its capabilities to support Battle Group Interoperability tes

The basic procurement program outlined herein is directed at adding to NSWC PHD DET SD the capability of supporting the following upgrades/new systems and to support Battle Group Interoperability testing:

Fiber Optics	CVN-76 Combat System	LPD-17 Combat System	C2P Upgrade
Open Architecture	CEC Upgrades	CEC with DDS System	
AN/SPS-48E	COTS	NAVSSI Upgrade	
SSDS/ICDS	C4ISR	AIEWS	
Simulators/Stimulators	LANs	DX/DR	

BUDGET ITEM JUSTIFICATION SHEET P-40 CONTINUATION	DATE: **February 2000**
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY/BA-2 Communications and Electronic Equipment**	P-1 ITEM NOMENCLATURE **Integrated Combat Systems Test Facility (ICSTF) - 296000**

In addition, the basic program provides for increasing centralized test support so that NSWC PHD DET SD can provide simultaneous support to multiple ship classes and to connect to geographically dispersed land based test sites (CONUS) to participate in total ship integrated testing.
Included is procurement of equipment at the Space Warfare System Center (SWSC) CHAS, SC for the Distributed Engineering Plant to ensure Battle Group Interoperability.

All procurements will be received and installed by NSWC PHD DET SD. Installations are based on CSIT and BG Interoperability schedules.

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 availabilty, during routine ship operations and prior to deployment.

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.

WEAPONS SYSTEM COST ANALYSIS P-5						Weapon System									DATE: **February 2000**
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy** **BA-2: COMMUNICATION AND ELECTRONIC EQUIPMENT**						ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **Integrated Combat Systems Test Facility (ICSTF)/296000**								
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS Prior Years				FY 1999			FY 2000			FY 2001		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
M8100	**CS ELEC EQUIP**	**A**							**1,845**			**2,376**			**2,575**
	Control Console Replacement						2	182	363						
	Support System Processor						1	130	130						
	Centralize IFF														
	SSDS/RAIDS						1	602	602				1	1,450	1,450
	Cooperative Engagement Cap (CEC)						1	300	300			75		55	55
	TAC Series Workstation														
	NAVSSI						1	450	450						
	NATO REACH									1	275	275			350
	Common Data Link Management System									1	630	630	1	630	630
	AN/UPX-29									1	400	400			
	Peripheral Emulator System									1	300	300			
	MK-162									1	130	130			
	Test Bed Upgrades											566			90
M8200	**SS ELEC EQUIP**	**A**							**476**			**500**			**500**
	Misc. Elec. Equip								281						
	Data Reduction								195			250			250
	Electronic Switching System									1	250	250	1	250	250
M8300	**CS Simulation**	**A**							**1,004**			**490**			**355**
M8400	**SESEF Elect. Equip**	**A**							**792**			**726**			**704**
M8500	**Space Warfare System**	**A**							**2,000**						
M8900	**SESEF Consulting Services**	**A**							**145**			**145**			**145**
M861N	**Equpment Installation**	**A**							**146**			**95**			**142**
									6,408			**4,332**			**4,421**

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

ITEM NO. PAGE NO.

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE February 2000
B. APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy** **BA-2: Communication and Electronic Equipment**	C. P-1 ITEM NOMENCLATURE **Integrated Combat Systems Test Facility (ICSTF)/296000**	SUBHEAD

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FY 1999										
Conrl Consl Repl	2	182	NAVSEA		C/FP	Loral, St. Paul, MN				
Coop Engage Capb	1	300	NAVSEA		WR	APL/JHU, MD				
SSDS/RAIDS	1	650	NAVSEA		C/FP	Hughes, San Diego, CA				
Spt Sys Processor	1	130	NSWC, PHD		C/FP	Elma, Oakland, CA				
NAVSSI	1	450	SPAWAR		C/FP	TELOS				
FY 2000										
NATO REACH	1	275	NAVSEA		C/FP	Raytheon, Wayland, Mass	Mar 00	Sep 00		
Common Data Link Mgmt System	1	630	SPAWAR		PD	SPAWAR	Mar 00	Sep 00		
AMS{X-29	1	400	NAVSEA		C/FP	Litton Industries	Mar 00	Sep 00		
Peripheral Emulator Sys	1	300	NAVSEA		C/FP	SAIC, CA	Mar 00	Sep 00		
MK-162	1	130	NAVSEA		C/FP	ELMA, Oakland, CA	Mar 00	Sep 00		
Electronic Switching Sys	1	250	NSWC/PHD		RC	SAIC, CA	Jan 00	Jun 00		
FY 2001										
SSDS/RAIDS	1	1450	NAVSEA		C/FP	Raytheon, Wayland, Mass	Mar 01	Sep 01		
Dual Multi Freq. Link	1	350	NAVSEA		C/FP	APL/JHU, MD	Mar 01	Sep 01		
Common Data Link Mgmt System	1	630	SPAWAR		PD	SPAWAR	Mar 01	Sep 01		
Electronic Switching Sys	1	250	NSWC PHD		RC	SAIC, CA	Mar 01	Sep 01		

D. REMARKS

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: N/A TYPE MODIFICATION: N/A MODIFICATION TITLE: N/A

DESCRIPTION/JUSTIFICATION:

INSTALLATION OF TEST BED EQUIPMENT REQUIRED TO CONDUCT PLANNED COMBAT SYSTEM INTEGRATION TEST

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.0
PROCUREMENT																						
INSTALLATION KITS																						
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT			VAR	3.5	VAR	6.3	VAR	4.2	VAR	4.3	VAR	4.4	VAR	4.5	VAR	4.5	VAR	4.6				36.3
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT																						0.0
SUPPORT EQUIPMENT																						0.0
OTHER				0.1		0.1		0.1		0.1		0.1		0.1		0.1		0.1				0.8
OTHER																						0.0
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST				0.1		0.1		0.1		0.1		0.1		0.1		0.1		0.1				0.8
TOTAL PROCUREMENT				3.7		6.5		4.4		4.5		4.6		4.7		4.7		4.8				37.9

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

MODELS OF SYSTEMS AFFECTED: MODIFICATION TITLE:

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: N/A
ADMINISTRATIVE LEADTIME: PRODUCTION LEADTIME: VARIOUS
CONTRACT DATES: FY 1999: VARIOUS FY 2000: VARIOUS FY 2001: VARIOUS
DELIVERY DATE: FY 1999: VARIOUS FY 2000: VARIOUS FY 2001: VARIOUS

($ in Millions)

Cost:	Prior Years		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS				0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0			0	0.0
FY 1998 EQUIPMENT				0.135		0.0		0.0		0.0						0.0		0.0			0	0.1
FY 1999 EQUIPMENT						0.146															0	0.1
FY 2000 EQUIPMENT								0.095													0	0.1
FY 2001 EQUIPMENT										0.142											0	0.1
FY 2002 EQUIPMENT												0.141									0	0.1
FY 2003 EQUIPMENT														0.141							0	0.1
FY 2004 EQUIPMENT																0.144					0	0.1
FY 2005 EQUIPMENT																		0.147			0	0.1
TO COMPLETE																						

INSTALLATION SCHEDULE:

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

BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: **February 2000**	
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY/BA-2 Communications and Electronics Equipment**							P-1 ITEM NOMENCLATURE **CALIBRATION STANDARDS BLI: 2962000 SBHD: 82NB**					
Program Element for Code B Items:							Other Related Program Elements					
	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)				**$1.9**								**$1.9**
SPARES COST (In Millions)												**$0.0**

These
the equipment are operational, accurate and precise.

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

measurement.

for failure prognosis and expert troubleshooting capability. ICAS us linked through data networks to other critical ship systems, such as Machinery Control, Damage Control and Bridge Systems to receive

BUDGET ITEM JUSTIFICATION SHEET FOR AGGREGATED ITEMS
P-40a

DATE: **February 2000**

APPROPRIATION/BUDGET ACTIVITY
OTHER PROCUREMENT, NAVY/ BA-2 Communications and Electronics Equipment

P-1 ITEM NOMENCLATURE
Calibration Standards BLI: 2962000

Procurement Items	ID Code	Prior Years	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
												0
												0
Mechanical Standards				**400**								**400**
Electronic Standards				**1,052**								**1,052**
Accept./Productions Test				**300**								**300**
Training Course Standards				**100**								**100**
												0
												0
												0
												0
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BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: **February 2000**	
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY BA-2 COMMUNICATIONS AND ELECTRONICS EQUIPMENT**							P-1 ITEM NOMENCLATURE **EMI CONTROL INSTRUMENTATION LI: 297000 82MA**					
Program Element for Code B Items:							Other Related Program Elements					
	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)				**$7.5**	**$6.5**	**$5.4**	**$5.2**	**$5.9**	**$6.5**	**$6.6**		**$43.6**
SPARES COST (In Millions)												

Funds will be used to 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 analysis, 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 Station (CAMS) and other high-density users.

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

WEAPONS SYSTEM COST ANALYSIS **P-5**	Weapon System		DATE: **February 2000**
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy** **BA-2 Communications and Electronic Equipment**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **EMI CONTROL INSTRUMENTATION LI297000 82MA**	

TOTAL COST IN THOUSANDS OF DOLLARS

COST CODE	ELEMENT OF COST	ID Code	Prior Years	FY 1998			FY 1999			FY 2000			FY 2001		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	ELECTRONICS SUPPORT (OP-N6)														
MA001	EMERG FIELD CHANGE KITS	A							500			500			500
MA004	EMI FIXES & SENSOR KITS	A							5,225			4,517			3,541
MA104	EMI CONTROL INSTRUMENTATION	A							1,586			1,345			1,177
MA107	FACTS INSTRUMENTATION	A							150			155			160
									7,461			**6,517**			**5,378**

BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: February 2000	
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY: BA 2 Communications and Electronic Equipment**							P-1 ITEM NOMENCLATURE **Shore Electronics Under $2M BLI: 297500 SBHD: C2M7/22M7**					
Program Element for Code B Items:							Other Related Program Elements					
	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)				**$10.4**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$10.4**
SPARES COST (In Millions)				**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**

Starting with the FY 00 budget, this program was consolidated into the Items Less than $5M BLI 298000.

BUDGET ITEM JUSTIFICATION SHEET P-40												DATE: February 2000
APPROPRIATION/BUDGET ACTIVITY: **OTHER PROCUREMENT, NAVY**							P-1 ITEM NOMENCLATURE: **Items under $5M (298000)**					
Program Element for Code B Items:							Other Related Program Elements					
	Prior Years	ID Code		FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)				**$0.0**	**$10.9**	**$4.9**	**$6.5**	**$8.4**	**$9.2**	**$8.1**		**$48.0**
SPARES COST (In Millions)				**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**		**$0.0**

THIS IS A CONSOLIDATED OPN BUDGET FOR THE FOLLOWING ITEMS:

ADVANCED SENSOR DISTRIBUTION SYSTEM (ASDS):
ASDS IS A RADAR DISTRIBUTION SYSTEM WHICH CONVERTS NAVAL SURFACE AND AIR SEARCH RADAR INFORMATION INTO A STANDARD DIGITAL FORMAT, WHICH DISTRIBUTES THIS DATA TO RADAR NAVIGATION AND TACTICAL DISPLAYS THROUGHOUT THE PLATFORM. THE ASDS SB-4229A(V)/SP RADAR SIGNAL DISTRIBUTION SWITCHBOARD IS DESIGNED FOR FAST, EFFECTIVE SWITCHING OF ALL NAVAL RADAR VIDEO, IFF AND MIL-STD-751 DIGITAL DATA TO ALL COMBAT SYSTEM DISPLAY CONSOLES THROUGHOUT THE PLATFORM. THE ASDS RADCOR IS A RADAR RECORDER WHICH PERFORMS LIVE RADAR RECORDING OF THE RADDS DATA STREAM AND SELECTED VIDEO. THE ASDS CV-3989(V)/SP DUAL SIGNAL DATA CONVERTER ACCEPTS STANDARD RADAR POSITIONAL INTERFACES AND RECEIVES INPUTS FROM SHIPBOARD NAVIGATIONAL SENSORS. THE ASDS PORTABLE RADAR OPERATOR VIDEO TRAINER (PROVT) PROVIDES DUAL CHANNEL SIMULATED RADDS OUTPUT SIGNALS PRODUCED FROM SCENARIO GENERATED TARGET DATA. THE TACTICAL SYSTEM INTERFACE UNIT (TSIU) ALLOWS TWO-WAY COMMUNICATION BETWEEN MULTIPLE AN/SPA-25G DISPLAYS, WHICH ENABLES FILTERING AND PERFORMS TRACK FILE MANAGEMENT. THE ASDS CONTROLLER ALLOWS FOR AN/SPA-25G DISPLAYS TO SHARE COMMON TRACK NUMBERS.

SHORE ELECTRONIC ITEMS (TECR):
THE TACTICAL EMBEDDED COMPUTER RESOURCES (TECR) REUTILIZATION PROGRAM - REFURBISHES, RECONFIGURES AND TESTS TECR ASSETS MADE AVAILABLE THROUGH DECOMMISSIONINGS AND OTHER DOWNSIZING EFFORTS AND PROVIDES THESE ASSETS TO SATISFY CURRENT TACTICAL SYSTEMS REQUIREMENTS. TECR DEPOT AND DIMINISHING MANUFACTURING RESOURCES CAPABILITY - INCLUDES PROCUREMENT OF TEST EQUIPMENT AND POTENTIALLY OBSOLETE PARTS TO MAINTAIN BOTH ORGANIC AND ORIGINAL EQUIPMENT MANUFACTURER DEPOTS FOR OUT-OF-PRODUCTION EQUIPMENT WHICH WILL REMAIN IN THE FLEET WELL PAST FY 2010. ADDITIONAL FUNDS WERE PROVIDED IN FY 99 TO UPGRADE AND TEST THE DISPLAY CONSOLES AND ASSOCIATED EQUIPMENT ON OLDER US NAVY SHIPS AND TEST SITES, REPLACING THEM WITH EMULATORS, AN/UYQ-70 DISPLAYS AND ASSOCIATED PERIPHERAL EQUIPMENT. THESE DISPLAYS AND ASSOCIATED EQUIPMENT WOULD BE TESTED TO ASSESS IMPROVEMENTS IN THE MAN/SYSTEM INTERFACES WHICH CONTROL THE COMMAND/CONTROL/WEAPONS/COMBAT SYSTEMS REQUIRED FOR THE MISSION OF THESE NAVY SURFACE COMBATANTS.

BUDGET ITEM JUSTIFICATION SHEET P-40												DATE: February 2000
APPROPRIATION/BUDGET ACTIVITY: **OTHER PROCUREMENT, NAVY**							P-1 ITEM NOMENCLATURE: **Items under $5M (298000)**					
Program Element for Code B Items:							Other Related Program Elements					
	Prior Years	ID Code	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY												
COST (In Millions)												**$0.0**
SPARES COST (In Millions)												**$0.0**

CALIBRATION STANDARDS:
THESE FUNDS PROCURE CALIBRATION EQUIPMENT FOR INTERMEDIATE AND ORGANIZATIONAL MAINTENANCE LEVELS. TEST AND MONITORING SYSTEMS (TAMS), WHICH INCLUDE TEST EQUIPMENT AND GAGES, MUST BE CALIBRATED TO ENSURE THE EQUIPMENT IS OPERATIONAL, ACCURATE AND PRECISE. FUNDS ARE USED TO PROCURE CALIBRATION STANDARDS. CALIBRATION STANDARDS ARE EQUIPMENTS WHICH ENSURE THE ACCURACY OF TEST EQUIPMENT USED TO INSTALL, ALIGN, AND MAINTAIN ALL NAVY WEAPONS SYSTEMS SHORE AND AFLOAT. IMA MECHANICAL STANDARDS PROGRAMS PROVIDE 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 AREAS OF MEASUREMENT. INTEGRATED CONDITION ASSESSMENT SYSTEM (ICAS) IS AN NDI (COTS EQUIPMENT) COMPUTER BASED SYSTEM THAT PROVIDES REAL-TIME, ON-LINE MACHINERY CONDITION MONITORING AND FAILURE DETECTION, DIAGNOSIS, TRENDING FOR FAILURE PROGNOSIS AND EXPERT TROUBLESHOOTING CAPABILITY. ICAS IS LINKED THROUGH DATA NETWORKS TO OTHER CRITICAL SHIP SYSTEMS, SUCH AS MACHINERY CONTROL, DAMAGE CONTROL AND BRIDGE SYSTEMS TO RECEIVE NECESSARY SENSORY INFORMATION.

SHORE ELECTRONIC ITEMS (AN/UYS-2):
PROCURES AN/UYS-2 HARDWARE, INCLUDING ASSEMBLIES AND COMPONENTS; QUALITY ASSURANCE, PRODUCTION ENGINEERING AND ACCEPTANCE TESTING IN SUPPORT OF AN/UYS-2 PROCUREMENTS; SUPPORT AND MATERIALS INCIDENT TO MODIFICATION OF AN/UYS-2A EQUIPMENT; PROCUREMENT OF COTS HAARDWARE TO SUPPORT MODERNIZATION/REPLACEMENT OF AN/UYS-2A EQUIPMENT; PROCUREMENT/DIRECT SUPPORT COSTS TO SUPPORT MODERNIZATION ACTIVITIES.

RADAR SUPPORT:
AN/SPS-73(V) RADAR - PROVIDES REPLACEMENT RADAR FOR AN/SPS-64 RADAR ON ALL SHIP CLASSES AND REPLACEMENT FOR AN/SPS-55 AND AN/SPS-67(V)1 RADAR ON VARIOUS CLASS SHIPS.
FFG UPGRADES (NRF) - PROVIDES WEAPON/COMBAT SYSTEM UPGRADES FOR NAVAL RESERVE FORCE FFG.

EQUIPMENT INSTALLATION - FUNDING IS THE INSTALLATION OF EQUIPMENT INCLUDING FLEET MODERNIZATION PROGRAM INSTALLATIONS, INSTALLATION OF TRAINING EQUIPMENT, INSTALLATION OF EQUIPMENT IN OTHER SHORE FACILITIES AND INSTALLATION/CERTIFICATION/TESTING OF EQUIPMENT.

WEAPONS SYSTEM COST ANALYSIS **P-5**	Weapon System	DATE: **February 2000**
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **Items under $5M (298000)**

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years				FY 1999			FY 2000			FY 2001		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
DC001	RADAR SUPPORT											827			
DC002	SHORE ELECTRONICS - TECR											5,390			1,671
DC003	SHORE ELECTRONICS - AN/UYS-2											1,340			1,461
DC004	CALIBRATION STANDARDS											1,336			1,757
DC005	ASDS											1,304			0
DCINS	EQUIPMENT INSTALLATION											719			
	NOTE: Cost codes shown are for FY 00 and out only														
									0			**10,916**			**4,889**

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: RADAR SUPPORT (298000) TYPE MODIFICATION: N/A MODIFICATION TITLE: AN/SPS-73(V) RADAR (N86)

DESCRIPTION/JUSTIFICATION:

PROVIDE REPLACEMENT RADARS FOR LN-66, AN/SPS-64(V)9, AN/SPS-55 AND AN/SPS-67(V)1.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1997 & Prior		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																					0	0.0
PROCUREMENT																						
INSTALLATION KITS																					0	0.0
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT			69	10.6	60	6.3	5	0.5			7	0.7	8	0.8	7	0.7	7	0.8	145	13.5	308	33.9
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT																						0.0
SUPPORT EQUIPMENT																						0.0
OTHER (Production Engineering)				0.7		0.5		0.2				0.2		0.2		0.2		0.2				2.2
OTHER (Consulting Services)				0.3		0.1		0.2				0.2		0.2		0.1		0.1				1.2
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST				2.8		2.8		0.2				0.3		0.3		0.3		0.3		4.1		11.1
TOTAL PROCUREMENT				14.4		9.7		1.1				1.4		1.5		1.3		1.4		17.6		48.4

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

MODELS OF SYSTEMS AFFECTED: RADAR SUPPORT (298000) MODIFICATION TITLE: AN/SPS-73(V) RADAR (N86)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: ALTERATION INSTALLATION TEAM (AIT)

ADMINISTRATIVE LEADTIME: 6 MONTHS PRODUCTION LEADTIME: 2 Months

CONTRACT DATES: FY 1999: 7/99 FY 2000: N/A FY 2001: N/A

DELIVERY DATE: FY 1999: 9/99 FY 2000: N/A FY 2001: N/A

($ in Millions)

Cost:	Prior Years		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS				0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0			0	0.0
FY 1998 EQUIPMENT			69	2.8		0.0		0.0		0.0						0.0		0.0			69	2.8
FY 1999 EQUIPMENT					60	2.8															60	2.8
FY 2000 EQUIPMENT							5	0.2													5	0.2
FY 2001 EQUIPMENT																					0	0.0
FY 2002 EQUIPMENT											7	0.3									7	0.3
FY 2003 EQUIPMENT													8	0.3							8	0.3
FY 2004 EQUIPMENT															7	0.3					7	0.3
FY 2005 EQUIPMENT																	7	0.3			7	0.3
TO COMPLETE																						

INSTALLATION SCHEDULE:

	FY 1998	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				TC	
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		TOTAL
In	5	1	7		2	46	68	1	2	2	0	2	2	2	0	2	2	3	0	1	2	5	0	2	3	2	0	2	2	3	145	314
Out	5	1	7		2	46	68	1	2	2	0	2	2	2	0	2	2	3	0	1	2	5	0	2	3	2	0	2	2	3	145	314

BUDGET ITEM JUSTIFICATION SHEET									February 2000	
APPROPRIATION / BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE BLI 3010 Ship Tactical Comms		SUBHEAD 52DN	
	PY	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY										
COST (in millions)		$31.9	$25.2							

Note: Ship Tactical Comms Program transfers to the Communications Items Under $5M (BLI 3057) in FY01. Detail budget justificatoin material is in the Communications Items Under $5M (BLI 3057) for budget comparability.

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.

JUSTIFICATION OF BUDGET YEAR REQUIREMENTS:

HF TILT MECHANISMS - DEVICES TO ENABLE VERTICAL WHIP ANTENNA TO BE LOWERED TO A HORIZONTAL POSITION DURING FLIGHT OPERATIONS.

HIGH FREQUENCY RADIO GROUP (HFRG BROADBAND) - WILL ALLOW FULLY AUTOMATED OPERATION OF THE HF COMMUNICATIONS SYSTEM. THIS SYSTEM WILL REDUCE THE NUMBER OF TOPSIDE ANTENNA USED, REDUCE ELECTROMAGNETIC INTERFERENCE AND REDUCE MANNING REQUIREMENTS.

HIGH FREQUENCY SMALL SHIP TRANSMITTER (HFSST NARROWBAND) - HFSST IS A ONE-TO-ONE RADIO REPLACEMENT OF LEGACY NARROWBAND HF TRANSMITTERS AND ANTENNA COUPLERS, REPLACING 1960'S VACUUM TUBE TECHNOLOGY.

DIGITAL WIDEBAND TRANSMISSION SYSTEM (DWTS) - UHF LINE-OF-SIGHT RADIO SYSTEM, SHIP-TO-SHIP AND SHIP-TO-SHORE COMMUNICATIONS REQUIRED TO SUPPORT LANDING FORCE SYSTEMS. THE CURRENT PROGRAM PROCURES DWTS FOR AMPHIBIOUS AND FLAG SHIPS ONLY. LRIP PROCUREMENTS OF LOW DATA RATE DWTS (DWTS LDR) BEGINS IN FY00.

INSTALLING AGENTS: INSTALLATION WILL BE ACCOMPLISHED BY ALTERATION INSTALLATION TEAMS (AIT) FROM SPAWAR FIELD ACTIVITIES.

BUDGET ITEM JUSTIFICATION SHEET

DATE
February 2000

APPROPRIATION/BUDGET ACTIVITY	**P-1 ITEM NOMENCLATURE**	**SUBHEAD**
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	BLI: 3033 Portable Radios	52T7

	PY	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	TO COMP	TOTAL
QUANTITY									
COST (in millions)		**$6.4**							

Note: Portable Radios Program transfers to the Communications Items Under $5M budget (BLI 3057) in FY01. Detail budget justification material is in the Communications Items Under $5M budget (BLI 3057) for budget comparbility.

PROGRAM COVERAGE:

Portable and mobile radios support the unique air, sea, and land environment of the Navy Explosive Ordnance Disposal Units, Construction Battalions, Naval Beach Groups, Tactical Air Control Units, Naval Special Warfare Units, and Shipboard requirements defined by OPNAVINST C2300.44F.

JUSTIFICATION OF BUDGET YEAR REQUIREMENTS:

Requirements include:
a. Combat Survivor Evader Locator Beacons (CSEL).
b. Single Channel Ground Air Radio System (SINCGARS) VHF FM units, both manpack and vehicular for anti-jam communications.
c. HF radios for beyond-line-of-sight operations.
d. Emergency lifeboat radios.
e. Survival ground to air radios.

Hierarchical Yet Dynamic Reprogrammable Architecture (HYDRA) AN/SRC-55 will replace all stovepipe wireless shipboard systems (DCWIFCOM, MOMCOM, PVPCS, FDCS) with an integrated system on all ship classes. HYDRA is a wireless digital voice and data communications system using COTS trunking technology. HYDRA is capable of interfacing with PBX/BG Cellular/RF systems.

Unit costs vary with the ship type and are based on the number of channels and radios in the system. Installations are performed by AITs during dockside availabilities.

BUDGET ITEM JUSTIFICATION SHEET

DATE
February 2000

APPROPRIATION/BUDGET ACTIVITY	**P-1 ITEM NOMENCLATURE**	**SUBHEAD**
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	BLI: 3040 SINCGARS	52D5

	PY	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY										
COST (in millions)		**$27.7**								

Note: The SINCGARS Program transfers to the Communications Items Under $5M budget (BLI 3057) in FY01. Detail budget justification material is in the Communications Items Under $5M budget (BLI 3057) for budget comparability.

PROGRAM COVERAGE: The Shipboard SINCGARS (Single Channel Ground and Airborne Radio System) provides tactical anti-jam radios to support ship-to-shore communications during amphibious operations. This program also fills the requirements for VHF ship-to-ship and ship-to-boat communications, replacing the aging AN/VRC-46 family of radios. FY 1999 provides funding for the the buy-out of the SINCGARS requirements. Production Support provides funding for procuring modified ILS documentation and support packages which reflect SINCGARS-SIP configurations and to integrate the products of this program with other components of the JMCOMS system, such as ADNS. FY99 PBD-290 provided funds and directed the Navy to accelerate procurement of equipment in order to conform to Joint PMO plans.

EXPLANATION OF PROGRAM CHANGE:
Systems are being procured in configurations which are specific to each ship class. These configurations consist of differing numbers of five standard subcomponents. The SIP version of SINCGARS is to be fielded, replacing non-SIP SINCGARS which have already been partially fielded.

Standard Components:
1) Ship System (AN/SRC-54A) - A SINCGARS System Improvement Program (SIP) configuration which uses a single radio in a single mount.
2) Ship System (AN/SRC-54B) - A SINCGARS SIP configuration which uses two radios in a single mount.
3) Multicoupler (TD-1456) This multicoupler is being provided to all ships to couple up to four SINCGARS radios to a single antenna; one radio can operate in anti-jam mode.
4) SINCGARS Remote Control System (OT-637A) - A device for providing remote control of radios from the command and control spaces throughout the ship.
5) Test Set (AN/GRM-122) - A test set for testing the unique components of the SINCGARS SIP frequency-hopping radio.

INSTALLING AGENTS: Alteration Installation Teams by all SPAWAR field activities.

BUDGET ITEM JUSTIFICATION SHEET											DATE	February 2000
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE BLI: 3050 COMM AUTO				SUBHEAD 52PQ	
				FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY												
COST (in millions)				$109.1	$229.2	$185.1	$174.7	$188.0	$153.6	$147.6	Continuing	Continuing

PROGRAM COVERAGE/JUSTIFICATION OF BUDGET YEAR REQUIREMENTS:

NAVMACS II/SMS (PQ065): The Naval Modular Automated Communication System II (NAVMACS II)/Single Message Solution (SMS) automates and increases the speed and efficiency of handling organizational message traffic aboard ships. This system was developed with an open system architecture, and is conducive to technological upgrades. NAVMACS II is the Navy's host platform for tactical (afloat) DMS. NAVMACS II 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. Tactical DMS satisfies MROC requirements to transition to IP based organizational messaging**.**

Automated Digital Network System (ADNS) (PQ069): Provides automated routing and switching of Tactical and Strategic C4I data via Transmission Control Protocol/Internet Protocol (TCP/IP) networks linking deployed Battle Group units with each other and with the Defense Information Systems Network (DISN) ashore via multiple Radio Frequency (RF) paths. Consists of Commercial Off-The-Shelf (COTS) non-developmental Joint Tactical Architecture (JTA) compliant hardware (routers, processors, switches) and commercial Y2K compliant software (VxWorks toolkit) in a standardized, scalable shock qualified rack design. Provides Internet Protocol (IP) connectivity afloat and ashore. Merges multiple redundant stove pipe communications circuits and efficiently manages RF assets resulting in better throughput using existing RF media. Line includes Network Operation Centers (NOCs) Ashore**.**

Tactical Switching (PQ070): Provides the switching and bandwidth management components of high capacity interoperable communications, as the number one fleet CINC requirement in the Navy Wide C4 and Information Warfare (IW) Joint Mission Area (JMA) assessment. Provides for the shore segment interconnect of an end-to-end dynamic bandwidth management, Internet Protocol, and Channel Access Protocol capability to deploying Battle Groups/Amphibious Ready Groups and other support units. Automates the major shore nodes which allow network centric and lights-out operations. Provides afloat interoperability of tactical and strategic C4I circuits with Marine Corps Ground Mobile Forces (GMF) . Tactical Switching (which includes GMF interoperability , Automated Network Control Center (ANCC), Automated Technical Control (ATC) and the Automated Digital Multiplexer System (ADMS)) is the key enabling mechanism for the execution of the Automated Digital Network System (ADNS) strategy which is essential to meeting the Information Technology for the 21st Century (IT21) vision.

Element Management System (PQ075): Provides ships and shore sites with the capability to rapidly realign communications, and deploys essential baseline elements of IT-21 Automated Digital Network Systems (ADNS). Automates and remotely controls communications switching and quality monitoring equipment which eliminates manual operations. Provides operator controlled automated configuration of the Radio Communications System Circuits, computerized communications plan development and quality monitoring and reporting. Eliminates manual operator functions (patch panels) and provides open system architecture in accordance with Defense Information Infrastructure (DII).

Integrated Shipboard Network Systems (ISNS) (Formerly ATM LAN) (PQ007): The Integrated Shipboard Network System (ISNS) program provides every Navy ship, including submarines, with a reliable, high-speed Local Area Network (LAN) that will provide LAN and Wide Area Network (WAN) access to the DISN WAN (Secure and Nonsecure Internet Protocol Router Network -SIPRNet and NIPRNet). It provides real-time information exchange between afloat units, Component Commanders, numbered Fleet Commanders and Fleet CINCs through the migration of existing legacy systems into the IT-21 strategy and is a key factor in the implementation of the Navy's portion of Joint Vision 2010. U mission capability. The ISNS program maximizes the use of both COTS software and hardware resulting in dependence on commercially supported hardware and software. Engineering and technical support is provided so that existing systems will keep pace with hardware and software that is supported commercially.

Afloat PCs (PQ085, PQ086, PQ088): Funds procurement of PCs for Amphibious Ships, Surface Combatants, and Aircraft Carriers/Squadrons respectively.

INSTALLING AGENTS: Installation will be by Alteration Installation Teams (AIT) from SPAWAR field activities.

COST ANALYSIS						**DATE** February 2000					
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT						**P-1 ITEM NOMENCLATURE** BLI: 3050 COMM AUTO					**SUBHEAD** 52PQ
			TOTAL COSTS IN THOUSANDS OF DOLLARS								
			FY 1999			**FY 2000**			**FY2001**		
COST CODE	**ELEMENT OF COST**	**ID CODE**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**
PQ065	**NAVMACS II/SMS**	**A**	**13**	**679.3**	**8,831**	**50**	**177.7**	**8,885**	**37**	**220.9**	**8,175**
PQ069	**ADNS**				**8,112**			**25,009**			**18,836**
	ADNS Afloat	**A**	28	289.7	8,112	71	291.8	20,717	58	265.3	15,389
	ADNS Ashore	**A**				4	1,073.0	4,292	4	861.8	3,447
PQ070	**TACTICAL SWITCHING**	**A**			**8,952**			**9,838**			**6,933**
	Tactical Switching Afloat		20	447.6	8,952	16	461.1	7,377	8	489.9	3,919
	ANCC Ashore					3	223.0	669	4	227.5	910
	ATC Ashore					1	1,250.0	1,250	1	1,275.0	1,275
	ADMS Ashore					2	271.0	542	3	276.3	829
PQ075	**EMS**	**A**						**8,829**			**7,622**
	EMS ASHORE					15	327.0	4,905	12	331.3	3,975
	EMS AFLOAT					12	327.0	3,924	11	331.5	3,647
PQ007	**ISNS (formerly ATM LANs)**	**A**	**55**	**595.7**	**32,762**	**71**	**909.9**	**64,602**	**42**	**1,258.9**	**52,875**
PQ555	**Production Support**	**A**			**1,855**			**4,387**			**4,160**
	Tactical Switching (IT21 Afloat)				540			345			160
	ANCC/ATC/ADMS (NON-IT21 Ashore)							168			125
	EMS							522			378
	NAVMACS II/SMS				853			410			542
	ADNS Afloat				462			662			664
	ISNS (formerly ATM LANs)							2,280			2,291
PQ085	**Amphibious Ship PCs**										**2,496**
PQ086	**Surface Combatants PCs**							**3,205**			**6,097**
PQ088	**Aircraft Carrier PCs**										**9,879**

Note: NAVMACS, ADNS and ISNS unit cost are based on average cost of all units.
Variances are due to the diverse types of ship sets being procured.

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Exhibit P-5

COST ANALYSIS							**DATE** February 2000					
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT							**P-1 ITEM NOMENCLATURE** BLI: 3050 COMM AUTO					**SUBHEAD** 52PQ
			TOTAL COST IN THOUSANDS OF DOLLARS									
				FY 1999			**FY 2000**			**FY2001**		
COST CODE	**ELEMENT OF COST**	**ID CODE**		**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**
PQ777	**INSTALLATION**	**A**				**48,583**			**104,452**			**68,070**
	FMP Install											
	Tactical Switching (IT21 Afloat)			20	122.3	2,445	16	126.5	2,024	8	128.4	1,027
	EMS (Afloat)						12	235.0	2,820	10	235.2	2,352
	NAVMACS II/SMS (Afloat)			13	81.1	1,054	50	104.8	5,241	37	95.2	3,523
	ADNS (Afloat)			27	258.7	6,984	72	212.9	15,331	58	205.0	11,889
	ISNS (formerly ATM LANs) (Afloat)			55	546.5	30,059	66	854.6	56,401	43	777.3	33,422
	Tactical Switching (IT21 Afloat) (DSA)					317			261			132
	EMS (DSA)								192			160
	NAVMACS II/SMS (DSA)					418			593			293
	ADNS Afloat (DSA)					959			3,371			2,803
	ISNS (formerly ATM LANs) DSA					6,347			13,214			6,979
	Non-FMP Install											
	ANCC/ATC/ADMS (NON-IT21 Ashore)						6	209.0	1,254	8	191.3	1,530
	EMS (Ashore)						15	190.0	2,850	12	191.9	2,303
	ADNS (Ashore)						4	225.0	900	4	414.3	1,657
	TOTAL CONTROL					**109,095**			**229,207**			**185,143**

PROCUREMENT HISTORY AND PLANNING

A. DATE: February 2000

B. APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

C. P-1 ITEM NOMENCLATURE: BLI: 3050 COMM AUTO

SUBHEAD: 52PQ

COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
PQ065	NAVMACS II/SMS	00	SSC CHARLESTON	SOW	SPAWAR	Oct-99	Nov-99	Jan-00	50	177.7	YES	N/A
		01	SSC CHARLESTON	SOW	SPAWAR	Oct-00	Nov-00	Jan-01	37	220.9	YES	N/A
PQ069	ADNS Afloat	99	SAIC, SAN DIEGO	Option	SPAWAR	Sep-98	Nov-98	Jan-99	28	289.7	YES	N/A
		00	SAIC, SAN DIEGO	Option	SPAWAR	Sep-99	Nov-99	Jan-00	71	291.8	YES	N/A
		01	SAIC, SAN DIEGO	Option	SPAWAR	Sep-00	Nov-00	Jan-01	58	265.3	NO	Oct-99
PQ069	ADNS Ashore	00	SAIC, SAN DIEGO	Option	SPAWAR	Sep-99	Nov-99	Jan-00	4	1,073.0	YES	N/A
		01	SAIC, SAN DIEGO	Option	SPAWAR	Sep-00	Nov-00	Jan-01	4	861.8	YES	N/A
PQ070	Tactical Switching Afloat	99	SAIC, SAN DIEGO	Option C	SPAWAR	Jul-98	Nov-98	Mar-99	20	447.6	YES	N/A
		00	SAIC, SAN DIEGO	Option C	SPAWAR	Jul-99	Nov-99	Mar-00	16	461.1	YES	N/A
		01	SAIC, SAN DIEGO	Option C	SPAWAR	Jul-00	Nov-00	Mar-01	8	489.9	YES	N/A
PQ070	ANCC Ashore	00	SSC CHARLESTON	WX	SPAWAR	Sep-99	Dec-99	Apr-00	3	223.0	YES	N/A
		01	SSC CHARLESTON	WX	SPAWAR	Sep-00	Dec-00	Apr-01	4	227.5	YES	N/A
PQ070	ATC Ashore	00	SSC CHARLESTON	WX	SPAWAR	Sep-99	Dec-99	Apr-00	1	1,250.0	YES	N/A
		01	SSC CHARLESTON	WX	SPAWAR	Sep-00	Dec-00	Apr-01	1	1,275.0	YES	N/A
PQ070	ADMS Ashore	00	SSC CHARLESTON	WX	SPAWAR	Sep-99	Dec-99	Apr-00	2	271.0	YES	N/A
		01	SSC CHARLESTON	WX	SPAWAR	Sep-00	Dec-00	Apr-01	3	276.3	YES	N/A
PQ075	EMS ASHORE	00	SSC CHARLESTON	WX	SPAWAR	Sep-99	Dec-99	May-00	15	327.0	YES	N/A
		01	SSC CHARLESTON	WX	SPAWAR	Sep-00	Dec-00	May-01	12	331.3	YES	N/A
PQ075	EMS AFLOAT	00	SSC CHARLESTON	WX	SPAWAR	Sep-99	Dec-99	May-00	12	327.0	YES	N/A
		01	SSC CHARLESTON	WX	SPAWAR	Sep-00	Dec-00	May-01	11	331.5	YES	N/A

D. REMARKS

Note: NAVMACS, ADNS and ISNS unit cost are based on average cost of all units. Variances are due to the diverse types of ship sets being procured.
Programs (except NAVMACS) not displaying FY99 data migrated to 52PQ beginning in FY00

PROCUREMENT HISTORY AND PLANNING

A. DATE: February 2000

B. APPROPRIATION / BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

C. P-1 ITEM NOMENCLATURE: BLI: 3050 COMM AUTO

SUBHEAD: 52PQ

COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
PQ007	ISNS (formerly ATM LANs)	99	Various	IDIQ	SPAWAR	Sep-98	Nov-98	Jan-99	55	595.7	YES	N/A
		00	Various	IDIQ	SPAWAR	Sep-99	Nov-99	Jan-00	71	909.9	YES	N/A
		01	Various	IDIQ	SPAWAR	Sep-00	Nov-00	Jan-01	42	1,258.9	YES	N/A

D. REMARKS

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

February 2000

MODIFICATION TITLE: NAVAL MODULAR AUTOMATED COMMUNICATIONS SYSTEM II (NAVMACS II)
COST CODE PQ095/PQ777
MODELS OF SYSTEMS AFFECTED: NAVMACS II
DESCRIPTION/JUSTIFICATION: The Navy Modular Automated Communications system (NAVMACS II) will automate and increase the efficiency of message handling aboard ships.

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

	PY			FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$		Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																							
PROCUREMENT:																							
Kit Quantity																							
Installation Kits																							
Installation Kits Nonrecurring																							
Equipment	50	31.3		9	3.5	13	8.8	50	8.9	37	8.2	10	1.7	45	7.5	67	6.6	118	12.4	Continue		399	88.9
Equipment Nonrecurring																							
Engineering Change Orders																							
Data																							
Training Equipment																							
Support Equipment																							
Other																							
Interm Contractor Support																							
Installation of Hardware*	50	8.6		9	1.2	13	1.1	50	5.2	37	3.5	10	1.3	45	5.4	67	4.6	118	8.5	Continue		399	39.5
PRIOR YR EQUIP	50	8.6																				50	8.6
FY 98 EQUIP				9	1.2																	9	1.2
FY 99 EQUIP						13	1.1															13	1.1
FY 00 EQUIP								50	5.2													50	5.2
FY 01 EQUIP										37	3.5											37	3.5
FY 02 EQUIP												10	1.3									10	1.3
FY 03 EQUIP														45	5.4							45	5.4
FY 04 EQUIP																67	4.6					67	4.6
FY 05 EQUIP																		118	8.5			118	8.5
FY TC EQUIP																						0	0.0
TOTAL INSTALLATION COST		8.6			1.2		1.1		5.2		3.5		1.3		5.4		4.6		8.5			399	39.5
TOTAL PROCUREMENT COST		39.9			4.7		9.9		14.1		11.7		3.0		12.9		11.3		20.9				128.4

METHOD OF IMPLEMENTATION: AIT ADMINISTRATIVE LEADTIME: 1 month PRODUCTION LEADTIME: 2 months

CONTRACT DATES: FY 1999: Nov-98 FY 2000: Nov-99 FY 2001: Nov-00

DELIVERY DATES: FY 1999: Jan-99 FY 2000: Jan-00 FY 2001: Jan-01

INSTALLATION SCHEDULE:	PY	FY 99 1	2	3	4	FY 00 1	2	3	4	FY 01 1	2	3	4
INPUT	59		5	4	4		15	20	15		10	15	12
OUTPUT	59		1	8	4		10	15	25		5	15	17

INSTALLATION SCHEDULE:	FY 02 1	2	3	4	FY 03 1	2	3	4	FY 04 1	2	3	4	FY 05 1	2	3	4	TC	TOTAL 1/
INPUT		3	5	2		15	25	5		15	40	12		30	60	28		399
OUTPUT		1	6	3		10	15	20		10	30	27		20	50	48		399

Notes/Comments
1/ Total quantity meets inventory objective.

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P-3A Exhibit

February 2000

MODIFICATION TITLE: Automated Digital Network System (ADNS)
COST CODE PQ069/PQ777
MODELS OF SYSTEMS AFFECTED: Automated Digital Network System (ADNS) Afloat.
DESCRIPTION/JUSTIFICATION: Automated Digital Network System (ADNS) implements ATM multiplexing technology, and JDIICS-D compliant Integrated Network Management tools.

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

	PY			FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$		Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																							
PROCUREMENT:																							
Kit Quantity																							
Installation Kits																							
Installation Kits Nonrecurring																							
Equipment	0	0.0		25	11.0	28	8.1	71	20.7	58	15.4	25	16.1	54	19.7	52	18.8	51	19.4	0	0.0	364	129.3
Equipment Nonrecurring																							
Engineering Change Orders																							
Data																							
Training Equipment																							
Support Equipment																							
Other																							
Interm Contractor Support																							
Installation of Hardware*	0	0.0		25	8.9	27	7.0	72	15.3	58	11.9	25	11.1	54	13.4	52	12.9	51	13.2	0	0.0	364	93.7
PRIOR YR EQUIP	0	0.0																				0	0.0
FY 97 EQUIP																						0	0.0
FY 98 EQUIP				25	8.9																	25	8.9
FY 99 EQUIP						27	7.0	1	0.2													28	7.2
FY 00 EQUIP								71	15.1													71	15.1
FY 01 EQUIP										58	11.9											58	11.9
FY 02 EQUIP												25	11.1									25	11.1
FY 03 EQUIP														54	13.4							54	13.4
FY 04 EQUIP																52	12.9					52	12.9
FY 05 EQUIP																		51	13.2			51	13.2
FY TC EQUIP																						0	0.0
TOTAL INSTALLATION COST		0.0			8.9		7.0		15.3		11.9		11.1		13.4		12.9		13.2		0.0	364	93.7
TOTAL PROCUREMENT COST		0.0			19.9		15.1		36.0		27.3		27.2		33.1		31.7		32.7		0.0		223.0

METHOD OF IMPLEMENTATION: AIT — ADMINISTRATIVE LEADTIME: 2 month — PRODUCTION LEADTIME: 2 months

CONTRACT DATES: FY 1999: Nov-98 — FY 2000: Nov-99 — FY 2001: Nov-00

DELIVERY DATES: FY 1999: Jan-99 — FY 2000: Jan-00 — FY 2001: Jan-01

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4
INPUT	25		9	9	9	1	24	24	23		19	19	20
OUTPUT	25			9	9	10		24	24	23		19	19

INSTALLATION SCHEDULE:	FY 02 1	FY 02 2	FY 02 3	FY 02 4	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL 1/
INPUT		8	8	9		18	18	18		18	17	17		17	17	17		364
OUTPUT	20		8	8	9		18	18	18		18	17	17		17	17	17	364

Notes/Comments
1/ Total quantity meets inventory objective (292 Ships and 72 upgrades equals quantity of 354)

P-3A Exhibit

P-1 SHOPPING LIST
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February 2000

MODIFICATION TITLE: Automated Digital Network System (ADNS) 1/
COST CODE PQ0069/PQ777
MODELS OF SYSTEMS AFFECTED: Automated Digital Network System (ADNS) Ashore.
DESCRIPTION/JUSTIFICATION: Automated Digital Network System (ADNS) implements ATM multiplexing technology, and JDIICS-D compliant Integrated Network Management tools. It adds SCI ADNS Architecture, Integrated Network Management Architecture, and supports legacy system programs. Line includes Network Operation Centers (NOCs) Ashore.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: ($ in millions)

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	0	0.0	<4>	<2.7>	<4>	<2.5>	4	4.3	4	3.4	4	4.0	4	4.4	2	2.1	1	0.9	0	0.0	27	24.4
Equipment Nonrecurring																						
Engineering Change Orders																						
Data				Funded in BLI 3368																		
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.0	<4>	<2.6>	<4>	<2.4>	4	0.9	4	1.7	4	1.0	4	1.1	2	0.8	1	0.4	0	0.0	27	10.8
PRIOR YR EQUIP	0	0.0																			0	0.0
FY 98 EQUIP			<4>	<2.6>																	<4>	<2.6>
FY 99 EQUIP					<4>	<2.4>															<4>	<2.4>
FY 00 EQUIP							4	0.9													4	0.9
FY 01 EQUIP									4	1.7											4	1.7
FY 02 EQUIP				Funded in BLI 3368							4	1.0									4	1.0
FY 03 EQUIP													4	1.1							4	1.1
FY 04 EQUIP															2	0.8					2	0.8
FY 05 EQUIP																	1	0.4			1	0.4
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		0.0		<2.6>		<2.4>		0.9		1.7		1.0		1.1		0.8		0.4		0.0	27	10.8
TOTAL PROCUREMENT COST		0.0		<4.7>		<4.9>		5.2		5.1		5.0		5.5		2.9		1.3		0.0		35.2

METHOD OF IMPLEMENTATION: AIT ADMINISTRATIVE LEADTIME: 2 months PRODUCTION LEADTIME: 2 months

CONTRACT DATES: FY 1999: Nov-98 FY 2000: Nov-99 FY 2001: Nov-00

DELIVERY DATES: FY 1999: Jan-99 FY 2000: Jan-00 FY 2001: Jan-01

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

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL 2/
INPUT			4				4				2		1	27
OUTPUT				4				4				2	1	27

Notes/Comments

1 / Funding for PY to FY 99 for this ADNS IT-21 enabler program is provided in BLI 3368 (Subhead 52D6, Cost Code D6002). Beginning in FY 00 funding for this program was transferred to BLI 3050.

2/ Total quantity meets inventory objective.

P-3A Exhibit

P-1 SHOPPING LIST

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February 2000

MODIFICATION TITLE: Tactical Switching
COST CODE PQ070/PQ777
MODELS OF SYSTEMS AFFECTED: Tactical Switching Afloat
DESCRIPTION/JUSTIFICATION: Provides the switching and bandwidth management components of high capacity interoperable communications.

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

	PY			FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$		Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																							
PROCUREMENT:																							
Kit Quantity																							
Installation Kits																							
Installation Kits Nonrecurring																							
Equipment	0	0.0		0	0.0	20	9.0	16	7.4	8	3.9	4	2.0	3	1.6	2	1.1	0	0.0	0	0.0	53	24.9
Equipment Nonrecurring																							
Engineering Change Orders																							
Data																							
Training Equipment																							
Support Equipment																							
Other																							
Interm Contractor Support																							
Installation of Hardware*	0	0.0		0	0.0	20	2.4	16	2.0	8	1.0	4	0.5	3	0.4	2	0.3	0	0.0	0	0.0	53	6.7
PRIOR YR EQUIP	0	0.0																				0	0.0
FY 98 EQUIP				0	0.0																	0	0.0
FY 99 EQUIP						20	2.4															20	2.4
FY 00 EQUIP								16	2.0													16	2.0
FY 01 EQUIP										8	1.0											8	1.0
FY 02 EQUIP												4	0.5									4	0.5
FY 03 EQUIP														3	0.4							3	0.4
FY 04 EQUIP																2	0.3					2	0.3
FY 05 EQUIP																		0	0.0			0	0.0
FY TC EQUIP																				0	0.0	0	0.0
TOTAL INSTALLATION COST		0.0			0.0		2.4		2.0		1.0		0.5		0.4		0.3		0.0		0.0	53	6.7
TOTAL PROCUREMENT COST		0.0			0.0		11.4		9.4		4.9		2.6		2.0		1.3		0.0		0.0		31.6

METHOD OF IMPLEMENTATION: AIT ADMINISTRATIVE LEADTIME: 4 months PRODUCTION LEADTIME: 4 months

CONTRACT DATES: FY 1999: Nov-98 FY 2000: Nov-99 FY 2001: Nov-00

DELIVERY DATES: FY 1999: Mar-99 FY 2000: Mar-00 FY 2001: Mar-01

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4
INPUT	0		4	10	6		2	8	6		3	3	2
OUTPUT	0			4	10	6		2	8	6		3	3

INSTALLATION SCHEDULE:	FY 02 1	FY 02 2	FY 02 3	FY 02 4	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL 1/
INPUT			4				3				2						0	53
OUTPUT	2			4				3				2					0	53

Notes/Comments:
1 / Total quantity meets inventory objective.

P-3A Exhibit

P-1 SHOPPING LIST
ITEM NO. 98 PAGE NO. 9 OF 20

February 2000

MODIFICATION TITLE: Tactical Switching 1/
COST CODE: PQ070/PQ777
MODELS OF SYSTEMS AFFECTED: Automated Network Control Center (ANCC)
DESCRIPTION/JUSTIFICATION: Modifications to operational ADNS/ANCC/ATCs to maintain current technology, modernization of manual patch and test facilities.
Quantities reflect the following areas of coverage: Med, Lant, Eastpac and Westpac. Costs vary by site requirements and configuration.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: ($ in millions)

	PY			FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$		Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																							
PROCUREMENT:																							
Kit Quantity																							
Installation Kits																							
Installation Kits Nonrecurring																							
Equipment	<10>	<14.8>		<3>	<3.7>	<5>	<1.3>	3	0.7	4	0.9	0	0.0	0	0.0	1	0.3	5	1.3	17	5.0	48	22.3
Equipment Nonrecurring																							
Engineering Change Orders																							
Data			Funded in BLI 3368																				
Training Equipment																							
Support Equipment																							
Other																							
Interm Contractor Support																							
Installation of Hardware*	<10>	<1.5>		<3>	<1.3>	<5>	<.5>	3	0.3	4	0.4	0	0.0	0	0.0	1	0.1	4	0.4	18	2.5	48	6.0
PRIOR YR EQUIP	<10>	<1.5>																				<10>	<1.5>
FY 98 EQUIP				<3>	<1.3>																	<3>	<1.3>
FY 99 EQUIP						<5>	<.5>															<5>	<.5>
FY 00 EQUIP								3	0.3													3	0.3
FY 01 EQUIP										4	0.4											4	0.4
FY 02 EQUIP			Funded in BLI 3368									0	0.0									0	0.0
FY 03 EQUIP														0	0.0							0	0.0
FY 04 EQUIP																1	0.1					1	0.1
FY 05 EQUIP																		4	0.4			4	0.4
FY TC EQUIP																				18	2.5	18	2.5
TOTAL INSTALLATION COST		<1.5>			<1.3>		<.5>		0.3		0.4		0.0		0.0		0.1		0.4		2.5	48	6.0
TOTAL PROCUREMENT COST		<16.3>			<5.0>		<1.8>		1.0		1.3		0.0		0.0		0.4		1.7		7.5		28.3

METHOD OF IMPLEMENTATION: AIT — ADMINISTRATIVE LEADTIME: 3 months — PRODUCTION LEADTIME: 4 months

CONTRACT DATES: FY 1999: Dec-98 — FY 2000: Dec-99 — FY 2001: Dec-00

DELIVERY DATES: FY 1999: Apr-99 — FY 2000: Apr-00 — FY 2001: Apr-01

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4
INPUT	<13>			<5>				3				4	
OUTPUT	<13>				<5>				3				4

INSTALLATION SCHEDULE:	FY 02 1	FY 02 2	FY 02 3	FY 02 4	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL 2/
INPUT			0				0				1				4		17	48
OUTPUT				0				0				1				3	18	48

Notes/Comments

1 / Funding for PY to FY 99 for this ADNS IT-21 enabler program was previously funded in BLI 3368 (Subhead 52D6, Cost Code D6001). Beginning in FY 00 funding for this program was transferred to BLI 3050.

2 / Total quantity meets inventory objective.

P-3A Exhibit

P-1 SHOPPING LIST
ITEM NO. 98 PAGE NO. 10 OF 20

February 2000

MODIFICATION TITLE: Tactical Switching 1/
COST CODE: PQ070/PQ777
MODELS OF SYSTEMS AFFECTED: Automated Technical Control (ATC)
DESCRIPTION/JUSTIFICATION: Modifications to operational ADNS/ANCC/ATCs to maintain current technology, modernization of manual patch and test facilities.
Quantities reflect the following areas of coverage: Med, Lant, Eastpac and Westpac. Costs vary by site requirements and configuration.

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

	PY			FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$		Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																							
PROCUREMENT:																							
Kit Quantity																							
Installation Kits																							
Installation Kits Nonrecurring																							
Equipment	<4>	<4.4>		<1>	<1.1>	<1>	<1.2>	1	1.3	1	1.3	0	0.0	0	0.0	0	0.0	0	0.0	4	5.2	12	14.5
Equipment Nonrecurring																							
Engineering Change Orders																							
Data																							
Training Equipment			Funded in BLI 3368																				
Support Equipment																							
Other																							
Interm Contractor Support																							
Installation of Hardware*	<3>	<2.0>		<2>	<1.0>	<1>	<.5>	1	0.6	1	0.6	0	0.0	0	0.0	0	0.0	0	0.0	4	2.4	12	7.1
PRIOR YR EQUIP	<3>	<2.0>																				<3>	<2.0>
FY 97 EQUIP				<1>	<.5>																	<1>	<.5>
FY 98 EQUIP				<1>	<.5>																	<1>	<.5>
FY 99 EQUIP						<1>	<.5>															<1>	<.5>
FY 00 EQUIP								1	0.6													1	0.6
FY 01 EQUIP										1	0.6											1	0.6
FY 02 EQUIP			Funded in BLI 3368									0	0.0									0	0.0
FY 03 EQUIP														0	0.0							0	0.0
FY 04 EQUIP																0	0.0					0	0.0
FY 05 EQUIP																		0	0.0			0	0.0
FY TC EQUIP																				4	2.4	4	2.4
TOTAL INSTALLATION COST		<2.0>			<1.0>		<.5>		0.6		0.6		0.0		0.0		0.0		0.0		2.4	12	7.1
TOTAL PROCUREMENT COST		<6.4>			<2.1>		<1.7>		1.9		1.9		0.0		0.0		0.0		0.0		7.6		21.6

METHOD OF IMPLEMENTATION: AIT — ADMINISTRATIVE LEADTIME: 3 months — PRODUCTION LEADTIME: 4 months

CONTRACT DATES: FY 1999: Dec-98 — FY 2000: Dec-99 — FY 2001: Dec-00

DELIVERY DATES: FY 1999: Apr-99 — FY 2000: Apr-00 — FY 2001: Apr-01

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4
INPUT	<5>			<1>				1				1	
OUTPUT	<5>				<1>				1				1

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

Notes/Comments
1 / Funding for PY to FY 99 for this ADNS IT-21 enabler program was previously funded in BLI 3368 (Subhead 52D6, Cost Code D6001). Beginning in FY 00 funding for this program was transferred to BLI 3050.
2 / Total quantity meets inventory objective.

P-3A Exhibit

February 2000

MODIFICATION TITLE: Tactical Switching 1/
COST CODE PQ070/PQ776
MODELS OF SYSTEMS AFFECTED: Automated Digital Multiplexer System (ADMS)
DESCRIPTION/JUSTIFICATION: Automated Network management capability which is fully compatible with switching technologies and in compliance with national and international standards.
Quantities reflect the units at various sites within the following areas of coverage: Med, Lant, Eastpac, and Westpac. Costs vary by site size, requirements and configuration.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	<8>	<5.3>			<2>	<0.7>	2	0.5	3	0.8	1	0.3	0	0.0	2	0.6	2	0.6	51	15.5	71	24.3
Equipment Nonrecurring																						
Engineering Change Orders																						
Data			Funded in BLI 3368																			
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	<8>	<2.5>			<2>	<0.6>	2	0.4	3	0.5	1	0.2	0	0.0	2	0.4	2	0.4	51	10.1	71	15.2
PRIOR YR EQUIP	<8>	<2.5>																			<8>	<2.5>
FY 98 EQUIP																					<0>	<0>
FY 99 EQUIP					<2>	<0.6>															<2>	<0.6>
FY 00 EQUIP							2	0.4													2	0.4
FY 01 EQUIP									3	0.5											3	0.5
FY 02 EQUIP											1	0.2									1	0.2
FY 03 EQUIP			Funded in BLI 3368										0	0.0							0	0.0
FY 04 EQUIP															2	0.4					2	0.4
FY 05 EQUIP																	2	0.4			2	0.4
FY TC EQUIP																			51	10.1	51	10.1
TOTAL INSTALLATION COST		<2.5>		0.0		<0.6>		0.4		0.5		0.2		0.0		0.4		0.4		10.1	71	15.2
TOTAL PROCUREMENT COST		<7.8>		0.0		<1.3>		0.9		1.4		0.5		0.0		1.0		1.0		25.6		39.5

METHOD OF IMPLEMENTATION: AIT ADMINISTRATIVE LEADTIME: 3 months PRODUCTION LEADTIME: 4 months

CONTRACT DATES: FY 1999: Dec-98 FY 2000: Dec-99 FY 2001: Dec-00

DELIVERY DATES: FY 1999: Apr-99 FY 2000: Apr-00 FY 2001: Apr-01

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4
INPUT	<8>			<2>				2				3	
OUTPUT	<8>				<2>				2				3

INSTALLATION SCHEDULE:	FY 02 1	FY 02 2	FY 02 3	FY 02 4	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL 2/
INPUT			1				0				2				2		51	71
OUTPUT				1				0				2				2	51	71

Notes/Comments
1 / Funding for PY to FY 99 for this ADNS IT-21 enabler program was previously funded in BLI 3368 (Subhead 52D6, Cost Code D6002). Beginning in FY 00 funding for this program was transferred to BLI 3050.
2 / Total quantity meets inventory objective.

P-3A Exhibit

P-1 SHOPPING LIST
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February 2000

MODIFICATION TITLE: Shore Remote Control Systems (SRCS)/Element Management System -Ashore (EMS) 1/
COST CODE PQ075/PQ776
MODELS OF SYSTEMS AFFECTED: Various transmission media.
DESCRIPTION/JUSTIFICATION: Automates and remotely controls communications switching and quality monitoring equipment which eliminates manual operations.
Quantities reflect installation sites in the following areas of coverage: Med, Lant, Eastpac, and Westpac. Cost vary by site size, requirements and configuration.

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

	PY		FY 98		FY 99		FY 00 2/		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	<12>	<4.3>	<4>	<2.4>	<5>	<1.7>	15	4.9	12	4.0	7	2.4	13	4.6	8	2.9	15	5.7	6	1.8	97	34.7
Equipment Nonrecurring																						
Engineering Change Orders																						
Data			Funded in BLI 3368																			
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	<12>	<1.5>	<4>	<1.5>	<5>	<.7>	15	2.9	12	2.3	7	1.4	13	2.6	8	1.7	14	3.0	7	1.8	97	19.4
PRIOR YR EQUIP	<12>	<1.5>																			<12>	<1.5>
FY 98 EQUIP			<4>	<1.5>																	<4>	<1.5>
FY 99 EQUIP					<5>	<.7>															<5>	<.7>
FY 00 EQUIP							15	2.9													15	2.9
FY 01 EQUIP									12	2.3											12	2.3
FY 02 EQUIP											7	1.4									7	1.4
FY 03 EQUIP			Funded in BLI 3368										13	2.6							13	2.6
FY 04 EQUIP															8	1.7					8	1.7
FY 05 EQUIP																	14	3.0			14	4.8
FY TC EQUIP																			7	1.8	7	1.8
TOTAL INSTALLATION COST	<12>	<1.5>	<4>	<1.5>	<5>	<.7>	15	2.9	12	2.3	7	1.4	13	2.6	8	1.7	14	3.0	7	1.8	97	19.4
TOTAL PROCUREMENT COST		<5.8>		<3.9>		<2.4>		7.8		6.3		3.8		7.2		4.6		8.7		3.6		54.0

METHOD OF IMPLEMENTATION: AIT — ADMINISTRATIVE LEADTIME: 3 months — PRODUCTION LEADTIME: 5 months

CONTRACT DATES: FY 1999: Dec-98 — FY 2000: Dec-99 — FY 2001: Dec-00

DELIVERY DATES: FY 1999: May-99 — FY 2000: May-00 — FY 2001: May-01

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4
INPUT	<16>			<5>				8	7			6	6
OUTPUT	<16>				<5>				8	7			6

INSTALLATION SCHEDULE:	FY 02 1	FY 02 2	FY 02 3	FY 02 4	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL 3/
INPUT			4	3			7	6			8				7	7	7	97
OUTPUT	6			4	3			7	6			8				7	14	97

Notes/Comments
1 / Funding for PY to FY 99 for this ADNS IT-21 enabler program was previously funded in BLI 3368 (Subhead 52D6, Cost Code D6002). Beginning in FY 00 funding for this program was transferred to BLI 3050.
2 / The Unit cost has decreased significantly since the original cost estimates were made. Savings are attributed to technology change and architecture refinement.
3 / Total quantity meets inventory objective.

P-1 SHOPPING LIST
ITEM NO. 98 PAGE NO. 13 OF 20

P-3A Exhibit

February 2000

MODIFICATION TITLE: Element Management System-Afloat (EMS) 1/
COST CODE: PQ075/PQ777
MODELS OF SYSTEMS AFFECTED: Various transmission media.
DESCRIPTION/JUSTIFICATION: Automates and remotely controls communications switching and quality monitoring equipment which eliminates manual operations.
Quantities reflect the following areas of coverage: Med, Lant, Eastpac, and Westpac. Cost vary by site size, requirements and configuration.

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

	PY			FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$		Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																							
PROCUREMENT:																							
Kit Quantity																							
Installation Kits																							
Installation Kits Nonrecurring																							
Equipment	<7>	<9.3>		<4>	<3.1>	<5>	<5.8>	12	3.9	11	3.6	7	2.4	11	3.9	14	5.1	10	3.8	101	35.3	187	73.1
Equipment Nonrecurring																							
Engineering Change Orders																							
Data																							
Training Equipment			Funded in BLI 3055																				
Support Equipment																							
Other																							
Interm Contractor Support																							
Installation of Hardware*	<6>	<1.9>		<5>	<0.9>	<10>	<6.0>	12	2.8	10	2.4	8	1.9	11	2.7	13	3.2	11	2.8	101	27.2	187	42.9
PRIOR YR EQUIP	<6>	<1.9>																				<6>	<1.9>
FY 97 EQUIP				<1>	<0.1>																	<1>	<.1>
FY 98 EQUIP				<4>	<0.8>																	<4>	<.8>
FY 99 EQUIP						<10>	<6.0>															<10>	<6.0>
FY 00 EQUIP								12	2.8													12	2.8
FY 01 EQUIP			Funded in BLI 3055							10	2.4	1	0.2									11	2.6
FY 02 EQUIP												7	1.7									7	1.7
FY 03 EQUIP														11	2.7							11	2.7
FY 04 EQUIP																13	3.2	1	0.3			14	3.4
FY 05 EQUIP																		10	2.5			10	2.5
FY TC EQUIP																				101	27.2	101	27.2
TOTAL INSTALLATION COST	<6>	<1.9>		<5>	<0.9>	<10>	<6.0>	12	2.8	10	2.4	8	1.9	11	2.7	13	3.2	11	2.8	101	27.2	187	42.9
TOTAL PROCUREMENT COST		<11.2>			<4.1>		<11.8>		6.7		6.0		4.4		6.6		8.2		6.6		62.5		116.1

METHOD OF IMPLEMENTATION: AIT — ADMINISTRATIVE LEADTIME: 3 months — PRODUCTION LEADTIME: 5 months

CONTRACT DATES: FY 1999: Nov-98 Dec-98 — FY 2000: Dec-99 — FY 2001: Dec-00

DELIVERY DATES: FY 1999: Dec-98 May-99 — FY 2000: May-00 — FY 2001: May-01

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4
INPUT	<11>			<10>				6	6			4	6
OUTPUT	<11>				<10>				6	6			4

INSTALLATION SCHEDULE:	FY 02 1	FY 02 2	FY 02 3	FY 02 4	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL 2/
INPUT	1		4	3			5	6			7	6	1		5	5	101	187
OUTPUT	6	1		4	3			5	6			7	6	1		5	106	187

Notes/Comments
1 / Funding for PY to FY 99 for this ADNS IT-21 enabler program was previously funded in BLI 3055 (Subhead 52NG). Beginning in FY 00 funding for this program was transferred to BLI 3050.
2 / Total quantity meets inventory objective.

P-3A Exhibit

February 2000

MODIFICATION TITLE: ISNS (formerly ATM LANs)
COST CODE PQ007/PQ777
MODELS OF SYSTEMS AFFECTED: Provides modern, centrally managed, network systems to replace aging LAN systems for Battle Group (BG) and non-BG ships, submarines and embarking Marine Corp units.
DESCRIPTION/JUSTIFICATION: Application subsystems include/financial/inventory management, organizational and surface maintenance management, and administrative information systems support.

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

	PY			FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$		Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																							
PROCUREMENT:																							
Kit Quantity																							
Installation Kits																							
Installation Kits Nonrecurring																							
Equipment						55	32.8	71	64.6	42	52.9	43	59.6	41	57.2	25	38.2	19	28.9	10	24.2	306	358.3
Equipment Nonrecurring																							
Engineering Change Orders																							
Data																							
Training Equipment																							
Support Equipment																							
Other																							
Interm Contractor Support																							
Installation of Hardware*						55	30.1	66	56.4	43	33.4	45	37.8	40	31.0	26	20.4	18	13.1	13	10.8	306	233.0
PRIOR YR EQUIP																						0	0.0
FY 98 EQUIP																						0	0.0
FY 99 EQUIP						55	30.1															55	30.1
FY 00 EQUIP								66	56.4	5	3.9											71	60.3
FY 01 EQUIP										38	29.5	4	3.3									42	32.9
FY 02 EQUIP												41	34.5	2	1.6							43	36.0
FY 03 EQUIP														38	29.4	3	2.4					41	31.8
FY 04 EQUIP																23	18.1	2	1.5			25	19.5
FY 05 EQUIP																		16	11.7	3	2.5	19	14.1
FY TC EQUIP																				10	8.3	10	8.3
TOTAL INSTALLATION COST						55	30.1	66	56.4	43	33.4	45	37.8	40	31.0	26	20.4	18	13.1	13	10.8	306	233.0
TOTAL PROCUREMENT COST							62.8		121.0		83.6		97.4		88.2		58.6		42.1		35.0		591.3

METHOD OF IMPLEMENTATION: AIT ADMINISTRATIVE LEADTIME: 2 months PRODUCTION LEADTIME: 2 months

CONTRACT DATES: FY 1999: Nov-98 FY 2000: Nov-99 FY 2001: Nov-00

DELIVERY DATES: FY 1999: Jan-99 FY 2000: Jan-00 FY 2001: Jan-01

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4
INPUT	0		30	20	5		35	20	11	5	12	13	13
OUTPUT	0		8	27	20		13	32	21	5		17	21

INSTALLATION SCHEDULE:	FY 02 1	FY 02 2	FY 02 3	FY 02 4	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL 1/
INPUT	4	19	15	7	2	18	16	4	3	11	7	5	2	7	5	4	13	306
OUTPUT	4		21	20	2		21	17	3		11	12	2		7	9	13	306

Notes/Comments
1 / Total quantity meets inventory objective.

P-1 SHOPPING LIST
ITEM NO. 98 PAGE NO. 15 OF 20

P-3A Exhibit

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February 2000

APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: BLI: 3050 COMM AUTO

SUBHEAD NO.: 52PQ

COST CODE	ITEM/MANUFACTURER	FY	SERV	PROC QTY	ACCEP PRIOR TO 1-Oct	BAL DUE AS OF 1-Oct	FISCAL YEAR 98												FISCAL YEAR 99												FISCAL YEAR 00											
							PY97			CALENDAR YEAR 98										CALENDAR YEAR 99												CALENDAR YEAR 00											
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PQ065	NAVMACS II/SMS	00		50		50																									A		5	5	5	10	5	5	3	6	6
PQ069	ADNS Afloat	99		28		28														A		3	3	3	3	3	3	3	3	4											
		00		71		71																									A		8	8	8	8	8	8	8	8	7
PQ069	ADNS Ashore	00		4		4																									A		4								

Lines showing FY00 only (except NAVMACS) transferred into subhead in FY00

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

NAVMAT FORM 7110/4 (REVISED 11/77)

P-1 SHOPPING LIST
ITEM NO. 98 PAGE NO. 16 OF 20

P-21A Exhibit

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February 2000

APPROPRIATION / BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: BLI: 3050 COMM AUTO

SUBHEAD NO.: 52PQ

COST CODE	ITEM / MANUFACTURER	FY	SERV	PROC QTY	ACCEP PRIOR TO 1-Oct	BAL DUE AS OF 1-Oct	FISCAL YEAR 98												FISCAL YEAR 99												FISCAL YEAR 00											
							PY97			CALENDAR YEAR 98										CALENDAR YEAR 99												CALENDAR YEAR 00											
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PQ070	TACTICAL SWITCHING	99		20		20														A				4	3	3	4	3	3											
	AFLOAT	00		16		16																									A				2	3	2	3	3	3	
PQ070	ANCC Ashore	00		3		3																									A					3					
PQ070	ATC Ashore	00		1		1																									A					1					
PQ070	ADMS Ashore	00		2		2																									A					2					

Lines showing FY00 only transferred into subhead in FY00

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

NAVMAT FORM 7110/4 (REVISED 11/77)

P-1 SHOPPING LIST
ITEM NO. 98 PAGE NO. 17 OF 20

P-21A Exhibit

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February 2000

APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: BLI: 3050 COMM AUTO

SUBHEAD NO.: 52PQ

COST CODE	ITEM/MANUFACTURER	FY	SERV	PROC QTY	ACCEP PRIOR TO 1-Oct	BAL DUE AS OF 1-Oct	FISCAL YEAR 98												FISCAL YEAR 99												FISCAL YEAR 00								
							PY97			CALENDAR YEAR 98									CALENDAR YEAR 99												CALENDAR YEAR 00								
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
PQ075	EMS ASHORE	00		15		15																										A					4	4	2	2	3
PQ075	EMS AFLOAT	00		12		12																										A					3	3	3	3	
PQ007	ISNS (formerly ATM LANs)	99		55		55														A		10	10	10	10	10	5													
		00		71		71																										A		12	12	12	12	12	11			

Lines showing FY00 only transferred into subhead in FY00

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

NAVMAT FORM 7110/4 (REVISED 11/77)

P-1 SHOPPING LIST
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P-21A Exhibit

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February 2000

APPROPRIATION / BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: BLI: 3050 COMM AUTO

SUBHEAD NO.: 52PQ

COST CODE	ITEM / MANUFACTURER / PROCUREMENT YEAR	FISCAL YEAR	CARRY OVER	FISCAL YEAR 01												FISCAL YEAR 02												FISCAL YEAR 03												LATER
				CY00			CALENDAR YEAR 01												CALENDAR YEAR 02												CALENDAR YEAR 03											
				OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
PQ065	NAVMACS II / SMS	01	37		A		5	5		5	5	5	6	6																									0
PQ069	ADNS Afloat	01	58		A		6	6	7	7	6	6	6	7	7																									0
PQ069	ADNS Ashore	01	4		A		4																																	0

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

NAVMAT FORM 7110 / 4 (REVISED 11 / 77)

P-1 SHOPPING LIST

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P-21A Exhibit

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February 2000

APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: BLI: 3050 COMM AUTO

SUBHEAD NO.: 52PQ

COST CODE	ITEM / MANUFACTURER / PROCUREMENT YEAR	FISCAL YEAR	CARRY OVER	FISCAL YEAR 01												FISCAL YEAR 02												FISCAL YEAR 03										LATER
				CY00			CALENDAR YEAR 01												CALENDAR YEAR 02												CALENDAR YEAR 03									
				OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
PQ070	TACTICAL SWITCHING	01	8		A				3	3	2																											0
PQ070	ANCC Ashore	01	4			A				4																												0
PQ070	ATC Ashore	01	1			A				1																												0
PQ070	ADMS Ashore	01	3			A				3																												0
PQ075	EMS ASHORE	01	12			A					3	3	2	2	2																							0
PQ075	EMS AFLOAT	01	11			A					2	2	2	2	3																							0
PQ007	ISNS (formerly ATM LANs)	01	42		A		6	6	7	7	8	8																										0

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

NAVMAT FORM 7110/4 (REVISED 11/77)

P-1 SHOPPING LIST

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P-21A Exhibit

BUDGET ITEM JUSTIFICATION SHEET									DATE February 2000	
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						P-1 ITEM NOMENCLATURE BLI: 3055 Communication Items Under $5M			SUBHEAD 52NG	
	PY	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY										
COST (in millions)		$31.2	$30.5							

NOTE: The Communications Items Under $5M budget (BLI 3055) transfers to Communications Items Under $5M (BLI 3057) in FY 01. Detail Budget justification material is in the Communications Items Under $5M (BLI 3057) for budget comparability

HF Tilt Mechanisms: - Devices to enable vertical whip antenna to be lowered to a horizontal position during flight operations

HIGH FREQUENCY RADIO GROUP (HFRG BROADBAND - Will allow fully automated operation of the HF communications system. The system will reduce the number of topside antenna used, reduce electromagnetic interference and reduce manning requirements..

HIGH FREQUENCY SMALL SHIP TRANSMITTER (HFSST NARROWBAND - HFSST is a one-to-tone radio replacement of legacy arrowbank HF transmitters and antenna couplers,replacing 1960s vacuum tube technology.

DIGITAL WIDEBAND TRANSMISSION SYSTEM (DWTS) - UHFline of sight radio system, ship-to-ship and ship-to-shore communications required to support landing force systems. The current program procures DWTS for amphibious and flag ships only. LRIP procurements of low data rate DWTS (DWTS LDR) Begins in FY00.
INSTALLING AGENTS: Installation will be accomplished by alteration installation teams (AIT) from SPAWAR field activities.

R-2368/URR HF RECEIVER: The R-2368/URR will replace all existing High Frequency (HF) receivers and will provide a capability for automated operation. When Digital Modular Radio (DMR) offers the HF receive capability, the funding will be transferred.

RED/BLACK DIGITAL SWITCH/EMS: The Red and Black Digital Switches (transitioning to the Element Management System (EMS)) are essential elements of the Joint Maritime Communications System (JMCOMS)/COPERNICUS switching architecture. These switches will provide the capability for automation of the Radio Communications Suite, via automatic interconnection between the remote subscriber to cryptographic equipment/multiplexers and digital radio equipment. This program provides for the transition of JMCOMS Automated Digital Network System (ADNS) to Integrated Services Digital Network (ISDN) and Asynchronous Transfer Mode (ATM) suitability. Beginning in FY99, EMS provides operator controlled automatic configuration of the Radio Communication System (RCS) circuits, computerized communications plan development, and quality monitoring and reporting. 1

BUDGET ITEM JUSTIFICATION SHEET		DATE February 2000
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	**P-1 ITEM NOMENCLATURE** BLI: 3055 Communication Items Under $5M	**SUBHEAD** 52NG

FCIP: The Field Change Improvement Plan (FCIP) upgrades Command, Control, Communications, Computers and Intelligence (C4I) equipment on over 200 ships annually by installing field changes to correct equipment and personnel safety hazards, restore reliability, update operating parameters, correct inter-operability problems, and replace obsolete components. Alteration Installation Team (AIT) coordination supports alterations that are made outside scheduled availabilities and integrates AIT installation with Type Command (TYCOM) pier side availability schedules. 1

MCIXS: Battle Group Cellular Telephone (BG Cellular)/Maritime Cellular Information Exchange Systems (MCIXS) provides non mission-critical Intra-Battle Group real-time transfer of information using a standard telephone or cellular hand held mobile telephone.

VIXS: Video Information Exchange System (VIXS) provides the Fleet with tactical video teleconferencing. The system provides multipoint secure Video Teleconferencing (VTC) between deployed carriers/large deck amphibs, Fleet Commander-in-Chief (CINCs), Chief of Naval Operations (CNO) and select Department of Defense (DOD) commands. Shipboard systems also provide connectivity to the Joint Worldwide Intelligence Communications System (JWICS) VTC system.

TMIP: Theater Medical Information Program - Maritime (TMIP-M) program is charged with deployment of both infrastructure and the software to support the theater requirements for healthcare and command and control (C2) activities: clinical, resources, logistics, decision support, etc. The development and release of TMIP software will be conducted incrementally and it will be based on GOTS medical software that is currently available in the military inventory. Software components selected for TMIP are: MAT, CHCS, DBSS, DMLSS, TRAC2ES, and other developed software meets the functionality of SAMS. Subsequent TMIP Block releases will follow. The TMIP-M will leverage IT-21 and NTCSS infrastructure components, as well as installation, logistics, and fleet support components.

PORTABLE RADIOS: Portable and mobile radios support the unique air, sea, and land environment of the Navy Explosive Ordnance Disposal Units, Construction Battalions, Naval Beach Groups, Tactical Air Control Units, Naval Special Warfare Units, and Shipboard requirements defined by OPNAVINST C2300.44F. Radios procured include, Single Channel Ground Air Radio System (SINCGARS) VHF FM units, both manpack and vehicular for anti-jam communications, HF radios for beyond-line-of-sight operations, Emergency lifeboat radios, Survival ground to air radios. Hierarchical Yet Dynamic Reprogrammable Architecture (HYDRA) AN/SRC-55 which will replace all stovepipe wireless shipboard systems (DCWIFCOM, MOMCOM, PVPCS, FDCS) with an integrated system on all ship classes.

SINCGARS (Single Channel Ground and Airborne Radio System): Single Channel Ground and Airborne Radio System (SINCGARS) provides tactical anti-jam radios to support ship-to-shore communications during amphibious operations. This program also fills the requirements for VHF ship-to-ship and ship-to-boat communications, replacing the aging AN/VRC-46 family of radios. FY 1999 provides funding for the the buy-out of the SINCGARS requirements. FY99 PBD-290 provided funds and directed the Navy to accelerate procurement of equipment in order to conform to Joint PMO plans.
Installing Agents: Installation will be accomplished by AIT from SPAWAR field activities.
Shipboard SINCGARS (Single Channel Ground and Airborne Radio System): Provides tactical anti-jam radios to support ship-to-shore communications during amphibious operations. This program also fills the requirements for VHF ship-to-ship and ship-to-boat communications, replacing the aging AN/VRC-46 family of radios. FY 1999 provides funding for the the buy-out of the SINCGARS requirements. Production Support provides funding for procuring modified ILS documentation and support packages which reflect SINCGARS-SIP configurations and to integrate the products of this program with other components of the JMCOMS system, such as ADNS. FY99 PBD-290 provided funds and directed the Navy to accelerate procurement of equipment in order to conform to Joint PMO plans.

EXPLANATION OF PROGRAM CHANGE:
Systems are being procured in configurations which are specific to each ship class. These configurations consist of differing numbers of five standard subcomponents. The SIP version of SINCGARS is to be fielded, replacing non-SIP SINCGARS which have already been partially fielded.

Standard Components:
1) Ship System (AN/SRC-54A) - A SINCGARS System Improvement Program (SIP) configuration which uses a single radio in a single mount.
2) Ship System (AN/SRC-54B) - A SINCGARS SIP configuration which uses two radios in a single mount.
3) Multicoupler (TD-1456) This multicoupler is being provided to all ships to couple up to four SINCGARS radios to a single antenna; one radio can operate in anti-jam mode.
4) SINCGARS Remote Control System (OT-637A) - A device for providing remote control of radios from the command and control spaces throughout the ship.
5) Test Set (AN/GRM-122) - A test set for testing the unique components of the SINCGARS SIP frequency-hopping radio.
INSTALLING AGENTS: Alteration Installation Teams by all SPAWAR field activities.

1. FCIP will transfer to OMN beginning FY00.

BUDGET ITEM JUSTIFICATION SHEET		DATE February 2000
APPROPRIATION/BUDGET ACTIVITY	**P-1 ITEM NOMENCLATURE**	**SUBHEAD**
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	BLI: 3055 Communication Items Under $5M	52NG

Hierarchical Yet Dynamic Reprogrammable Architecture (HYDRA) AN/SRC-55 - will replace all stovepipe wireless shipboard systems (DCWIFCOM, MOMCOM, PVPCS, FDCS) with an integrated system on all ship classes. HYDRA is a wireless digital voice and data communications system using COTS trunking technology. HYDRA is capable of interfacing with PBX/BG Cellular/RF systems.

Unit costs vary with with the ship type and are based on the number of channels and radios in he system. Installations are performed by AITs during dockside availabilities.

BUDGET ITEM JUSTIFICATION SHEET

DATE February 2000

APPROPRIATION/BUDGET ACTIVITY	**P-1 ITEM NOMENCLATURE**	**SUBHEAD**
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	Integrated Broadcast Service 3056	D2AA

		FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL	
QUANTITY		**0**	**VAR**	**0**	**0**	**0**	**0**	**0**	**0**	**VAR**	**VAR**	
COST (in millions)		**0.0**	**$10.2**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	

Narrative Description/Justification:

The Integrated Broadcast Service (IBS) provides warfighters with critical and highly perishable intelligence and information in a single correlated picture via a near-real-time, integrated dissemination architecture. IBS consolidates existing intelligence broadcast systems into a common-format, common-terminal, theater-tailored architecture. The IBS design incorporates new functionality in broadcast and information management, a new message format, and a new receiver. It fields Information Management Elements to geographic CINCs to perform the requirements set forth in the IBS Joint Operational Requirements Document.

In FY99, the IBS program also sustained the legacy broadcast systems in their continuing individual acquisition programs, including the TRAP Data Dissemination System (TDDS), Tactical Information Broadcast Service (TIBS), Automated M-22 Broadcast (AMB), and Long-range Information Networked Communication Services (LINCS).

TDDS improvements: Procure a software support facility for the Effectively 2.0 deployment TIBS improvements: Procure noise cancellation equipment for the TIBS UHF relay sites.
AMB improvements: Procure equipment for the Effectively 3.0 deployment.
LINCS improvements: Assist in the tactical extension of systems and networks installed by LINCS during tactical exercise and contingency.

*NOTE:
Program transfer to Air Force in FY2000. Program transferred to Navy, from DARO, for FY1999 Only.

COST ANALYSIS

DATE: February 2000

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	Integrated Broadcast Service	D2AA

COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS									
			PY		FY 1998		FY1999		FY 2000		FY2001	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
DA001	IBS	A										
	Tactical Receive Application							5,400				
	Tactial Information Broadcast Service							1,644				
	Automated M-22 Broadcast							1,284				
	LRI-Networked COMMS Service							1,900				
	TOTAL PROGRAM							**10,228**				

BUDGET ITEM JUSTIFICATION SHEET

DATE February 2000

APPROPRIATION/BUDGET ACTIVITY
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE
BLI: 3057 Communication Items Under $5M

SUBHEAD
52NU

	PY	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY										
COST (in millions)				**$30.9**	**$22.7**	**$25.4**	**$56.4**	**$49.5**	**Continuing**	**Continuing**

JUSTIFICATION OF BUDGET YEAR REQUIREMENTS: This Budget line is a consolidation of several Communication Items Under $5M line items which includes Ship Tac Comms BLI 3010, Portable Radios BLI 3033 and SINGARS BLI 3040.

HF Tilt Mechanisms: - Devices to enable vertical whip antenna to be lowered to a horizontal positoin during flight operations **.**

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BUDGET ITEM JUSTIFICATION SHEET		DATE February 2000
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	**P-1 ITEM NOMENCLATURE** BLI: 3057 Communication Items Under $5M	**SUBHEAD** 52NU

FCIP: The Field Change Improvement Plan (FCIP) upgrades Command, Control, Communications, Computers and Intelligence (C4I) equipment on over 200 ships annually by installing field changes to correct equipment and personnel safety hazards, restore reliability, update operating parameters, correct inter-operability problems, and replace obsolete components. Alteration Installation Team (AIT) coordination supports alterations that are made outside scheduled availabilities and integrates AIT installation with Type Command (TYCOM) pier side availability schedules. 1

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TMIP: Theater Medical Information Program - Maritime (TMIP-M) program is charged with deployment of both infrastructure and the software to support the theater requirements for healthcare and command and control (C2) activities: clinical, resources, logistics, decision support, etc. The development and release of TMIP software will be conducted incrementally and it will be based on GOTS medical software that is currently available in the military inventory. Software components selected for TMIP are: MAT, CHCS, DBSS, DMLSS, TRAC2ES, and other developed software meets the functionality of SAMS. Subsequent TMIP Block releases will follow. The TMIP-M will leverage IT-21 and NTCSS infrastructure components, as well as installation, logistics, and fleet support components.

PORTABLE RADIOS: Portable and mobile radios support the unique air, sea, and land environment of the Navy Explosive Ordnance Disposal Units, Construction Battalions, Naval Beach Groups, Tactical Air Control Units, Naval Special Warfare Units, and Shipboard requirements defined by OPNAVINST C2300.44F. Radios procured include, Single Channel Ground Air Radio System (SINCGARS) VHF FM units, both manpack and vehicular for anti-jam communications, HF radios for beyond-line-of-sight operations, Emergency lifeboat radios, Survival ground to air radios. Hierarchical Yet Dynamic Reprogrammable Architecture (HYDRA) AN/SRC-55 which will replace all stovepipe wireless shipboard systems (DCWIFCOM, MOMCOM, PVPCS, FDCS) with an integrated system on all ship classes.

SINCGARS (Single Channel Ground and Airborne Radio System): Single Channel Ground and Airborne Radio System (SINCGARS) provides tactical anti-jam radios to support ship-to-shore communications during amphibious operations. This program also fills the requirements for VHF ship-to-ship and ship-to-boat communications, replacing the aging AN/VRC-46 family of radios. FY 1999 provides funding for the the buy-out of the SINCGARS requirements. FY99 PBD-290 provided funds and directed the Navy to accelerate procurement of equipment in order to conform to Joint PMO plans.
Installing Agents: Installation will be accomplished by AIT from SPAWAR field activities.
Shipboard SINCGARS (Single Channel Ground and Airborne Radio System): Provides tactical anti-jam radios to support ship-to-shore communications during amphibious operations. This program also fills the requirements for VHF ship-to-ship and ship-to-boat communications, replacing the aging AN/VRC-46 family of radios. FY 1999 provides funding for the the buy-out of the SINCGARS requirements. Production Support provides funding for procuring modified ILS documentation and support packages which reflect SINCGARS-SIP configurations and to integrate the products of this program with other components of the JMCOMS system, such as ADNS. FY99 PBD-290 provided funds and directed the Navy to accelerate procurement of equipment in order to conform to Joint PMO plans.

EXPLANATION OF PROGRAM CHANGE:
Systems are being procured in configurations which are specific to each ship class. These configurations consist of differing numbers of five standard subcomponents. The SIP version of SINCGARS is to be fielded, replacing non-SIP SINCGARS which have already been partially fielded.

Standard Components:
1) Ship System (AN/SRC-54A) - A SINCGARS System Improvement Program (SIP) configuration which uses a single radio in a single mount.
2) Ship System (AN/SRC-54B) - A SINCGARS SIP configuration which uses two radios in a single mount.
3) Multicoupler (TD-1456) This multicoupler is being provided to all ships to couple up to four SINCGARS radios to a single antenna; one radio can operate in anti-jam mode.
4) SINCGARS Remote Control System (OT-637A) - A device for providing remote control of radios from the command and control spaces throughout the ship.
5) Test Set (AN/GRM-122) - A test set for testing the unique components of the SINCGARS SIP frequency-hopping radio.
INSTALLING AGENTS: Alteration Installation Teams by all SPAWAR field activities.

1. FCIP will transfer to OMN beginning FY00.

BUDGET ITEM JUSTIFICATION SHEET		DATE February 2000
APPROPRIATION/BUDGET ACTIVITY	**P-1 ITEM NOMENCLATURE**	**SUBHEAD**
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	BLI: 3057 Communication Items Under $5M	52NU

Hierarchical Yet Dynamic Reprogrammable Architecture (HYDRA) AN/SRC-55 - will replace all stovepipe wireless shipboard systems (DCWIFCOM, MOMCOM, PVPCS, FDCS) with an integrated system on all ship classes. HYDRA is a wireless digital voice and data communications system using COTS trunking technology. HYDRA is capable of interfacing with PBX/BG Cellular/RF systems.

Unit costs vary with with the ship type and are based on the number of channels and radios in he system. Installations are performed by AITs during dockside availabilities.

COST ANALYSIS												DATE February 2000		
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT			P-1 ITEM NOMENCLATURE BLI: 3057 Communication Items Under $5M									SUBHEAD 52NU		
			TOTAL COST IN THOUSANDS OF DOLLARS											
			PY			FY 1999			FY 2000			FY 2001		
COST CODE	ELEMENT OF COST	ID CODE	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
NG013	**HF Tilt Mechanism**										**2,179**			**1,602**
DN013	HF Tilt Mechanism	A							[30]	[72.6]	[2179]			
NG013	HF Tilt Mechanism	A										22	72.8	1,602
NG016	**HFRG Broadband**							**8,751**		.0	**0**			**9,897**
DN016	HFRG Broadband	A				[2]	[4375.5]	[8751]						
NG016	HFRG Broadband	A										2	4948.5	9,897
DN017	**HFSST Narrowband**										**4,710**	**0**		**0**
DN017	HFSST Narrowband	A							[6]	[785.0]	**[4710]**			
NG019	**DWTS**	B						**10,531**			**5,427**			**2,268**
DN019	DWTS					[21]	[501.4]	[10531]						
DN019	DWTS Block Upgrade (FY00 only)								[0]	[0]	[5427]			
NG019	DWTS											4	567.0	2,268
NG184	**R2368/URR HF Receiver**							**457**			**1,549**			**0**
NG184	R2368/URR HF Receiver (FY99/00)[1]	A						[457]	[177]	[8.75]	[1549]			
NG237	**Red/Black Digital Switch/EMS**							**2,719**						
NG237	Red/Black Digital Switch/EMS (FY99 ONLY)[2,3]					[10]	[271.9]	[2719]						
NG238	**MCIXS**							**69**			**944**			**943**
NG238	MCIXS (FY99/00)[1]	A						[69]	[3]	[314.7]	[944]			
NG238	MCIXS (FY01)[1]	A										3	314.3	943
NG239	**ADNS**							**6,868**						
NG239	ADNS (FY99 ONLY)[2]					[35]	[196.2]	[6868]						
NG239	**VIXS**							**1,016**			**2,112**			**955**
NG239	VIXS (FY99/00)	A				[11]	[92.4]	[1016]	[33]	[64]	[2112]			
NG239	VIXS (FY01)	A										12	79.6	955
NG240	**TMIP**										**783**			**753**
NG240	TMIP (FY99/00)	B							[30]	[26.1]	[783]			
NG240	TMIP (FY01)	B										30	25.1	753
	PORTABLE RADIOS							**1,605**						
T7016	SINCGARS Manpack	A				[18]	[8.2]	[148]						
T7029	SINCGARS Vehicle	A				[62]	[23.5]	[1457]						
	SINCGARS							**24,533**						
D5001	Ship System Upgrades (AN/SRC-54)	A				[56]	[34.1]	[1910]						
D5005/D5006	TD-1456/GRC FH Multicoupler	A				[110]	[76.3]	[8393]						
D5007	AN/GRM-122 Radio Test Set	A				[78]	[28.8]	[2246]						
D5008	Ship System (AN/SRC-54A)	A						[18]						
D5009	Ship System (AN/SRC-54B)	A				[311]	[37.6]	[11695]						
D5010	Remote Control System (OK-637A)	A						[271]						

Remarks

COST ANALYSIS												DATE February 2000		
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT			P-1 ITEM NOMENCLATURE BLI: 3057 Communication Items Under $5M									SUBHEAD 52NU		
			TOTAL COST IN THOUSANDS OF DOLLARS											
			PY			FY 1999			FY 2000			FY 2001		
COST CODE	ELEMENT OF COST	ID CODE	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	Production Support	A						**1,599**			**2,482**			**1,310**
NG001/NG555	R2368/URR HF, Red/Black - EMS, MCIXS, ADNS/VIXS										[355]			183
DN006/NG555	HF, HFRG, HFSST, DWTS	A						[846]			[1040]			1,043
D5011/NG001	SINCGARS	A						[753]			[1087]			84
	INSTALLATION							**31,161**			**22,149**			**9,068**
	FMP													
NG777	R2368/URR HF, Red/Black - EMS, MCIXS, ADNS/VIXS, FCIP	A						[18375]			[1640]			1,200
NG777	TMIP										[146]			164
D5777/NG777	SINCGARS							[2132]			[6736]			2882
DN777/NG777	HF TILT, HFRG, HFSST AND DWTS	A						[7910]			[10,485]			3,186
NG777	R2368/URR HF, Red/Black - EMS, MCIXS, ADNS/VIXS, - **DSA**	A						[1096]			[238]			172
NG777	SINCGARS - **DSA**	F						[250]			[1039]			18
DN777/NG777	HF TILT, HFRG, HFSST AND DWTS - **DSA**	A						[833]			[1355]			1,268
	NON-FMP													
NG776/NG777	VIXS	A						[565]			[510]			178
NG080	**HYDRA - SPAWAR**							**4787**			**2144**			**0**
T7046	HYDRA	A				[2]	[2019.5]	[4039]						
NG245	HYDRA													
T7777/NG777	HYDRA - **FMP**							[555]			[1864]			
T7777/NG777	HYDRA - **DSA**							[193]			[280]			
	SVICS - NAVSEA (FY99)							[3000]						
	Total SPAWAR CONTROL							**97,096**			**44,479**			**26,796**
	SPAWAR SUMMARY													
	BLI: 3055 52NG							31,165			19,283			26,796
	BLI: 3033 52T7							6,392			0			0
	BLI: 3040 52D5							27,668			0			0
	BLI: 3010 52DN							31,871			25,196			0
								97,096			**44,479**			**26,796**
	HYDRA - NAVSEA													
	HYDRA								[4]	[2806.7]	[11227]	2	1,620	3240
	FMP Installation													873
	Total NAVSEA CONTROL							**0**			**11,227**			**4,113**
	CONSOLIDATED CONTROL							**97,096**			**55,706**			**30,909**

PROCUREMENT HISTORY AND PLANNING

A. DATE February 2000

B. APPROPRIATION/BUDGET ACTIVITY
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

C. P-1 ITEM NOMENCLATURE
BLI: 3057 Communication Items Under $5M

SUBHEAD
52NU

COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
DN013	HF Tilt Mechanism	00	TBD	FFP	SPAWAR		Jun-00	Mar-01	[30]	[72.6]	YES	
NG013		01	TBD	FFP/O	SPAWAR		Nov-00	Aug-01	22	72.8	YES	
DN016	HFRG Broadband	99	HARRIS Corporation	FFP/O	SPAWAR		Nov-98	Nov-99	[2]	[4375.5]	YES	
NG016		01	HARRIS Corporation	FFP/O	SPAWAR		Nov-00	Nov-01	2	4,948.5	YES	
DN017	HFSST Narrowband	00	TBD	FFP	SPAWAR		Jun-00	Jun-01	[6]	[785.0]	YES	
DN019	DWTS	99	Canadian Marconi	IDIQ	SSC CHASN		Nov-98	Sep-99	[21]	[501.4]	YES	
DN019	DWTS Block Upgrade [6]	00	Canadian Marconi	IDIQ	SSC CHASN		Various	Various	[0]	[0]	YES	
NG017		01	Canadian Marconi	IDIQ	SSC CHASN		Nov-00	Sep-01	4	567.0	YES	
NG184	R2368/URR HF Receiver [5]	00	TBD	FFP	SPAWAR		Jun-00	Mar-01	[177]	[8.75]	YES	
NG237	Red/Black Digital Switch/Element Mgmt System [1,3]	99	SSC CH	WX	SPAWAR	N/A	Feb-99	May-99	[10]	[271.9]	YES	
NG238	MCIXS[5]											
NG238		00	TTK Inc	FFP/OPT	SPAWAR		Apr-00	Jul-00	[3]	[314.7]	YES	
NG238		01	TTK Inc	FFP/OPT	SPAWAR		Oct-00	Jan-01	3	314.3	YES	
NG239	ADNS	99	SAIC, San Diego	Option C	SPAWAR	Jun-98	Nov-98	Mar-99	[35]	[196.2]	YES	
NG239	VIXS [2]	99	SSC CHS	WX	SPAWAR	N/A	Dec-98	Apr-99	[11]	[92.4]	YES	
NG239		00	SSC CHS	WX	SPAWAR	N/A	Dec-99	Feb-00	[33]	[64]	NO	
NG239		01	SSC CHS	WX	SPAWAR	N/A	Dec-00	Feb-01	12	79.6	NO	
NG240	TMIP [4]	00	TBD	IDIQ	SPAWAR	N/A	Jan-00	Feb-00	[30]	[26.1]	NO	
NG240		01	TBD	IDIQ	SPAWAR	N/A	Oct-00	Nov-00	30	25.1	NO	

D. REMARKS

[1] Beginning in FY 00, funding for this program has been transferred to BLI 3050, Subhead 52PQ.

[2] Unit cost variances are due to the diverse types of ship sets being procured as well as the averaging of ship and shore procurements with varying quantities in one procurement cost code (NG239).

[3] FY99 unit cost includes EMS procurement plus non-recurring engineering cost to integrate 3 ship equipment types into the basic EMS software configuration

[4] TMIP: Unit cost determined by platform configuration, for example CVN/LHD/LHA cost more than other ships.

[5] FY99 program deferred to fund higher priority program.

[6] FY00 program is a Block Upgrade

PROCUREMENT HISTORY AND PLANNING											**A. DATE** February 2000	
B. APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					**C. P-1 ITEM NOMENCLATURE** BLI: 3057 Communication Items Under $5M					**SUBHEAD** 52NU	
COST CODE	**ELEMENT OF COST**	**FY**	**CONTRACTOR AND LOCATION**	**CONTRACT METHOD & TYPE**	**LOCATION OF PCO**	**RFP ISSUE DATE**	**AWARD DATE**	**DATE OF FIRST DELIVERY**	**QTY**	**UNIT COST**	**SPECS AVAILABLE NOW**	**DATE REVISIONS AVAILABLE**
	PORTABLE RADIOS											
T7016	SINCGARS Manpack	99	ITT: Ft. Wayne, IN	FFP	CECOM: Ft. Monmouth, NJ		Jun-99	Jun-00	[18]	[8.2]	YES	
T7029	SINCGARS Vehicle	99	ITT: Ft. Wayne, IN	FFP	CECOM: Ft. Monmouth, NJ		Jun-99	Jun-00	[62]	[23.5]	YES	
T7046	HYDRA-Amphibs /Carrier	99	Motorola/Lucent	C/FFP	SSC CHS	Jul-97	Dec-98	May-99	[2]	[2019.5]	YES	
NG245	HYDRA-Carriers&Amphibs	00	TBD	C/FFP	SSC CHS		Dec-99	Jun-00	[4]	[2806.7]	YES	
NG245	HYDRA-Carriers&Amphibs	01	TBD	C/FFP	SSC CHS		Dec-00	Feb-01	2	1,620	YES	
	SINCGARS											
D5001	Ship System Upgrades (AN/SRC-54)	98	ITT	FFP	SSC CHS		Jun-98	Dec-98	[54]	[30]	Yes	
D5001	Ship System Upgrades (AN/SRC-54)	99	ITT	FFP	SSC CHS		Jan-99	Aug-99	[56]	[34.1]	Yes	
D5005/D5006	TD-1456/GRC FHMulticoupler[6]	98	XETRON	FFP	CECOM: Ft. Monmouth, NJ		Mar-98	Jun-99	[49]	[58]	Yes	
D5005/D5006	TD-1456/GRC FHMulticoupler	99	XETRON	FFP	CECOM: Ft. Monmouth, NJ		Mar-99	Jul-00	[110]	[76.3]		
D5007	AN/GRM-122 Radio Test Set	99	ITT	FFP	CECOM: Ft. Monmouth, NJ		Mar-99	Jul-00	[78]	[28.8]	Yes	
D5009	Ship System (AN/SRC-54B)	99	ITT	FFP	CECOM: Ft. Monmouth, NJ		Mar-99	May-00	[311]	[37.6]	Yes	

D. REMARKS

[1] FY98 buy for D5005/06 (TD-1456/GRC FH Multicoupler) omits auxilliary components and, therefore, explains variance in unit cost.

Feb-00

MODIFICATION TITLE: SHIP TACTICAL COMMUNICATIONS

COST CODE: DN013/NG013

MODELS OF SYSTEMS AFFECTED: HF TILT MECHANISMS

DESCRIPTION/JUSTIFICATION: Installation on ships to allow vertical whip antennas to be lowered to a horizontal position during flight operations.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: ($ in millions)

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	[13]	[.6]	[0]	[.4]	[0]	[0.0]	[30]	[2.2]	22	1.6	0	0.0	12	0.9	35	2.6	31	2.2	457	34.2	600	44.7
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	[0]	[0.0]	[0]	[0.0]	[13]	[1.2]	[0]	[0.0]	30	1.0	22	1.6	0	0.0	12	1.0	35	2.5	488	0.0	600	7.3
PRIOR YR EQUIP																					0	0.0
FY 98 EQUIP					[13]	[1.2]															13	1.2
FY 99 EQUIP							[0]	[0.0]													0	0.0
FY 00 EQUIP									30	1.0											30	1.0
FY 01 EQUIP											22	1.6									22	1.6
FY 02 EQUIP													0	0.0							0	0.0
FY 03 EQUIP															12	1.0					12	1.0
FY 04 EQUIP																	35	2.5			35	2.5
FY 05 EQUIP																			31		31	0.0
FY TC EQUIP																			457		457	0.0
TOTAL INSTALLATION COST		[0.0]		[0.0]		[1.2]		[0.0]		1.0		1.6		0.0		1.0		2.5		0.0	600	7.3
TOTAL PROCUREMENT COST		[.6]		[.4]		[1.2]		[2.2]		2.6		1.6		0.9		3.6		4.7		34.2		52.0

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME 9 Months

CONTRACT DATES: FY 1999: N/A FY 2000: Jun-00 FY 2001: Nov-00

DELIVERY DATES: FY 1999: N/A FY 2000: Mar-01 FY 2001: Aug-01

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT			9	2	2						2	13	15	8	8	4	2
OUTPUT			9	2	2						2	13	15	8	8	4	2

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT					4	4	4		8	15	10	2	488	600
OUTPUT					4	4	4		8	15	10	2	488	600

Notes/Comments

Installations not started at delivery of equipment, as they are dependent upon ships availability.

Feb-00

MODIFICATION TITLE: SHIP TACTICAL COMMUNICATIONS

COST CODE: DN016/NG016

MODELS OF SYSTEMS AFFECTED: HIGH FREQUENCY RADIO GROUP HFRG

DESCRIPTION/JUSTIFICATION: Provides for fully automated operation of the High Frequency Communications System.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: ($ in millions)

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	[29]	[23]	[0]	[0.0]	[2]	[8.8]	[0]	[0.0]	2	9.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	33	41.6
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	[25]	[27.2]	[0]	[0.0]	[3]	[5.8]	[3]	[6.4]	0	0.0	2	6.1	0	0.0	0	0.0	0	0.0	0	0.0	33	45.5
PRIOR YR EQUIP	[25]	[27.2]			[3]	[5.8]	[1]	[1.1]													29	34.1
FY 98 EQUIP																					0	0.0
FY 99 EQUIP							[2]	[5.3]													2	5.3
FY 00 EQUIP									0	0.0											0	0.0
FY 01 EQUIP											2	6.1									2	6.1
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		[27.2]		[0.0]		[5.8]		[6.4]		0.0		6.1		0.0		0.0		0.0		0.0	33	45.5
TOTAL PROCUREMENT COST		[50.2]		[0.0]		[14.6]		[6.4]		9.9		6.1		0.0		0.0		0.0		0.0		87.1

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 5 Months PRODUCTION LEADTIME 12 Months

CONTRACT DATES: FY 1999: Nov-98 FY 2000: N/A FY 2001: Nov-00

DELIVERY DATES: FY 1999: Nov-99 FY 2000: N/A FY 2001: Nov-01

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				FY 02			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT	25	2	1			1	1	1						1	1		
OUTPUT	25			2	1			1	1	1						1	1

INSTALLATION SCHEDULE:	FY 03				FY 04				FY 05				TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	
INPUT													33
OUTPUT													33

Notes/Comments

The flucuation of unit costs are due to: FY99 procurementsconsists of 8 Kilowatt systems and the FY01 procurements consists of 12 Kilowatt systems

Installations not started at delivery of equipment, as they are dependent upon ships availability.

P-1 Shopping List-Item No 101-9 of 101-26

Feb-00

MODIFICATION TITLE: SHIP TACTICAL COMMUNICATIONS

COST CODE: DN017 [0] [0.0]

MODELS OF SYSTEMS AFFECTED: HIGH FREQUENCY SMALL SHIP TRANSMITTER

DESCRIPTION/JUSTIFICATION: Provides for fully automated operation of the High Frequency Communications System.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: ($ in millions)

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	[0]	[0.0]	[0]	[0.0]	[0]	[0.0]	[6]	[4.7]	0	0.0	0	0.0	6	6.2	35	31.9	9	9.4	185	98.7	241	150.9
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	[0]	[0.0]	[0]	[0.0]	[0]	[0.0]	[0]	[0.0]	6	2.2	0	0.0	0	0.0	6	3.1	35	15.5	194	50.2	241	71.0
PRIOR YR EQUIP																					0	0.0
FY 98 EQUIP																					0	0.0
FY 99 EQUIP																					0	0.0
FY 00 EQUIP									6	2.2											6	2.2
FY 01 EQUIP											0	0.0									0	0.0
FY 02 EQUIP													0	0.0							0	0.0
FY 03 EQUIP															6	3.1					6	3.1
FY 04 EQUIP																	35	15.5			35	15.5
FY 05 EQUIP																			9	2.1	9	2.1
FY TC EQUIP																			185	48.1	185	48.1
TOTAL INSTALLATION COST		[0.0]		[0.0]		[0.0]		[0.0]		2.2		0.0		0.0		3.1		15.5		50.2	241	71.0
TOTAL PROCUREMENT COST		[0.0]		[0.0]		[0.0]		[4.7]		2.2		0.0		6.2		34.9		24.9		148.9		221.9

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 9 Months PRODUCTION LEADTIME 12 Months

CONTRACT DATES: FY 1999: FY 2000: Jun-00 FY 2001:

DELIVERY DATES: FY 1999: FY 2000: Jun-01 FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				FY 02			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT												2	4				
OUTPUT													2	4			

INSTALLATION SCHEDULE:	FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT					3	1	2		8	15	10	2	194	241
OUTPUT						3	1	2		8	15	12	194	241

Notes/Comments

Unit cost variance due to procurement quantities being reflective of ships not units.

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Exhibit P-3a, Individual Modification Program

Feb-00

MODIFICATION TITLE: SHIP TACTICAL COMMUNICATIONS

COST CODE: DN019/NG019

MODELS OF SYSTEMS AFFECTED: DWTS

DESCRIPTION/JUSTIFICATION: UHF Line-Of-Sight radio system, ship to ship and ship to shore communications.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: ($ in millions)

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	[1]	[.9]	[10]	[4.7]	[21]	[10.5]	0	[5.4]	4	2.3	2	1.3	12	8.0	0	0.0	2	1.7	9	7.7	61	42.5
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Interm Contractor Support																						
Installation of Hardware*	[0]	[0.0]	3	[1.3]	[11]	[.89]	[18]	[4.1]	0	0.0	4	0.7	3	0.5	11	1.8	0	0.0	11	1.1	61	9.5
PRIOR YR EQUIP			[1]	[.15]																	1	0.2
FY 98 EQUIP			[2]	[1.15]	[8]	[.65]															10	1.8
FY 99 EQUIP					[3]	[.24]	[18]	[4.1]													21	4.3
FY 00 EQUIP																					0	0.0
FY 01 EQUIP											4	0.7									4	0.7
FY 02 EQUIP													2	0.4							2	0.4
FY 03 EQUIP													1	0.1	11	1.8					12	1.9
FY 04 EQUIP																	0	0.0			0	0.0
FY 05 EQUIP																			2	0.2	2	0.2
FY TC EQUIP																			9	0.9	9	0.9
TOTAL INSTALLATION COST		[0.0]		[1.3]		[.89]		[4.1]		0.0		0.7		0.5		1.8		0.0		1.1	61	10.3
TOTAL PROCUREMENT COST		[.9]		[6.0]		[11.4]		[8.7]		2.3		2.0		8.4		1.8		1.7		8.8		52.8

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 1 mo. PRODUCTION LEADTIME 10 mo

CONTRACT DATES: FY 1999: Nov-98 FY 2000: Various FY 2001: Nov-00

DELIVERY DATES: FY 1999: Sep-99 FY 2000: Various FY 2001: Sep-01

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT	3	2	1	5	3	15	3							4			
OUTPUT	3	2	1		8	15	3							4			

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT			2	1	7	4							11	61
OUTPUT			2	1	7	4							11	61

Notes/Comments

FY00 program is a Block Upgrade.

Feb-00

MODIFICATION TITLE: R-2368/URR HF Receiver
COST CODE NG184
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: Replaces all functionally obsolete MF and HF recievers with a receiver capable of operating in a remote automated environment.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	[426]	[5.2]	[0]	[.2]	[0]	[.5]	[177]	[1.5]	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	584	5.7	1,187	13.1
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	[299]	[1.1]	[67]	[.5]	[60]	[.3]	[0]	[0.0]	177	0.6	0	0.0	0	0.0	0	0.0	0	0.0	584	3.0	1,187	5.5
PRIOR YR EQUIP	[299]	[1.1]	[67]	[.5]	[60]	[.3]															426	1.9
FY 98 EQUIP																					0	0.0
FY 99 EQUIP																					0	0.0
FY 00 EQUIP									177	0.6											177	0.6
FY 01 EQUIP																					0	0.0
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY 06 EQUIP																					0	0.0
FY TC EQUIP																			584	3.0	584	3.0
TOTAL INSTALLATION COST		[1.1]		[.5]		[.3]		[0.0]		0.6		0.0		0.0		0.0		0.0		3.0		5.5
TOTAL PROCUREMENT COST		[6.3]		[.7]		[.8]		[1.5]		0.6		0.0		0.0		0.0		0.0		8.7		18.6

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 1 mos PRODUCTION LEADTIME 10 mos

CONTRACT DATES: FY 1999: N/A FY 2000: Jun-00 FY 2001:

DELIVERY DATES: FY 1999: FY 2000: Mar-01 FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT	366	20	20	20								133	44				
OUTPUT	366		20	20	20								133	44			

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT													584	1,187
OUTPUT													584	1,187

Notes/Comments
FY98 funds used for production support
FY99 funding realigned to NG237 to fund higher priority Y2K efforts.

Feb-00

MODIFICATION TITLE: Red/Black Digital Switch/EMS
COST CODE NG237
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: Red/Black Digital Switch will provide automated and remote controls of digital circuits.
The Element Management System (EMS) supports ADNS functionality beginning in FY99.
Beginning in FY00, this program's funding has been transfered to BLI 3050, Subhead 52PQ.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	[7]	[9.3]	[4]	[3.1]	[10]	[2.7]	[0]	[0.0]	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	21	15.1
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	[6]	[1.9]	[5]	[1.0]	[10]	[2.7]	[0]	[0.0]	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	21	5.6
PRIOR YR EQUIP	[6]	[1.9]	[1]	[0.1]																	7	2.0
FY 98 EQUIP			[4]	[0.9]																	4	0.9
FY 99 EQUIP					[10]	[2.7]															10	2.7
FY 00 EQUIP																					0	0.0
FY 01 EQUIP																					0	0.0
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY 06 EQUIP																					0	0.0
FY TC EQUIP																					0	0
TOTAL INSTALLATION COST		[1.9]		[1.0]		[2.7]		[0.0]		0.0		0.0		0.0		0.0		0.0		0.0		5.6
TOTAL PROCUREMENT COST		[11.2]		[4.1]		[5.4]		[0.0]		0.0		0.0		0.0		0.0		0.0		0.0		20.8

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 7 mos PRODUCTION LEADTIME 3 mos

CONTRACT DATES: FY 1999: Feb-99 FY 2000: N/A FY 2001: N/A

DELIVERY DATES: FY 1999: May-99 FY 2000: N/A FY 2001: N/A

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT	11			3	7												
OUTPUT	11			3	7												

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT														21
OUTPUT														21

Notes/Comments
FY99 marks the transition to Element Management System (EMS). We are procuring significantly more quantities in FY99 than in prior years so the production lead time has been shortened to facilitate installation in the same year.
EMS is different than Red Black Digital Switch even though it is procured under the same cost code.
FY99 cost includes 10 EMS procurements plus non-recurring engineering cost to integrate 3 ship equipment types into the basic EMS software configuration

Feb-00

MODIFICATION TITLE: Maritime Cellular Information Exchange Systems (MCIXS) (formerly known as Battle Group Cellular Telephone/BG Cellular)
COST CODE NG238
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: Technical improvment of existing MCIXS systems based on commercial system availability.
REMARKS: Exhibit reflects ECP change to the MCIXS (NG238) program

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	[7]	[1.9]	[0]	[0.0]	[0]	[.1]	[3]	[.9]	3	0.9	2	0.6	2	0.7	5	1.4	7	2.0	18	5.4	47	13.9
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	[7]	[.4]	[0]	[0.0]	[0]	[0.0]	[3]	[.4]	3	0.4	2	0.2	2	0.3	5	0.5	7	0.6	18	1.8	47	4.6
PRIOR YR EQUIP	[7]	[.4]																			7	0.4
FY 98 EQUIP			[0]	[0.0]																	0	0.0
FY 99 EQUIP					[0]	[0.0]															0	0.0
FY 00 EQUIP							[3]	[.4]													3	0.4
FY 01 EQUIP									3	0.4											3	0.4
FY 02 EQUIP											2	0.2									2	0.2
FY 03 EQUIP													2	0.3							2	0.3
FY 04 EQUIP															5	0.5					5	0.5
FY 05 EQUIP																	7	0.6			7	0.6
FY 06 EQUIP																					0	0.0
FY TC EQUIP																			18	1.8	18	1.8
TOTAL INSTALLATION COST		[.4]		[0.0]		[0.0]		[.4]		0.4		0.2		0.3		0.5		0.6		1.8		4.6
TOTAL PROCUREMENT COST		[2.3]		[0.0]		[0.1]		[1.3]		1.3		0.8		1.0		1.9		2.6		7.2		18.5

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: N/A PRODUCTION LEADTIME 3 mos

CONTRACT DATES: FY 1999: N/A FY 2000: Apr-00 FY 2001: Oct-00

DELIVERY DATES: FY 1999: FY 2000: Jul-00 FY 2001: Jan-01

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT	7								3		1	2			2		
OUTPUT	7								3		1	2			2		

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT		2				2	3			2	3	2	18	47
OUTPUT		2				2	3			2	3	2	18	47

Notes/Comments
[1] FY 98 program cancelled to fund IT-21 efforts.
Executed FY99 funds were used for production support
FY99 funding realigned to NG237 to fund higher priority Y2K efforts.

Feb-00

MODIFICATION TITLE: Automated Digital Network Systems (ADNS)
COST CODE NG239
MODELS OF SYSTEMS AFFECTED: Automated Digital Network Systems (ADNS) Build 2 Afloat
DESCRIPTION/JUSTIFICATION: Automated Digital Network Systems (ADNS) Build 2 implements ATM multiplexing technology, and JDIICS-D compliant Integrated Network Management tools.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	[0]	[0.0]	[0]	[0.0]	[35]	[6.9]	[0]	[0.0]	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	35	6.9
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	[0]	[0.0]	[0]	[0.0]	[35]	[9.3]	[0]	[0.0]	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	35	9.3
PRIOR YR EQUIP																					0	0.0
FY 98 EQUIP																					0	0.0
FY 99 EQUIP					[35]	[9.3]															35	9.3
FY 00 EQUIP																					0	0.0
FY 01 EQUIP																					0	0.0
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		[0.0]		[0.0]		[9.3]		[0.0]		0.0		0.0		0.0		0.0		0.0		0.0		9.3
TOTAL PROCUREMENT COST		[0.0]		[0.0]		[16.1]		[0.0]		0.0		0.0		0.0		0.0		0.0		0.0		16.1

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 1 month PRODUCTION LEADTIME 5 months

CONTRACT DATES: FY 1999: Nov-98 FY 2000: N/A FY 2001: N/A

DELIVERY DATES: FY 1999: Mar-99 FY 2000: FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99 1	2	3	4	FY 00 1	2	3	4	FY 01 1	2	3	4	FY 02 1	2	3	4
INPUT	0		5	15	15												
OUTPUT	0		5	15	15												

INSTALLATION SCHEDULE:	FY 03 1	2	3	4	FY 04 1	2	3	4	FY 05 1	2	3	4	TC	TOTAL
INPUT														35
OUTPUT														35

Notes/Comments
ADNS funding to support IT21 Matrix requirement. FY99 funding was authorized by CNO (N61) Letter Ser N61/8U556479 dated 15 Dec 1998.

Feb-00

MODIFICATION TITLE: VIXS (Video Information Exchange System)-SHIP INSTALLATION
COST CODE NG239
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: Provides multifunctional information exchange systems capable of interactive imagery and video teleconferencing.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	[3]	[.2]	[0]	[0.0]	[1]	[0.1]	[24]	[1.6]	9	0.7	18	0.5	15	0.3	15	0.5	15	0.5	0	0	100	4.5
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	[3]	[.2]	[0]	[0.0]	[1]	[0.1]	[24]	[1.2]	9	0.3	18	0.2	15	0.1	15	0.2	15	0.2	0	0.0	100	2.4
PRIOR YR EQUIP	[3]	[.2]																			3	0.2
FY 98 EQUIP																					0	0.0
FY 99 EQUIP					[1]	[0.1]															1	0.1
FY 00 EQUIP							[24]	[1.2]													24	1.2
FY 01 EQUIP									9	0.3											9	0.3
FY 02 EQUIP											18	0.2									18	0.2
FY 03 EQUIP													15	0.1							15	0.1
FY 04 EQUIP															15	0.2					15	0.2
FY 05 EQUIP																	15	0.2			15	0.2
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		[.2]		[0.0]		[0.1]		[1.2]		0.3		0.2		0.1		0.2		0.2		0.0		2.4
TOTAL PROCUREMENT COST		[.4]		[0.0]		[0.1]		[2.9]		1.0		0.7		0.5		0.6		0.6		0.0		6.9

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 1 month PRODUCTION LEADTIME 4 months

CONTRACT DATES: FY 1999: Dec-98 FY 2000: Dec-99 FY 2001: Dec-00

DELIVERY DATES: FY 1999: Apr-99 FY 2000: Feb-00 FY 2001: Feb-01

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT	3			1			8	8	8		3	3	3		6	6	6
OUTPUT	3			1			8	8	8		3	3	3		6	6	6

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT		5	5	5		5	5	5		5	5	5		100
OUTPUT		5	5	5		5	5	5		5	5	5		100

Notes/Comments

P-1 Shopping List-Item No 101-16 of 101-26

Feb-00

MODIFICATION TITLE: VIXS (Video Information Exchange System)-SHORE INSTALLATION
COST CODE NG239
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: Provides multifunctional information exchange systems capable of interactive imagery and video teleconferencing.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	[0]	[0.0]	[0]	[0.0]	[10]	[.9]	[9]	[.5]	3	0.2	5	0.2	5	0.2	5	0.2	5	0.2	0	0.0	42	2.5
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	[0]	[0.0]	[0]	[0.0]	[10]	[.6]	[9]	[.5]	3	0.2	5	0.1	5	0.1	5	0.1	5	0.1	0	0.0	42	1.7
PRIOR YR EQUIP																					0	0.0
FY 98 EQUIP																					0	0.0
FY 99 EQUIP					[10]	[.6]															10	0.6
FY 00 EQUIP							[9]	[.5]													9	0.5
FY 01 EQUIP									3	0.2											3	0.2
FY 02 EQUIP											5	0.1									5	0.1
FY 03 EQUIP													5	0.1							5	0.1
FY 04 EQUIP															5	0.1					5	0.1
FY 05 EQUIP																	5	0.1			5	0.1
FY 06 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		[0.0]		[0.0]		[.6]		[.5]		0.2		0.1		0.1		0.1		0.1		0.0		1.7
TOTAL PROCUREMENT COST		[0.0]		[0.0]		[1.5]		[1.0]		0.4		0.3		0.3		0.4		0.4		0.0		4.3

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 1 month PRODUCTION LEADTIME 4 months

CONTRACT DATES: FY 1999: Dec-98 FY 2000: Dec-99 FY 2001: Dec-00

DELIVERY DATES: FY 1999: Apr-99 FY 2000: Feb-00 FY 2001: Feb-01

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT	0			4	6		3	3	3		1	1	1		2	2	1
OUTPUT	0			4	6		3	3	3		1	1	1		2	2	1

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT		2	2	1		2	2	1		2	2	1	0	42
OUTPUT		2	2	1		2	2	1		2	2	1	0	42

Notes/Comments

Feb-00

MODIFICATION TITLE: Field Change Improvement Plan (FCIP)
COST CODE NG777
MODELS OF SYSTEMS AFFECTED: Various C4I Systems
DESCRIPTION/JUSTIFICATION: The FCIP upgrades C4I equipment on over 200 ships annually by installing field changes to correct equipment and personnel safety hazards, restore reliability, update operating parameters, correct inter-operability problems and replace obsolete components.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment																						
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	[7305]	[5.8]	[7950]	[5.4]	[7720]	[6.0]	[0]	[0.0]	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	22,975	17.2
PRIOR YR EQUIP																					0	0.0
FY 98 EQUIP	[7305]	[5.8]	[7950]	[5.4]																	15,255	11.2
FY 99 EQUIP					[7720]	[6.0]															7,720	6.0
FY 00 EQUIP							[0]	[0.0]													0	0.0
FY 01 EQUIP									0	0.0											0	0.0
FY 02 EQUIP											0	0.0									0	0.0
FY 03 EQUIP													0	0.0							0	0.0
FY 04 EQUIP															0	0.0					0	0.0
FY 05 EQUIP																	0	0.0			0	0.0
FY 06 EQUIP																					0	0.0
FY TC EQUIP																			0	0.0	0	0.0
TOTAL INSTALLATION COST		[5.8]		[5.4]		[6.0]		[0.0]		0.0		0.0		0.0		0.0		0.0		0.0		17.2
TOTAL PROCUREMENT COST		[5.8]		[5.4]		[6.0]		[0.0]		0.0		0.0		0.0		0.0		0.0		0.0		17.2

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: PRODUCTION LEADTIME

CONTRACT DATES: FY 1999: FY 2000: FY 2001:

DELIVERY DATES: FY 1999: FY 2000: FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT	15,255		2,530	2645	2,545												
OUTPUT	15,255		2,530	2645	2,545												

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT														22,975
OUTPUT														22,975

Notes/Comments

[1] **Field Change Improvement Plan (FCIP) will transfer to OMN beginning FY00.**

Feb-00

MODIFICATION TITLE: TMIP
COST CODE NG240
MODELS OF SYSTEMS AFFECTED: TMIP
DESCRIPTION/JUSTIFICATION: TMIP is the infrastructure and software to support Navy and Marine Corps requiements for healthcare and C2 activities: clinical resources, logistics, decision support, etc.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	[0]	[0.0]	[0]	[0.0]	[0]	[0.0]	[30]	[.8]	30	0.8	30	0.8	35	0.9	25	0.7	32	0.9	70	58.0	252	62.7
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	[0]	[0.0]	[0]	[0.0]	[0]	[0.0]	[30]	[.1]	30	0.2	30	0.2	35	0.2	25	0.1	32	0.1	70	5.0	252	5.9
PRIOR YR EQUIP																					0	0.0
FY 98 EQUIP																					0	0.0
FY 99 EQUIP																					0	0.0
FY 00 EQUIP							[30]	[.1]													30	0.1
FY 01 EQUIP									30	0.2											30	0.2
FY 02 EQUIP											30	0.2									30	0.2
FY 03 EQUIP													35	0.2							35	0.2
FY 04 EQUIP															25	0.1					25	0.1
FY 05 EQUIP																	32	0.1			32	0.1
FY 06 EQUIP																					0	0.0
FY TC EQUIP																			70	5.0	70	5.0
TOTAL INSTALLATION COST		[0.0]		[0.0]		[0.0]		[.1]		0.2		0.2		0.2		0.1		0.1		5.0		5.9
TOTAL PROCUREMENT COST		[0.0]		[0.0]		[0.0]		[.9]		0.9		0.9		1.1		0.8		1.0		63.0		68.6

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 1 mos. PRODUCTION LEADTIME 3 mos.

CONTRACT DATES: FY 1999: N/A FY 2000: Jan-00 FY 2001: Oct-00

DELIVERY DATES: FY 1999: FY 2000: Feb-00 FY 2001: Nov-00

INSTALLATION SCHEDULE:	PY	FY 99 1	2	3	4	FY 00 1	2	3	4	FY 01 1	2	3	4	FY 02 1	2	3	4
INPUT								15	15	20	5	5		7	8	8	7
OUTPUT								15	15	20	5	5		7	8	8	7

INSTALLATION SCHEDULE:	FY 03 1	2	3	4	FY 04 1	2	3	4	FY 05 1	2	3	4	TC	TOTAL
INPUT	8	9	9	9	6	6	7	6	8	8	8	8	70	252
OUTPUT	8	9	9	9	6	6	7	6	8	8	8	8	70	252

Notes/Comments

Feb-00

MODIFICATION TITLE: HYDRA
COST CODE T7046/NG245
MODELS OF SYSTEMS AFFECTED: AN/SRC-55
DESCRIPTION/JUSTIFICATION: HYDRA is a wireless digital voice and data communications systems using COTS trunking technology.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	[0]	[0.0]	[1]	[0.6]	[2]	[4.0]	[4]	[11.2]	2	3.2	2	3.3	2	4.5	4	8.6	6	9.7	37	74.0	60	119.2
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	[0]	[0.0]	[0]	[0.0]	[2]	[.6]	[4]	[1.9]	2	0.9	2	0.8	2	0.7	4	1.5	6	1.4	37	13.0	59	20.7
PRIOR YR EQUIP																					0	0.0
FY 98 EQUIP																					0	0.0
FY 99 EQUIP					[2]	[.6]															2	0.6
FY 00 EQUIP							[4]	[1.9]													4	1.9
FY 01 EQUIP									2	0.9											2	0.9
FY 02 EQUIP											2	0.8									2	0.8
FY 03 EQUIP													2	0.7							2	0.7
FY 04 EQUIP															4	1.5					4	1.5
FY 05 EQUIP																	6	1.4			6	1.4
FY TC EQUIP																			37	13.0	37	13.0
TOTAL INSTALLATION COST		[0.0]		[0.0]		[.6]		[1.9]		0.9		0.8		0.7		1.5		1.4		13.0		20.7
TOTAL PROCUREMENT COST		[0.0]		[.6]		[4.6]		[13.1]		4.1		4.1		5.2		10.1		11.0		87.0		139.9

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 5 Months PRODUCTION LEADTIME 11 Months

CONTRACT DATES: FY 1999: Dec-98 FY 2000: Dec-99 FY 2001: Dec-00

DELIVERY DATES: FY 1999: May-99 FY 2000: Jun-00 FY 2001: Feb-01

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT				[2]				1	3		1	1			1	1	
OUTPUT					[2]			1	3				2				2

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT		1	1			1	2	1		2	2	2	37	59
OUTPUT				2				4				6	37	59

Notes/Comments
The FY98 buy is an upgrade and requires no actual installation.
Beginning in FY01, the HYDRA prgram will become a NAVSEA program and reflected under NAVSEA's claimancy.

MODIFICATION TITLE: SINCGARS

Feb-00

COST CODE: D5005/D5006/NG247

MODELS OF SYSTEMS AFFECTED: Antenna Multiplexer TD-1456

DESCRIPTION/JUSTIFICATION: Provides ships engaged in amphibious operations and naval gunfire support missions the capability to communicate with ground forces in a VHF-FM anti-jam mode.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: ($ in millions)

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity	[0]	[0.0]	[49]	[2.9]	[110]	[8.4]	[0]	[0.0]	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	159	11.3
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment																						
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	[0]	[0.0]	[0]	[0.0]	[17]	[0.0]	[76]	[0.0]	66	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.0	159	0.0
PRIOR YR EQUIP																					0	0.0
FY 98 EQUIP					[17]	Note 1.	[32]	Note 1.													49	0.0
FY 99 EQUIP							[44]	Note 1.	66	Note 1.											110	0.0
FY 00 EQUIP																					0	0.0
FY 01 EQUIP																					0	0.0
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY 06 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		[0.0]		[0.0]		[0.0]		[0.0]		0.0		0.0		0.0		0.0		0.0		0.0		0.0
TOTAL PROCUREMENT COST		[0.0]		[2.9]		[8.4]		[0.0]		0.0		0.0		0.0		0.0		0.0		0.0		11.3

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 6 months PRODUCTION LEADTIME

CONTRACT DATES: FY 1999: Mar-99 FY 2000: N/A FY 2001: N/A

DELIVERY DATES: FY 1999: Jul-00 FY 2000: N/A FY 2001: N/A

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT					[17]	32		19	25	10	16	20	20				
OUTPUT					[17]	32			24	30	16	20	20				

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT														159
OUTPUT														159

Note 1. Installation costs are included in the costs to install AN/SRC-54A/B (D5008 /NG249 and D5009/NG250).

MODIFICATION TITLE: SINCGARS

Feb-00

COST CODE: D5009/NG250

MODELS OF SYSTEMS AFFECTED: SINCGARS Ship System AN/SRC-54B

DESCRIPTION/JUSTIFICATION: Provides ships engaged in amphibious operations and naval gunfire support missions the capability to communicate with ground forces in a VHF-FM anti-jam mode.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: ($ in millions)

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	
RDT&E																							
PROCUREMENT:																							
Kit Quantity	[0]	[0.0]	[0]	[0.0]	[311]	[11.7]	[0]	[0.0]	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	311	11.7	Note 1
Installation Kits																							
Installation Kits Nonrecurring																							
Equipment																							
Equipment Nonrecurring																							
Engineering Change Orders																							
Data																							
Training Equipment																							
Support Equipment																							
Other																							
Interm Contractor Support																							
Installation of Hardware*	[0]	[0.0]	[21]	[2.29]	[33]	[2.12]	[172]	[6.74]	108	2.92	87	3.84	0	0.00	0	0.00	0	0.00	0	0.00	421	17.9	
PRIOR YR EQUIP																					0	0.0	
FY 98 EQUIP			[21]	[2.29]	[33]	[2.12]															54	4.4	
FY 99 EQUIP							[172]	[6.74]	108	2.92	87	3.84									367	13.5	
FY 00 EQUIP																					0	0.0	
FY 01 EQUIP																					0	0.0	
FY 02 EQUIP																					0	0.0	
FY 03 EQUIP																					0	0.0	
FY 04 EQUIP																					0	0.0	
FY 05 EQUIP																					0	0.0	
FY 06 EQUIP																					0	0.0	
FY TC EQUIP																					0	0.0	
TOTAL INSTALLATION COST		[0.0]	[21]	[2.29]	[33]	[2.12]	[172]	[6.74]	108	2.92	87	3.84	0	0.00	0	0.00	0	0.00	0	0.00		17.9	
TOTAL PROCUREMENT COST		[0.0]		[2.29]		[13.75]		[6.74]		2.92		3.84		0.00		0.00		0.00		0.00		29.6	

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 6 months PRODUCTION LEADTIME

CONTRACT DATES: FY 1999: Mar-99 FY 2000: FY 2001:

DELIVERY DATES: FY 1999: May-00 FY 2000: FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT	[21]		[33]			56		83	33	108				87			
OUTPUT	[21]		[33]			56			83	33	108				87		

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT														421
OUTPUT														421

Note 1. The FY98-00 installations include 110 quantities of upgraded AN/SRC-54 radios procured under cost code D5001. (54 units are FY98 upgrades and 56 units are FY99 upgrades)

The FY00 Installations of 259 units includes 203 units of FY99 SINCGARS SRC-54B radios procured under D5009 and 56 units of FY99 FY99 upgrades procured under D5001.

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February 2000

APPROPRIATION/BUDGET ACTIVITY
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE
BLI: 3057 Communication Items Under $5M

SUBHEAD NO.
52NU

COST CODE	ITEM/MANUFACTURER	FY	SERV	PROC QTY	ACCEP PRIOR TO 2-Oct	BAL DUE AS OF 2-Oct	FISCAL YEAR 99												FISCAL YEAR 00												FISCAL YEAR 01								
							PY98	CALENDAR YEAR 99											CALENDAR YEAR 00												CALENDAR YEAR 01								
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
DN013	HF Tilt Mechanism	00		[30]		[30]																				A								2	4	4	5	6	6	3
NG013		01		22		22																									A								3	3
DN016	HFRG Broadband	99		[2]		[2]		A												1		1																		
NG016		01		2		2																									A									
DN017	HFSST Narrowband	00		[6]		[6]																				A											2	1	3	
DN019	DWTS	99		[21]		[21]		A										3	6	6	3	3																		
DN019		00		0		0																																		
NG019		01		4		4																									A									4

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

NAVMAT FORM 7110/4 (REVISED 11/77)

P-1 Shopping List-Item No 101-23 of 101-26

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February 2000

APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: BLI: 3057 Communication Items Under $5M

SUBHEAD NO.: 52NU

COST CODE	ITEM/MANUFACTURER	FY	SERV	PROC QTY	ACCEP PRIOR TO 1-Oct	BAL DUE AS OF 1-Oct	FISCAL YEAR 99												FISCAL YEAR 00												FISCAL YEAR 01											
							PY98			CALENDAR YEAR 99												CALENDAR YEAR 00												CALENDAR YEAR 01											
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
NG184	R2368/URR HF Receiver	00		[177]		[177]																				A									45	44	44	44			
NG237	Red/Black DGTL Switch [1]	99		[10]		[10]					A			2	1	2	3	2																							
NG238	MCIXS	00		[3]		[3]																			A			2	1												
NG238		01		3		3																								A			2	1							
NG239	ADNS	99		[35]		[35]		A				5	5	5	5	5	5	5																							
NG239	VIXS	99		[11]		[11]			A				1	2	2	2	2	2																							
NG239		00		[33]		[33]															A		5	6	3	4	4	3	4	4											
NG239		01		12		12																										A		2	2	1	1	2	1	1	2
NG240	TMIP	00		[30]		[30]																A	7	8			7	8													
NG240		01		30		30																								A	10	10			5	5					
	PORTABLE RADIOS																																								
T7016	SINCGARS Manpack	99		[18]		[18]									A												5	5	5	3											
T7029	SINCGARS Vehicle	99		[62]		[62]									A												10	10	10	10	10	10	2								
T7046	HYDRA	99		[2]		[2]			A					1	1																										
NG245		00		[4]		[4]															A						1	2	1									1			
NG245		01		2		2																										A		1				1			
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP

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

NAVMAT FORM 7110/4 (REVISED 11/77)

P-1 Shopping List-Item No 101-24 of 101-26

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February 2000

APPROPRIATION/BUDGET ACTIVITY
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE
BLI: 3057 Communication Items Under $5M

SUBHEAD NO.
52NU

COST CODE	ITEM/MANUFACTURER	FY	SERV	PROC QTY	ACCEP PRIOR TO 1-Oct	BAL DUE AS OF 1-Oct	FISCAL YEAR 99												FISCAL YEAR 00												FISCAL YEAR 01								
							PY98			CALENDAR YEAR 99									CALENDAR YEAR 00												CALENDAR YEAR 01								
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
	SINCGARS																																							
D5001	Ship System Upgrades (AN/SRC-54)	99		[56]		[56]				A							11	12	11	11	11																				
D5005/D5006	TD-1456/GRC FH Multicoupler	99		[110]		[110]						A															20	20	20	20	20	10								
D5007	AN/GRM-122 Radio Test Set	99		[78]		[78]						A															10	10	10	10	10	10	10	8						
D5009	Ship System AN/SRC-54B	99		[311]		[311]						A														45	38	43	42	35	39	32	37							

[1] Beginning in FY00, funding for this program has been transferred to BLI 3050, Subhead 52PQ

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

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE (DOD EXHIBIT P-21A)

DATE February 2000

APPROPRIATION/BUDGET ACTIVITY
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE
BLI: 3057 Communication Items Under $5M

SUBHEAD NO. 52NU

COST CODE	ITEM/MANUFACTURER	FY	SERV	CARRY OVER	FISCAL YEAR 02												FISCAL YEAR 03												FISCAL YEAR 04												LATER
					CY01			CALENDAR YEAR 02											CALENDAR YEAR 03												CALENDAR YEAR 04											
					OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
DN013	HF Tilt Mechanism	00		0																																			0
NG013		01		16	3	3	4	3	3																															0
																																							0
DN016	HFRG Broadband	99		0																																			0
NG016		01		2		1		1																															
																																							0
DN017	HFSST Narrowband	00		0																																			0
																																							0
DN019	DWTS	99		0																																			0
DN019		00		0																																			0
NG019		01		0																																			0
					OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

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

NAVMAT FORM 7110/4 (REVISED 11/77)

P-1 Shopping List-Item No 101-26 of 101-26

								DATE	February 2000	
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						**P-1 ITEM NOMENCLATURE** *310700 Submarine Broadcast Support			**SUBHEAD** 52W4	
	PY	**FY 1999**	**FY 2000**	**FY 2001**	**FY 2002**	**FY 2003**	**FY 2004**	**FY 2005**	**TO COMP**	**TOTAL**
QUANTITY										
COST (in millions)		**$13.9**	**$36.2**	**$31.4**	**$19.3**	**$4.4**	**$14.1**	**$19.3**	**Continuing**	**Continuing**

PROGRAM COVERAGE: *This program now includes OPN P-1 Line Item Submarine LF/VLF VME Receiver (314700) beginning in FY00. FY99 detail information is provided for budget comparability.
The Submarine Broadcast Support program was established to improve the reliability, efficiency and performance of the Extremely Low Frequency (ELF)/Very Low Frequency (VLF)/Low Frequency (LF) submarine broadcast system. These transmission mediums (ELF/VLF/LF) comprise the primary line of Fleet Ballistic Missile Command, Control and Communications (FBMC3). Two (2) ELF, four (4) VLF and six (6) LF shorebased transmitter sites are Emergency Action Message (EAM) relay points providing primary connectivity between National Command Authorities (NCA) and SSBNs. Tasks are planned/ongoing to improve performance of ELF/VLF/LF broadcast capabilities consistent with changing operational requirements. The ELF Communications Ashore Robustness Program (ECARP) will provide upgrades to existing ELF transmitter systems by replacing degraded, obsolete and high maintenance items that could preclude reliable operation well into the next century. The SLVR system replaces antiquated and limited capability VLF/LF receivers on TRIDENT and SSN (688/Seawolf/New Attack) submarines and at selected shore sites.

JUSTIFICATION OF BUDGET YEAR REQUIREMENTS:

(1) REM (Range Extension Mode): (W4011) Provides upgrades to increase ocean area coverage of the submarine broadcast to support littoral and special mission submarine operations without requiring costly modifications to increase transmitter output power.
(2) VALUE (VLF Ashore Lifetime Upkeep Effort): (W4012) Provides upgrades to correct deficiencies in material condition and logistics support of existing VLF/LF transmitter systems at shore stations worldwide that could preclude reliable operation to the year 2025.
(3) NON-FMP Equipment Installation: (W4776) Provides installation support such as Base Electronic System Engineering Plans (BESEP) for Submarine Broadcast Upgrade ((W4008).
(4) SLVR: (W4001) A Mission Critical piece of C3I equipment onboard submarines. Procurements are planned through FY01 to change out the legacy shipboard VLF/LF systems. SLVR replaces 20 - 30 year old technology limited VLF receiver systems and provides flexibility for change in addition to reductions in space and weight. This approach will modernize the existing systems to a standard design and eliminates the need for supporting numerous configurations of VLF/LF receiver systems, thus minimizing total cost of ownership/maintenance cost to the Fleet. To be successful, the commercial components must be procured during the brief period of FY98 thru FY01 to insure a single generation of COTS is used for SLVR.
(5) SLVR NON-FMP Equipment Installation Shore: (W4776) Provides installation at the VLF/LF shore sites.
(6) SLVR FMP Installation Ships: (W4777) Provides installation support to replace the legacy shipboard VLF/LF Systems for Trident SSBN's, SSN 688's, and Tenders.

INSTALLING AGENTS: The equipment will be installed by the In-Service Engineering Activity (ISEA).

COST ANALYSIS | **DATE** Feb-00

APPROPRIATION ACTIVITY: OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: *310700 Submarine Broadcast Support

SUBHEAD: 52W4

TOTAL COST IN THOUSANDS OF DOLLARS

COST CODE	ELEMENT OF COST	ID CODE	PY QTY	PY TOTAL COST	FY 1999 QTY	FY 1999 UNIT COST	FY 1999 TOTAL COST	FY 2000 QTY	FY 2000 UNIT COST	FY 2000 TOTAL COST	FY 2001 QTY	FY 2001 UNIT COST	FY 2001 TOTAL COST
	Submarine Broadcast Systems												
W4011	REM	A			VAR		2,798	VAR		3,500			
W4012	**VALUE	A			1	10,970	10,970	1	11,678	11,678	1	13,370	13,370
W4776	NON-FMP INSTALLATION	A			1	154	154						169
	Submarine LF/VLF VME Receiver												
LF001	Submarine LF/VLF VME Receiver	A			[44]	[353.1]	[15,538]						
W4001	Submarine LF/VLF VME Receiver	A						47	347.2	16,318	44	312.7	13,757
LF776	Non FMP Installation (Shore) (SLVR)	A					[576]						
W4776	Non FMP Installation (Shore) (SLVR)	A								765			796
LF777	FMP Installation Ships (SLVR)	A											
W4777	FMP Installation Ships (SLVR)	A								503			1,088
	DSA									125			176
W4555	Production Support	A								**3,269**			**2,077**
	VALUE									1,524			1,033
	SLVR									1,745			1,044
	*This program now includes OPN P-1 Line Item Submarine LF/VLF VME Receiver (314700) beginning in FY00. FY99 detail information is provided for budget comparability.												
							[16,114]						
	TOTAL CONTROL			**0**			**13,922**			**36,158**			**31,433**

Remarks:

**Unit cost varies by site due to differing equipment configurations at each location.

PROCUREMENT HISTORY AND PLANNING

A. DATE: February 2000

B. APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

C. P-1 ITEM NOMENCLATURE: *310700 Submarine Broadcast Support

SUBHEAD: 52W4

COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
W4012	**VALUE	99	Continental Elec, Dallas, TX	C/CPIF	SSC Chas	Jul-98	May-99	May-01	1	10,970	Yes	
		00	Continental Elec, Dallas, TX	C/CPIF	SSC Chas	Option	Dec-99	Dec-01	1	11,678	Yes	
		01	Continental Elec, Dallas, TX	C/CPIF	SSC Chas	Option	Nov-00	Nov-02	1	13,370	Yes	
LF001	Submarine LF/VLF VME Receiver	99	Sechan Electronics, Inc., Lilitz, PA	FFP/OPT	SSC SAN DIEGO	N/A	Jul-99	Jan-00	44	353	Yes	
W4001	Submarine LF/VLF VME Receiver	00	Sechan Electronics, Inc., Lilitz, PA	FFP/OPT	SSC SAN DIEGO	N/A	Dec-99	Jul-00	47	347	Yes	
		01	TBD	FFP/OPT	SSC SAN DIEGO	N/A	Feb-01	Aug-01	44	313	Yes	

D. REMARKS

**Unit cost varies by site due to differing equipment configurations at each location.

DD FORM 2446, JUN 87

P-1 Shopping List - Item No 102 - 3 of 9

MODIFICATION TITLE: Submarine Broadcast Upgrade
MODELS OF SYSTEMS AFFECTED: Various Feb-00
DESCRIPTION/JUSTIFICATION: Upgrades and replaces submarine broadcast equipment and antenna components worldwide.
COST CODE: W4008

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

	P Y		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		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	9	16.9											4	8.6	3	9.1			16	34.5
Equipment Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware	8	0.6	1	0.2											4	0.1	3	0.1	16	1.0
(PY) Eqpt	8	0.6	1	0.2															9	0.8
FY99 Eqpt																				
FY00 Eqpt																				
FY01 Eqpt																				
FY02 Eqpt																				
FY03 Eqpt																				
FY04 Eqpt															4	0.1			4	0.1
FY05 Eqpt																	3	0.1	3	0.1
FY TC Eqpt																				
Total Installation Cost	8	0.6	1	0.2											4	0.1	3	0.1	16	1.0
Total Procurement Cost		17.5		0.2										8.6		9.2		0.1		35.5

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 8 Months PRODUCTION LEADTIME: 11 Months

CONTRACT DATES: FY 1999: N/A FY 2000 N/A FY 2001 N/A

DELIVERY DATE: FY 1999: 7/99 FY 2000 N/A FY 2001 N/A

	PY	FY 99				FY 00				FY 01				FY 02			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INSTALLATION SCHEDULE:																	
INPUT	8				1												
OUTPUT	8				1												

	FY 03				FY 04				FY 05					
	1	2	3	4	1	2	3	4	1	2	3	4	TC	Total
INSTALLATION SCHEDULE:														
INPUT								4				3		16
OUTPUT									4				3	16

MODIFICATION TITLE: VALUE
MODELS OF SYSTEMS AFFECTED: VLF/LF Transmitter Systems Feb-00
DESCRIPTION/JUSTIFICATION: Corrects deficiencies in material condition and logistics support of existing VLF/LF transmitter systems.
COST CODE: W4012

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

	P Y		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		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	11.0	1	11.7	1	13.4	1	15.2	1	3.7							5	58.7
Equipment Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware							1	0.2	1	0.2	1	0.2	1	0.1	1	0.1			5	0.7
(PY) Eqpt																				
FY99 Eqpt							1	0.2											1	0.2
FY00 Eqpt									1	0.2									1	0.2
FY01 Eqpt											1	0.2							1	0.2
FY02 Eqpt													1	0.1					1	0.1
FY03 Eqpt															1	0.1			1	0.1
FY04 Eqpt																				
FY05 Eqpt																				
FY TC Eqpt																				
Total Installation Cost							1	0.2	1	0.2	1	0.2	1	0.1	1	0.1			5	0.7
Total Procurement Cost				11.0		11.7		13.5		15.3		3.9		0.1		0.1				59.4

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 8 Months PRODUCTION LEADTIME: 24 months

CONTRACT DATES: FY 1999: 5/99 FY 2000 12/99 FY 2001 11/00

DELIVERY DATE: FY 1999: 5/01 FY 2000 12/01 FY 2001 11/02

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				FY 02			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT												1		1			
OUTPUT													1		1		

INSTALLATION SCHEDULE:	FY 03				FY 04				FY 05				TC	Total
	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT	1				1				1					5
OUTPUT		1				1				1				5

MODIFICATION TITLE: SLVR (W4001)
MODELS OF SYSTEMS AFFECTED: NON -FMP Shore Installations Feb-00
DESCRIPTION/JUSTIFICATION: Replaces legacy VLF/LF receive systems.
COST CODE: W4776

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

	P Y		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		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	*[15]	[7.4]	8	2.8	13	5.0	12	4.0			0.5		0.5		0.5				48	20.8
Equipment Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware			[15]	[0.6]	8	0.8	13	0.8	12	0.7									48	2.8
(PY) Eqpt			[15]	[0.6]															15	0.6
FY99 Eqpt					8	0.8													8	0.8
FY00 Eqpt							13	0.8											13	0.8
FY01 Eqpt									12	0.7									12	0.7
FY02 Eqpt																				
FY03 Eqpt																				
FY04 Eqpt																				
FY05 Eqpt																				
FY TC Eqpt																				
Total Installation Cost			[15]	[.576]	8	0.8	13	0.8	12	0.7									48	2.8
Total Procurement Cost				2.8		5.8		4.8		0.7	0.5		0.5		0.5					23.6

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 6 Months

CONTRACT DATES: FY 1999: 7/99 FY 2000 12/99 FY 2001 2/01

DELIVERY DATE: FY 1999: 1/00 FY 2000 6/00 FY 2001 8/01

	PY	***FY 99**				FY 00				FY 01				FY 02			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INSTALLATION SCHEDULE:																	
INPUT			2	4	9		4	2	2	3	3	4	3	3	3	3	3
OUTPUT			2	4	9		4	2	2	3	3	4	3	3	3	3	3

	FY 03				FY 04				FY 05				TC	Total
	1	2	3	4	1	2	3	4	1	2	3	4		
INSTALLATION SCHEDULE:														
INPUT														48
OUTPUT														48

NOTE: *This program now includes OPN Line Item Submarine LF/VLF VME Receiver (314700) beginning in FY00.

MODIFICATION TITLE: SLVR (W4001)
MODELS OF SYSTEMS AFFECTED: FMP Ship Installations Feb-00
DESCRIPTION/JUSTIFICATION: Replace the legacy shipboard VLF/LF systems.
COST CODE: W4777

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

	P Y		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		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			36	12.7	34	13.1	32	10.8											102	36.5
Equipment Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware					36	0.6	34	1.3	32	0.7									102	2.6
(PY) Eqpt																				
FY99 Eqpt					36	0.6													36	0.6
FY00 Eqpt							34	1.3											34	1.3
FY01 Eqpt									32	0.7									32	0.7
FY02 Eqpt																				
FY03 Eqpt																				
FY04 Eqpt																				
FY05 Eqpt																				
FY TC Eqpt																				
Total Installation Cost					36	0.6	34	1.3	32	0.7									102	2.6
Total Procurement Cost				12.7		13.7		12.0		0.7										39.1

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 6 Months

CONTRACT DATES: FY 1999: 7/99 FY 2000 12/99 FY 2001 2/01

DELIVERY DATE: FY 1999: 1/00 FY 2000 6/00 FY 2001 8/01

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				FY 02			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT							12	16	8	10	8	8	8	8	6	11	7
OUTPUT							12	16	8	10	8	8	8	8	6	11	7

INSTALLATION SCHEDULE:	FY 03				FY 04				FY 05				TC	Total
	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT														102
OUTPUT														

UNCLASSIFIED
CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February 2000

APPROPRIATION/BUDGET ACTIVITY

P-1 ITEM NOMENCLATURE: *310700 Submarine Broadcast Support

SUBHEAD NO.: 52W4

COST CODE	ITEM/MANUFACTURER	FY	SERV	PROC QTY	ACCEP PRIOR TO 30-Sep	BAL DUE AS OF 30-Sep	FISCAL YEAR 99															FISCAL YEAR 00												FISCAL YEAR 01											
							98			CALENDAR YEAR 99												CALENDAR YEAR 00												CALENDAR YEAR 01											
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
W4012	VALUE	99		1		1								A																												
		00		1		1															A																	1				
		01		1		1																											A										
LF001/W4001	Submarine LF/VLF VME Receiver	99		44		44										A						7	7	8	7	7	8															
		00		47		47															A							4	4	4	4	4	4	4	4	3	4	4	4			
		01		44		44																																	A				4	4
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP

MANUFACTURER'S NAME & LOCATION	PRODUCTION SCHEDULE MINIMUM SUST.	1 & 5	MAX.	REACHED D+

PROCUREMENT LEAD TIME	ADMIN LEAD TIME PRIOR 30-Sep	ADMIN LEAD TIME AFTER 30-Sep	MANUFACTURING TIME	TOTAL AFTER 1 OCT
INITIAL				
REORDER				

REMARKS

NAVMAT FORM 7110/4 (REVISED 11/77)

P-1 SHOPPING LIST
ITEM NO. 102 PAGE NO. 8 of 9

UNCLASSIFIED
CLASSIFICATION

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February 2000

APPROPRIATION/BUDGET ACTIVITY | P-1 ITEM NOMENCLATURE | SUBHEAD NO.

COST CODE	ITEM/MANUFACTURER/ PROCUREMENTY YEAR	FISCAL YEAR	CARRY OVER	FISCAL YEAR 02												FISCAL YEAR 03												FISCAL YEAR 04												LATER
				CY01			CALENDAR YEAR 02												CALENDAR YEAR 03												CALENDAR YEAR 04										
				OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
W4012	VALUE	99																																				
		00	1			1																																
		01	1														1																						
LF001/W4001	Submarine LF/VLF VME Receiver	01	36	4	4	4	4	4	4	4	4	4																										
				OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MANUFACTURER'S NAME & LOCAT	PRODUCTION SCHEDULE MINIMUM SUST.	1 & 5	MAX.	REACHED D+

PROCUREMENT LEAD TIME	ADMIN LEAD TIME PRIOR 30-Sep	ADMIN LEAD TIME AFTER 30-Sep	MANUFACTURING TIME	TOTAL AFTER 1 OCT
INITIAL				
REORDER				

REMARKS

NAVMAT FORM 7110/4 (REVISED 11/77)

P-1 SHOPPING LIST

ITEM NO. 102 PAGE NO. 9 of 9

UNCLASSIFIED

CLASSIFICATION

								DATE February-00		
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						**P-1 ITEM NOMENCLATURE** 313000 SUBMARINE COMMUNICATIONS			**SUBHEAD** 52L0	
	PY	**FY 1999**	**FY 2000**	**FY 2001**	**FY 2002**	**FY 2003**	**FY 2004**	**FY 2005**	**TO COMP**	**TOTAL**
QUANTITY										
COST (in millions)		**$63.7**	**$83.2**	**$78.0**	**$88.9**	**$107.8**	**$95.3**	**$104.4**	**Continuing**	**Continuing**

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.

BASEBAND DISTRIBUTION SYSTEM (BBS) (L0027) - Consists of switching hardware and controller that will allow flexible distribution of baseband signals throughout the submarine Radio Room. The Baseband Switch is a Non-Developmental Item (NDI) that will automate SSN 688 class assets, provide remotely controlled switching operation, allow preset configurations for quick reaction times, reduce needed rack space, and recover fleet configuration control.

ANTENNA MODIFICATIONS (L0035) - Modifications to antenna systems in order to provide Very Low Frequency (VLF) performance, Mid Frequency/High Frequency (MF/HF) effciency, and UHF DAMA and control unit reliablity. All SSN/SSBN classes are affected by these modifications.

TIME and FREQUENCY DISTRIBUTION SYSTEM (TFDS)/DUAL PACKAGE CESIUM (DPC) (L0078) - The TFDS/DPC provides time and frequency input to communications, electronic warfare, periscope, navigation, combat and ship control systems aboard SSN 688, SSN21, and SSBN 726 class submarines. The TFDS/DPC hardware will be capable of automatic or manual selection of host system standards and Global Positioning Satellite (GPS) receivers.

OE-538/BRC ANTENNA GROUP (IMPROVED AN/BRA-34) (L0080) - Provides SSN submarines with a mast mounted, multi-functional antenna to include High Frequency (HF) broadband and Fleet Satellite communications (FLTSATCOM) Demand Access Multiple Access (DAMA) operation. RDT&E Program Element - PE 0604503N pertains.

SUBMARINE COMMUNICATIONS SUPPORT SYSTEM RADIO ROOM (SCSS) (L0084) - The SSN SCSS Radio Room will consist of an open system, multimedia, circuit sharing architecture that will serve as the shipboard automated communications control system. Procurement in this line is for the radio room communications racks, chassis, common power supplies and ancillary components required to integrate the fast-attack submarine's communication equipment.

BUDGET ITEM JUSTIFICATION SHEET		DATE February-00
APPROPRIATION/BUDGET ACTIVITY	**P-1 ITEM NOMENCLATURE**	**SUBHEAD**
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	313000 SUBMARINE COMMUNICATIONS	52L0

SHF/EHF HIGH DATA RATE SATELLITE COMMUNICATIONS ANTENNAS (L0087) - The Submarine HDR antenna will provide submarines with antennas that have the bandwidth, gain, and flexibility to meet the stated COMSUBLANT/COMSUBPAC requirements for HDR communications in the SHF and EHF frequency. RDT&E (N) Program Element - PE 0604503N pertains.

TRIDENT SUBMARINE COMMUNICATIONS SUPPORT SYSTEM RADIO ROOM (SCSS) (L0089) - The Trident SCSS Radio Room will consist of an open system, multimedia, circuit sharing architecture that will serve as the shipboard automated communications control system. Procurement in this line is for the radio room communications racks, chassis, common power supplies and ancillary components required to integrate the ballistic missile submarine's communication equipment.

SUBMARINE SHIP PC UPGRADE (L0094) - Funds procurement of PCs for submarines.

EHF PERISCOPE MODIFICATIONS (L0095) - Funds procurement and installation of EHF periscope modification kits. The modifications will augment and enhance the communication capability of the HDR Follow-On Terminal contract award of March 1998.

SUBMARINE SHORE PC UPGRADE (L0096) - Funds procurement of PCs for submarine shore facilities. Procurements start in FY01.

SUBMARINE LAN (L0097) (Formerly Tactical Information Distribution System (TIDS)) - Will provide a connectivity layer that supports the achievement of an "End-to-End" capability for submarines crossing multiple classification enclaves. Sub LAN will provide significant improvement in data flow between subsystems within the submarine and off board enterprises. Sub LAN will enhance battle group connectivity, which increases awareness and interoperability, thus increasing battle readiness.

DESIGN SERVICES ALLOCATION (DSA) (L0777) - Design work and engineering associated with ship alterations.

COST ANALYSIS											DATE February-00		
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT					**P-1 ITEM NOMENCLATURE** 313000 SUBMARINE COMMUNICATIONS						**SUBHEAD** 52L0		
			TOTAL COST IN THOUSANDS OF DOLLARS										
				PY	**FY 1999**			**FY 2000**			**FY 2001**		
COST CODE	**ELEMENT OF COST**	**ID CODE**	**QTY**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**
L0027	BASEBAND SWITCH	A			8	548.1	4,385	8	722.1	5,777			
L0035	ANTENNA MODIFICATIONS	A			VAR		2,668	VAR		4,072	VAR		3,948
L0078	TFDS/DPC	A			12	157.4	1,889	10	185.1	1,851	6	207.5	1,245
L0080	OE-538/BRC	B			6	1,268.3	7,610	9	623.2	5,609	9	622.7	5,604
L0084	SCSS RADIO ROOM	A			VAR		3,353	VAR		3,052	VAR		1,972
L0087	HIGH DATA RATE ANTENNA	B			7	3,924.1	27,469	13	2,554.5	33,209	13	2,436.6	31,676
L0089	TRIDENT SCSS RADIO ROOM	A			VAR		404	VAR		421			
L0094	SUB SHIP PC UPGRADE	A						VAR		2,757	VAR		1,851
L0095	EHF PERISCOPE MODIFICATIONS *	A						8	1,300.0	10,400	VAR		
L0096	SUB SHORE PC UPGRADE	A									VAR		5,678
L0097	SUB LAN **	A			VAR		4,548	VAR		4,000	VAR		10,600
L0777	INSTALLATION EQUIPMENT						11,414			12,054			15,383
	FMP INSTALL				VAR		10,675	VAR		11,275	VAR		14,600
	DSA				VAR		739	VAR		779	VAR		783
	TOTAL CONTROL						**63,740**			**83,202**			**77,957**

Remarks:
* EHF Periscope Modifications (L0095) - One-time plus up to field top priority C41 MOD kits.
** Sub LAN (L0097) - FY99 plus-up of $4,548K and FY00 reallocation of $4,000K will fund LAN backfit requirements on SSN 688 Submarines.
L0080 - FY99 unit cost includes First Article System and testing (not seperately priced).

DD FORM 2446, JUN 86

PROCUREMENT HISTORY AND PLANNING

A. DATE: February-00

B. APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

C. P-1 ITEM NOMENCLATURE: 313000 SUBMARINE COMMUNICATIONS

SUBHEAD: 52L0

COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
L0027	BASEBAND SWITCH	99	L-3 Communications, NJ	C/FFP/OPT	SPAWAR		Dec-98	Aug-99	8	548.1	YES	N/A
		00	L-3 Communications, NJ	C/FFP/OPT	SPAWAR		Dec-99	Jul-00	8	722.1	YES	N/A
L0078	TFDS/DPC	99	Brandywine Com, CA	C/FFP/OPT	SSC-SD		Dec-98	Aug-99	12	157.4	YES	N/A
		00	Brandywine Com, CA	C/FFP/OPT	SSC-SD		Dec-99	Aug-00	10	185.1	YES	N/A
		01	Brandywine Com, CA	C/FFP/OPT	SSC-SD		Dec-00	Aug-01	6	207.5	YES	N/A
L0080	OE-538/BRC	99	Sippican/GSM, MA	C/FFP	NUWC		Jul-99	Jul-00	6	1,268.3	YES	N/A
		00	Sippican/GSM, MA	C/FFP/OPT	NUWC		Feb-00	Feb-01	9	623.2	YES	N/A
		01	Sippican/GSM, MA	C/FFP/OPT	NUWC		Dec-00	Dec-01	9	622.7	YES	N/A
L0087	HIGH DATA RATE ANTENNA	99	Raytheon, MA	C/FFP/OPT	SPAWAR		Feb-99	Feb-00	7	3,924.1	YES	N/A
		00	Raytheon, MA	C/FFP/OPT	SPAWAR		Apr-00	Apr-01	13	2,554.5	YES	N/A
		01	Raytheon, MA	C/FFP/OPT	SPAWAR		Feb-01	Feb-02	13	2,436.6	YES	N/A
L0095	EHF PERISCOPE MODIFICATIONS	00	Raytheon, MA	C/FFP/OPT	SPAWAR		Feb-00	May-01	8	1,300.0	N/A	N/A

D. REMARKS

Note: BBS (L0027), OE-538 (L0080), and HDR (L0087) Unit Cost growth since FY00 President's Budget is attributed to the reallocation of installation kit money from OPN(I) to OPN(P).

DD FORM 2446, JUN 87

MODIFICATION TITLE: Baseband Switch (BBS) - AFLOAT February-00
COST CODE L0027
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: Installation of Baseband Switch

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

	PY		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
PROCUREMENT:	41	27.1	8	4.4	8	5.8			1	1.3	7	5.8	7	5.2	5	3.9	0	0.0	77	53.5
Kit Quantity																				
Installation Kits					15	2.1														2.1
Installation Kits Nonrecurring																				
Equipment	41	27.1	8	4.4	8	3.7			1	1.3	7	5.8	7	5.2	5	3.9	0	0.0	77	51.5
Equipment Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Support											(See Note 1)		(See Note 1)		(See Note 1)		(See Note 1)			
Installation of Hardware*	18	12.7	14	7.3	15	6.2	10	4.2	0	0.0	1	0.0	7	0.0	7	0.0	5	0.0	77	27.7
Installation Kits	10	1.0	13	1.7																
Installation Kits Nonrecurring																				
PRIOR YR EQUIP	18	11.7	14	5.6	9	3.7													41	21.0
FY 99 EQUIP					6	2.5	2	0.8											8	3.3
FY 00 EQUIP							8	3.4											8	3.4
FY 01 EQUIP																			0	0.0
FY 02 EQUIP											1								1	0.0
FY 03 EQUIP													7						7	0.0
FY 04 EQUIP															7				7	0.0
FY 05 EQUIP																	5		5	0.0
FY TC EQUIP																			0	0.0
TOTAL INSTALLATION COST		12.7		7.3		6.2		4.2		0.0		0.0		0.0		0.0		0.0		27.7
TOTAL PROCUREMENT COST		39.8		11.7		12.0		4.2		1.3		5.8		5.2		3.9		0.0		81.3

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 months PRODUCTION LEADTIME: 5-8 months

CONTRACT DATES: FY 1999: Dec-98 FY 2000: Dec-99 FY 2001:

DELIVERY DATES: FY 1999: Aug-99 FY 2000: Jul-00 FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99 1	2	3	4	FY 00 1	2	3	4	FY 01 1	2	3	4	FY 02 1	2	3	4
INPUT	17	3	4	4	4	3	4	4	4	2	2	3	3				
OUTPUT	18	2	4	4	4	3	4	4	4	2	2	3	3				

INSTALLATION SCHEDULE:	FY 03 1	2	3	4	FY 04 1	2	3	4	FY 05 1	2	3	4	TC	TOTAL
INPUT	1				1	2	2	2	1	2	2	2	5	77
OUTPUT		1			1	2	2	2	1	2	2	2	5	77

Notes/Comments:
1) Installation funding for (1) BBS in FY03, (7) BBS in FY04, (7) BBS in FY05 and (5) BBS "To Complete" for equipment procured in FY03 and FY04, FY05 is covered by Trident SCSS Radio Room Installation (Cost Code L0777). Procurement quantities are represented on BBS P-3A with associated installation cost represented on Trident SCSS Radio Room (Cost Code L0777) P-3A. Installation funding presented on BBS P-3A represents SSN installations only.

2) FY99 Installation line included procurement of 13 Installation kits.

MODIFICATION TITLE: Baseband Switch (BBS) - ASHORE February-00
COST CODE L0027
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: Installation of Baseband Switch

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

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

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 months PRODUCTION LEADTIME: 5 months

CONTRACT DATES: FY 1999: Dec-98 FY 2000: FY 2001:

DELIVERY DATES: FY 1999: Aug-99 FY 2000: FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				FY 02			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT	1																
OUTPUT		1															

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

Notes/Comments:
1) In FY99, the Maintenance Trainer installation was funded by NAVSEA 92L.

February-00

MODIFICATION TITLE: Time & Frequency Distribution System (TFDS)
COST CODE L0078
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: Installation of Time & Frequency Distribution System

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

	PY		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
PROCUREMENT:																				
Kit Quantity																				
Installation Kits																				
Installation Kits Nonrecurring																				
Equipment	26	4.1	12	1.9	10	1.9	6	1.2	1	0.8	7	1.5	7	1.2	4	0.7			73	13.2
Equipment Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Support													(See Note 1)		(See Note 1)					
Installation of Hardware*	14	0.5	12	0.3	12	0.3	10	0.2	6	0.1	1	0.0	7	0.0	7	0.0	4	0.0	73	1.5
PRIOR YR EQUIP	14	0.5	12	0.3															26	0.9
FY 99 EQUIP					12	0.3													12	0.3
FY 00 EQUIP							10	0.2											10	0.2
FY 01 EQUIP									6	0.1									6	0.1
FY 02 EQUIP											1	0.0							1	0.0
FY 03 EQUIP													7	0.0					7	0.0
FY 04 EQUIP															7	0.0		0.0	7	0.0
FY 05 EQUIP																	4	0.0	4	0.0
FY TC EQUIP																			0	0.0
TOTAL INSTALLATION COST		0.5		0.3		0.3		0.2		0.1		0.0		0.0		0.0		0.0		1.5
TOTAL PROCUREMENT COST		4.7		2.2		2.1		1.5		0.9		1.5		1.2		0.7		0.0		14.8

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 months PRODUCTION LEADTIME: 8 months

CONTRACT DATES: FY 1999: Dec-98 FY 2000: Dec-99 FY 2001: Dec-00

DELIVERY DATES: FY 1999: Aug-99 FY 2000: Aug-00 FY 2001: Aug-01

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT	14	6	6			6	6			5	5			3	3		
OUTPUT	14	6	6			6	6			5	5			3	3		

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT	1					3	3	1		3	3	1	4	73
OUTPUT	1					3	3	1		3	3	1	4	73

Notes/Comments:
1) Installation funding for 1 TFDS/DPC in FY03, 7 TFDS/DPC in FY04, 7 TFDS/DPC in FY05 and 4 TFDS/DPC "To Complete" for equipment procured in FY02, FY03, FY04 and FY05 are covered by Trident SCSS Radio Room Installation (L0777). Procurement quantities are represented on TFDS/DPC P-3A with associated installation cost represented on the P-3A for Trident SCSS Radio Room.

February-00

MODIFICATION TITLE: OE-538/BRC
COST CODE L0080
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: Installation of OE-538/BRC

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

	PY		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E		2.3		0.1		0.4		0.4		0.4										3.6
PROCUREMENT:	4	15.6	6	7.6	9	5.6	9	5.6	10	6.2	18	11.1	19	12.0	20	12.9	0	0.0	95	76.6
Kit Quantity																				
Installation Kits																				
Installation Kits Nonrecurring																				
Equipment	4	15.6	6	7.6	9	5.6	9	5.6	10	6.2	18	11.1	19	12.0	20	12.9	0	0.0	95	76.6
Equipment Nonrecurring																				0.0
Engineering Change Orders																				0.0
Data																				
Training Equipment																				
Support Equipment																				0.0
Other																				0.0
Interim Support																			(See Note 2)	0.0
Installation of Hardware*	1	0.4	3	0.8	6	1.2	9	1.9	9	1.9	10	2.1	18	3.7	14	2.8	19	3.9	89	18.7
PRIOR YR EQUIP	1	0.4	3	0.8															4	1.2
FY 99 EQUIP					6	1.2													6	1.2
FY 00 EQUIP							9	1.9					(See Note 1)		(See Note 2)		(See Note 2)		9	1.9
FY 01 EQUIP									9	1.9									9	1.9
FY 02 EQUIP											10	2.1							10	2.1
FY 03 EQUIP													18	3.7					18	3.7
FY 04 EQUIP															14	2.8			14	2.8
FY 05 EQUIP																	19	3.9	19	3.9
FY TC EQUIP																			0	0.0
TOTAL INSTALLATION COST		0.4		0.8		1.2		1.9		1.9		2.1		3.7		2.8		3.9		18.7
TOTAL PROCUREMENT COST		16.0		8.4		6.8		7.5		8.1		13.1		15.7		15.7		3.9		95.3

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 12 months PRODUCTION LEADTIME: 12 months

CONTRACT DATES: FY 1999: Jul-99 FY 2000: Feb-00 FY 2001: Dec-00

DELIVERY DATES: FY 1999: Jul-00 FY 2000: Feb-01 FY 2001: Dec-01

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT	1		3						6		3	3	3		3	3	3
OUTPUT	1		3						6		3	3	3		3	3	3

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT		3	3	4		6	6	6		6	6	2	19	89
OUTPUT		3	3	4		6	6	6		6	6	2	19	89

Notes/Comments:

1) Two (2) OE-538/BRC antennas comprise one installation on TRIDENT class submarines. This reduces the effective cost per installation in FY04, FY05 and TC.

2) Six (6) OE-528/BRC units are assigned to a rotatable pool to accommodate equipment refurbishment and do not require installation funding. Pool assets are procured as follows: 5 in FY04, 1 in FY05.

3) FY99 unit cost includes First Article System and testing (not seperately priced).

February-00

MODIFICATION TITLE: High Data Rate Antenna (Sub HDR)
COST CODE L0087
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: Installation of High Data Rate Antenna (Sub HDR)

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

	PY		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E		23.8		0.5		0.5														24.7
PROCUREMENT:	1	7.8	7	27.5	13	33.2	13	31.7	13	34.2	13	29.3	0	2.8					60	166.5
Kit Quantity																				
Installation Kits																				
Installation Kits Nonrecurring																			(See Note 1)	
Equipment	1	7.8	7	27.5	13	33.2	13	31.7	13	34.2	13	29.3	VAR	2.8					60*	166.5
Equipment Nonrecurring																				0.0
Engineering Change Orders																				0.0
Data																				
Training Equipment																				0.0
Support Equipment																				0.0
Other																				0.0
Interim Support																			(See Note 1)	0.0
Installation of Hardware*	0	0.0	1	1.1	7	3.5	13	5.7	13	5.0	13	4.9	6	2.3					53	22.5
PRIOR YR EQUIP			1	1.1															1	1.1
FY 99 EQUIP					7	3.5													7	3.5
FY 00 EQUIP							13	5.7											13	5.7
FY 01 EQUIP									13	5.0									13	5.0
FY 02 EQUIP											13	4.9							13	4.9
FY 03 EQUIP													6	2.3					6	2.3
FY 04 EQUIP																			0	0.0
FY 05 EQUIP																			0	0.0
FY TC EQUIP																			0	0.0
TOTAL INSTALLATION COST		0.0		1.1		3.5		5.7		5.0		4.9		2.3		0.0		0.0		22.5
TOTAL PROCUREMENT COST		7.8		28.6		36.7		37.3		39.1		34.2		5.1		0.0		0.0		189.0

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 months PRODUCTION LEADTIME: 12 months

CONTRACT DATES: FY 1999: Feb-99 FY 2000: Apr-00 FY 2001: #####

DELIVERY DATES: FY 1999: Feb-00 FY 2000: Apr-01 FY 2001: #####

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				FY 02			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT					1		1	3	3		2	5	6		3	4	6
OUTPUT						1		3	3	1	1	4	4	3	3	3	4

INSTALLATION SCHEDULE:	FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT		3	4	6		3	3							53
OUTPUT	3	3	3	4	3	3	4							53

Notes/Comments:
1) Seven (7) SubHDR units procured in FY03 are assigned to a rotatable pool to accommodate equipment refurbishment and do not require installation funding.
2) SubHDR is a three-phased installation consisting of sail modifications, MMG and antenna installs. Due to the complexity of the sail modifications and MMG installs, SubHDR installations commence prior to delivery of the antennas.

February-00

MODIFICATION TITLE: TRIDENT SCSS Radio Room
COST CODE L0089
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: Installation of TRIDENT SCSS Radio Room

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

	PY		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E								1.0		5.6		0.8		0.5		0.5				8.4
PROCUREMENT:																				
Kit Quantity																				
Installation Kits																				
Installation Kits Nonrecurring																				
Equipment	VAR	3.4	VAR	0.4	VAR	0.4			VAR	1.1	VAR	1.0	7	12.8	12	20.3			19	39.4
Equipment Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Support													(See Note 1)		(See Note 1)					
Installation of Hardware*	0	0.0	VAR	1.1	0	0.0	0	0.0	0	0.3	0	0.6	7	14.1	7	14.3	5	11.0	19	41.4
PRIOR YR EQUIP			VAR	1.1															0	1.1
FY 99 EQUIP																			0	0.0
FY 00 EQUIP																			0	0.0
FY 01 EQUIP																			0	0.0
FY 02 EQUIP																			0	0.0
FY 03 EQUIP																			0	0.0
FY 04 EQUIP													7	14.1					7	14.1
FY 05 EQUIP															7	14.3	5	11.0	12	25.3
FY TC EQUIP																			0	0.0
TOTAL INSTALLATION COST		0.0		1.1		0.0		0.0		0.3		0.6		14.1		14.3		11.0		41.4
TOTAL PROCUREMENT COST		3.4		1.5		0.4		0.0		1.4		1.6		26.8		34.6		11.0		80.8

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 months PRODUCTION LEADTIME: 12 months

CONTRACT DATES: FY 1999: N/A FY 2000: N/A FY 2001: N/A

DELIVERY DATES: FY 1999: N/A FY 2000: N/A FY 2001: N/A

INSTALLATION SCHEDULE:	PY	FY 99 1	2	3	4	FY 00 1	2	3	4	FY 01 1	2	3	4	FY 02 1	2	3	4
INPUT																	
OUTPUT																	

INSTALLATION SCHEDULE:	FY 03 1	2	3	4	FY 04 1	2	3	4	FY 05 1	2	3	4	TC	TOTAL
INPUT						2	3	2		2	3	2	5	19
OUTPUT						2	3	2		2	3	2	5	19

Notes/Comments:
1) Reflects installations of Trident SCSS Radio Room equipment procured under Baseband Switch (L0027), Dual Package Cesium (L0078), and SCSS Radio Room (L0084).
One (1) Trident SCSS Radio Room installation consists of the following equipment contained within this budget: 1 BBS, 1 DPC and ancillary equipment.

February-00

MODIFICATION TITLE: EHF Periscope Modifications
COST CODE L0095
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: Installation of EHF Periscope Modifications

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

	PY		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
PROCUREMENT:																				
Kit Quantity																				
Installation Kits																				
Installation Kits Nonrecurring																				
Equipment					8	10.4													8	10.4
Equipment Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Support																				
Installation of Hardware*							8	2.6											8	2.6
PRIOR YR EQUIP																			0	0.0
FY 97 EQUIP																			0	0.0
FY 98 EQUIP																			0	0.0
FY 99 EQUIP																			0	0.0
FY 00 EQUIP							8	2.6											8	2.6
FY 01 EQUIP																			0	0.0
FY 02 EQUIP																			0	0.0
FY 03 EQUIP																			0	0.0
FY 04 EQUIP																			0	0.0
FY 05 EQUIP																			0	0.0
FY TC EQUIP																			0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.0		2.6		0.0		0.0		0.0		0.0		0.0		2.6
TOTAL PROCUREMENT COST		0.0		0.0		10.4		2.6		0.0		0.0		0.0		0.0		0.0		13.0

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 months PRODUCTION LEADTIME: 16 months

CONTRACT DATES: FY 1999: N/A FY 2000: Feb-00 FY 2001: N/A

DELIVERY DATES: FY 1999: N/A FY 2000: May-01 FY 2001: N/A

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

INSTALLATION SCHEDULE:	FY 02 1	2	3	4	FY 03 1	2	3	4	FY 04 1	2	3	4	FY 05 1	2	3	4	TC	TOTAL
INPUT																		8
OUTPUT																		8

Notes/Comments:

Unclassified

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February-00

APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: 313000 SUBMARINE COMMUNICATIONS

SUBHEAD NO.: 52L0

COST CODE	ITEM/MANUFACTURER	FY	SERV	PROC QTY	ACCEP PRIOR TO 30-Sep	BAL DUE AS OF 30-Sep	FISCAL YEAR 99																		FISCAL YEAR 00												FISCAL YEAR 01											
							98			CALENDAR YEAR 99															CALENDAR YEAR 00												CALENDAR YEAR 01											
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
L0027	BASEBAND SWITCH	99		8		8			A							2	2	2	2																															
		00		8		8															A							2	2	2	2																			
		01																																																	
L0078	TFDS/DPC	99		12		12			A							6	6																															
		00		10		10															A							5	5																			
		01		6		6																																											6	
L0080	OE-538/BRC	99		6		6									A													2	2	2																			
		00		9		9																	A																									
		01		9		9																																												

MANUFACTURER'S NAME & LOCATION	PRODUCTION SCHEDULE MINIMUM SUST.	1 & 5	MAX.	REACHED D+

PROCUREMENT LEAD TIME	ADMIN LEAD TIME PRIOR 30-Sep	ADMIN LEAD TIME AFTER 30-Sep	MANUFACTURING TIME	TOTAL AFTER 1 OCT
INITIAL				
REORDER				

REMARKS

NAVMAT FORM 7110/4 (REVISED 11/77)

Unclassified

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February-00

APPROPRIATION/BUDGET ACTIVITY
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE
313000 SUBMARINE COMMUNICATIONS

SUBHEAD NO.
52L0

COST CODE	ITEM/MANUFACTURER	FY	SERV	PROC QTY	ACCEP PRIOR TO 30-Sep	BAL DUE AS OF 30-Sep	FISCAL YEAR 99												FISCAL YEAR 00												FISCAL YEAR 01											
							98			CALENDAR YEAR 99													CALENDAR YEAR 00												CALENDAR YEAR 01											
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
L0087	HIGH DATA RATE ANTENNA	99		7		7					A												1			1	1	1	1	1	1										
		00		13		13																			A												1	2	1	2	1	2
		01		13		13																															A						
L0095	EHF PERISCOPE MODIFICATIONS	00		8		8																	A														2	2	2	2	

MANUFACTURER'S NAME & LOCATION	PRODUCTION SCHEDULE MINIMUM SUST.	1 & 5	MAX.	REACHED D+

PROCUREMENT LEAD TIME	ADMIN LEAD TIME PRIOR 30-Sep	ADMIN LEAD TIME AFTER 30-Sep	MANUFACTURING TIME	TOTAL AFTER 1 OCT
INITIAL				
REORDER				

REMARKS

NAVMAT FORM 7110/4 (REVISED 11/77)

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE
February-00

APPROPRIATION/BUDGET ACTIVITY
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE
313000 SUBMARINE COMMUNICATIONS

SUBHEAD NO.
52L0

				FISCAL YEAR 02												FISCAL YEAR 03												FISCAL YEAR 04												
				01			CALENDAR YEAR 02												CALENDAR YEAR 03												CALENDAR YEAR 04									
COST CODE	**ITEM/MANUFACTURER/ PROCUREMENTY YEAR**	**FISCAL YEAR**	**CARRY OVER**	**OCT**	**NOV**	**DEC**	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUN**	**JUL**	**AUG**	**SEP**	**OCT**	**NOV**	**DEC**	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUN**	**JUL**	**AUG**	**SEP**	**OCT**	**NOV**	**DEC**	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUN**	**JUL**	**AUG**	**SEP**	**LATER**
L0087	HIGH DATA RATE ANTENNA	99																																						
		00	4	1	1	1	1																																	
		01	13					1	1	1	2	1	1	1	1	1	1	1	1																			
L0095	EHF PERISCOPE MODIFICATIONS	00																																						
				OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

	PRODUCTION SCHEDULE			REACHED
MANUFACTURER'S NAME & LOCATION	MINIMUM SUST.	1 & 5	MAX.	D+

PROCUREMENT LEAD TIME

	ADMIN LEAD TIME		MANUFAC-TURING TIME	TOTAL AFTER 1 OCT
	PRIOR 30-Sep	AFTER 30-Sep		
INITIAL				
REORDER				

REMARKS

NAVMAT FORM 7110/4 (REVISED 11/77)

Unclassified
CLASSIFICATION

Unclassified

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February-00

APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: 313000 SUBMARINE COMMUNICATIONS

SUBHEAD NO.: 52L0

COST CODE	ITEM/MANUFACTURER/ PROCUREMENTY YEAR	FISCAL YEAR	CARRY OVER	FISCAL YEAR 02												FISCAL YEAR 03												FISCAL YEAR 04												LATER
				01			CALENDAR YEAR 02											CALENDAR YEAR 02											CALENDAR YEAR 03											CALENDAR YEAR 04											
				OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
L0027	BASEBAND SWITCH	99																																				
		00																																				
		01																																				
L0078	TFDS/DPC	99																																				
		00																																				
		01																																				
L0080	OE-538/BRC	99																																				
		00																																				
		01	9			2	2	2	2	1																													

MANUFACTURER'S NAME & LOCATION	PRODUCTION SCHEDULE MINIMUM SUST.	1 & 5	MAX.	REACHED D+

PROCUREMENT LEAD TIME	ADMIN LEAD TIME PRIOR 30-Sep	ADMIN LEAD TIME AFTER 30-Sep	MANUFACTURING TIME	TOTAL AFTER 1 OCT
INITIAL				
REORDER				

REMARKS

NAVMAT FORM 7110/4 (REVISED 11/77)

BUDGET ITEM JUSTIFICATION SHEET							DATE			February 2000	
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE 314700 Submarine LF/VLF VME Receiver			SUBHEAD 52LF	
	PY	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	TO COMP	TOTAL
QUANTITY											
COST (in millions)		$16.1									

NOTE: Submarine LF/VLF VME Receiver (314700) transfers to the Submarine Broadcast Support Program (310700) in FY00. Detailed budget justification material for FY99 is included in the Submarine Broadcast Support Program for budget comparability.

PROGRAM COVERAGE:

The Submarine Low Frequency/Very Low Frequency (LF/VLF) VMEbus Receiver (SLVR) (LF001) is an open architecture hybrid radio receiver system that operates in the VLF/L frequency range (14 to 160 KHz). SLVR receives tactical and strategic messages and allows submarines to receive the messages while submerged. The SLVR design includes Commercial Off The Shelf (COTS), Non-Developmental Items (NDI) and custom components. The SLVR design maximizes the simplicity of implementing future technology upgrades through the incorporation of new generation VMEbus modules and Navy Standard and other available software to the maximum extent possible. The SLVR system replaces antiquated and limited capability LF/VLF receivers on TRIDENT and SSN (688/Seawolf/New Attack) submarines and at selected shore sites. It will receive U.S. and joint NATO LF/VLF tactical and strategic message traffic in support of Joint Strike, Surveillance, SEW/Intelligence, and Littoral Warfare mission areas, as well as the Strategic Deterrence mission area. SLVR P3I to be implemented includes noise reduction processing which increases the effectiveness of SLVR and is necessary to maintain capability with a reduced shore transmit infrastructure.

JUSTIFICATION OF BUDGET YEAR REQUIREMENTS:

SLVR (LF001) is a Mission Critical piece of C3I equipment onboard submarines and procurements are planned through FY01 to change out all the legacy shipboard systems. It replaces 20 - 30 year old technology limited VLF receiver systems and provides flexibility for change in addition to reductions in space and weight. This approach will modernize the existing systems to a standard design and eliminates the need for supporting numerous configurations of LF/VLF receiver systems, thus minimizing total cost of ownership/maintenance cost to the Fleet. To be successful the commercial components must be procured during the brief period of FY98 through FY01 to ensure a single generation of COTS is used for SLVR.

BUDGET ITEM JUSTIFICATION SHEET								DATE		February 2000
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						P-1 ITEM NOMENCLATURE SATCOM Ship Terminals (Space) 321000			SUBHEAD 52NN	
	PY	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY										
COST (in millions)	$678.9	$140.8	$216.5							

Note: SATCOM Ship Terminals transfers to the SATCOM Systems budget (BLI 3215) in FY 01. Detail budget justification material for PY through FY00 is included in the SATCOM Systems budget (BLI 3215) for budget comparability.

PROGRAM COVERAGE: The Satellite Communications (SATCOM) Ship Terminals P-1 line provides funds for procurement of shipboard terminal equipment for ship-to-ship, ship-to-shore and ship-to-aircraft tactical communications via earth orbiting relay satellites in the ultra high frequency (UHF), super high frequency (SHF), and extremely high frequency (EHF) bands. This includes radio frequency (RF) equipment and baseband equipment assembled and grouped into systems and subsystems structured to address specific naval communications requirements. These systems provide processors and peripheral equipment that control the RF links for message traffic, direct data transfer and secure voice communications. They are selected and oriented by communications traffic levels, types of communications and operational missions. These procurements are scheduled to meet the satellite communications requirements established by the Chief of Naval Operations (CNO) in the Fleet Communications Planning and Programming documents. These programs are part of the Navy Satellite Communications Program (Navy SATCOM) to provide a communications architecture that will provide seamless, rapid and reliable switching and transfer of large volumes of information (voice, video, data or imagery).

JUSTIFICATION OF BUDGET YEAR REQUIREMENTS:

MINI-DAMA: Demand Assigned Multiple Access (DAMA) quadruples the UHF satellite channel capacity through multiplexing, thus providing adequate satellite access to meet the present user requirements without increasing the number of satellites in the constellation. The shipboard DAMA system consists of multiplexers, control monitor groups, and radios. Equipment will be installed on all SATCOM equipped ships during regular overhaul, restricted availability and by alteration installation teams (AIT). Mini-DAMA is the second phase of the UHF DAMA program. It provides a miniaturized version of the TD-1271B/U as well as incorporating UHF SATCOM and Line of sight (LOS) transceiver capability. Mini-DAMA also uses 5 kHz or 25 kHz satellite channels and can operate in DAMA or non-DAMA modes. The Mini-DAMA configuration was transitioned from MIL-SPEC to commercial open system architecture. The production variant will be delivered with either a one or a two channel configuration. The cost is essentially the same and references to quantities in this budget represent the number of channels, whether they are in one chassis or two. The standard submarine configuration requires two channels whether with one chassis or two.

BUDGET ITEM JUSTIFICATION SHEET (Continuation)		DATE February 2000
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	SUBHEAD
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	SATCOM Ship Terminals (Space) 321000	52NN

Special Intelligence Communications(SI COMMS): Sensitive Compartmented (SCI)Automated Digital Network System (ADNS) SCI ADNS has been designated as an evolutionary program allowing for continued growth and expansion paralleling technology changes. The SI COMMS and TACINTEL programs were combined into the SI COMMS architecture to replace the outdated TACINTEL system developed in the early 1970s. It provides the mechanism for phased implementation of both planned improvements and those which surface through advancing technology. SCI ADNS provides for the real-time exchange of SCI COMMS data to Afloat operational commanders. The cornerstone of this program is the versatility and growth potential of the processing and networking equipment which will provide the network centric communications for the SI community. The premise of using Commercial off-the-shelf (COTS), Government off-the-shelf (GOTS), non developmental items (NDI) and existing systems to meet the requirements for Special Intelligence Communications will continue to be followed. To realize the ADNS architecture, FY00 and FY01 funds will procure the SCI ADNS equipment necessary to implement the IT-21 architecture to provide SI Communications to the Fleet. Impact of no ship SCI COMMS is that the ability to detect, identify and prosecute hostile threats and provide warnings of grave danger to U.S. interests will be lost.

5/25 KHz SATCOM: Numberous pieces of SATCOM terminal equipment are required to satisfy special communications needs. This line includes procurement of off-the-shlef non-developmental items (NDI) for replacement of obsolete satellite communications terminals and baseband equipment. These items meet the Joint Chief of Staff (JCS) MANDATE (CJCSI 6250.01) for fleet, DOD and allied interoperability. Current implementation of this requirement is being satisfied using the MD-1324A modem, which will be replaced with Digital Modular Radio (DMR). FY00 and FY01 funds continue the procurement of the COTS/NDI DMR as the main replacement for the non-JCS compliant AN/WSC-3 transceivers and TD-1271 multiplexer modems.

EHF TERMINALS: This program provides for the acquisition of the Navy's EHF Satellite Communications Program (NESP) terminals in four semi-concurrent phases. Phase I of the NESP program provides Low Data Rate (LDR) jam resistant, low probability of intercept EHF SATCOM terminals for submarines, surface ships, and shore stations in the electromagnetic threat environment projected into the next decade. This requirement is contained in the NESP NDCP dated Apr 89 and the JROC validated Milstar ORD of Jun 92. There is a requirement to procure a total of 280 operational ship and sub terminals (OPN and SCN), plus five life cycle support systems already bought. This requirement was recently updated per the CNO ltr, Ser N631/8U556125 dated 11 Jun 98.

Phase II of the NESP program procures Navy EHF Communications Controllers (NECCs), as part of the ADNS strategy to provide for the exchange of computer-to-computer tactical communications over the survivable EHF satellite links. NECC provides for network management; multiplexing and channel sharing; resource management; communications management and planning; network control and monitoring; and communications protocols such as circuit switching and packet switching. NECC requirements are outlined in the NESP NDCP dated Apr 89 and must be fully fielded with deploying battle groups and shore sites to support tactical information exchange over EHF SATCOM.

BUDGET ITEM JUSTIFICATION SHEET (Continuation)	DATE	February 2000

APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE		SUBHEAD
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	SATCOM Ship Terminals (Space)	321000	52NN

Phase III of the NESP program provides for the procurement of Full Milstar LDR Operational Capabilities (FMLOC). FMLOC efforts include Agile Beam Management (ABM), Over-the-Air-Rekey (OTAR), and In-Band Control (IBC) capabilities required by the JROC validated Milstar ORD. Additionally, the Processor Upgrade Program (PUP) must be implemented to support the terminal throughput and memory requirements of the Phase III capabilities. All of these Phase III efforts will provide essential EHF operational communications capabilities with the current Milstar satellites. Similarly, IBCs will provide interoperable voice communications on all EHF satellites (Milstar, UHF Follow-On (UFO), and FLTSAT EHF Package (FEP)). Phase III also includes procurement of Interim Polar modification kits. An EHF polar communications capability is available using an EHF package on a classified host in the Molniya orbit. To use this polar capability, terminals will require minor modifications. In addition, shore gateways are necessary to provide connectivity from the Interim Polar satellite to other EHF satellite constellations.

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 appliqués will be procured and retrofitted into existing LDR terminals and the balance of the requirements will be procured as part of the Follow-On Terminal contract award of 20 Mar 98. Follow-on terminals will also have Phase III FMLOC capabilities incorporated into their baseline. The requirement for MDR is outlined in the JROC validated Milstar ORD and must be fielded by FY 99 in order to support the launch schedule of the first Milstar II satellite. By OPNAV paper, Ser N631D/703-693-0024 dated 16 September, the Program Office was directed to accelerate the MDR upgrade program to meet fleet needs. Prior to receiving the MDR appliqué, existing NESP terminals must have Phase III upgrades due to the processing throughput and memory requirements of MDR.

SHF SYSTEMS: The Navy has been expanding its use of SHF for communications in support of Navy Tactical and Joint Task Forge (JTF) Operating Forces Afloat through a phased implementation plan. In FY00 and FY01, the AN/WSC-6(V)2 and AN/WSC-6(V)4 are being modified to a standard AN/WSC-6(V)5 configuration to provide dual RG circuit and current technology controller capabilities to flag capable platforms and large combatants. The ultimate goal is to continue expanding the SHF SATCOM capability to other combatants, combat logistics force ships, and the mine countermeasures support ship, through a combination of modifications to existing production SATCOM terminals and provisioning of additional AN/WSC-6(V) terminal variants matched in capability to individual ship mission requirements. Also procured is ancillary hardware for the Automated Digital Multiplexing System (ADMS). Under the submarine high data rate (SUB HDR) program, the Navy is exploring the technical feasibility of DSCS support of wideband capabilities for attack submarines.

BUDGET ITEM JUSTIFICATION SHEET (Continuation)		DATE February 2000
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	SUBHEAD
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	SATCOM Ship Terminals (Space) 321000	52NN

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 Military Satellite Communications (MILSATCOM) systems. This relieves the congestion on military tactical satellite communications systems while enhancing the overall Navy tactical communications capacity and reducing the competition with tactical data on the limited tactical satellite assets. The COMMERSAT program will use commercial off-the-shelf (COTS)/non-developmental item (NDI) equipment, software, and service with minimal adaptation for the naval environment. Variants of the commercially available INMARSAT terminals will be procured in the next few years. The various types are required to satisfy different requirements on flagships, aircraft carriers, amphib ships, combatants and auxiliary ships. The COMMERSAT Operational Requirements Document (ORD) mandates INMARSAT "M" terminals on Mine Counter-Measures ships. There will be INMARSAT "B" upgrades, and dual INMARSAT B upgrades to modify the earlier "A" INMARSAT terminals. FY00 and FY01 funds will continue procurement o
f C and Ku wide band SATCOM terminals for carriers and large deck amphibs components, supporting ancillary hardware related to Automated Digital Multiplexing System (ADMS) and INMARSAT terminals and high speed data (HSD) kits for network centric warfare on combatants.

Global Broadcast Service (GBS): This is the Navy ship portion of the joint program with the Air Force as Executive Service. The GBS will augment other Military Satellite Communications (MILSATCOM) systems and provide a continuous, high speed, one way information flow of high volume data to units ashore, afloat or special operations. GBS will support routine operations, training and military exercises, special activities, crises, situational awareness, weapons targeting, reconnaissance and the transition to and conduct of opposed operations short of nuclear war. GBS will provide the capability of quickly disseminating large information products to various joint and small combat and combat support elements. FY00 and FY01 funds are a continuation to procure receiving equipment in various configurations customized to each type of ship for Phase II of the GBS program in support of UHF follow-on satellite launches numbers 8, 9, and 10. For ship and submarine procurements, antennas and ancillary equipment such as Asynchronous Transfer Mode (ATM) in-line encryptors will be procured through a SPAWAR contract. Shipboard and receive broadcast management equipment will be procured through an Air Force contract. An Operational Requirements Document (ORD) was signed on 30 April 97.

INSTALLATION OF EQUIPMENT: This sub-line provides funding to shipyards and alteration installation teams (AIT) at Navy field activities for installation of equipment procured for ships and submarines.

EXPLANATION OF PROGRAM CHANGE: N/A

BUDGET ITEM JUSTIFICATION SHEET								DATE	February 2000
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						P-1 ITEM NOMENCLATURE Satellite Communications Systems 321500		SUBHEAD 52NR	
	PY	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY										
COST (in millions)		$140.8	$216.5	$252.7	$260.0	$191.1	$90.5	$33.0	Continuing	Continuing

PROGRAM COVERAGE: This budget line is a consolidation of the SATCOM terminal procurement lines, SATCOM Ship Terminals (BLI 3210) and SATCOM Shore Terminals (BLI 3220). The Satellite Communications (SATCOM) Systems 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 frequenc (UHF), super high frequency (SHF), and extremely high frequency (EHF) bands. This includes radio frequency (RF) equipment and baseband equipment assembled and grouped into systems and subsystems structured to address specific naval communications requirements. These systems provide processors and peripheral equipment that control the RF links for message traffic, direct data transfer and secure voice communications. They are selected and oriented by communications traffic levels, types of communications and operational missions. These procurements are scheduled to meet the satellite communications requirements established by the Chief of Naval Operations (CNO) in the Fleet Communications Planning and Programming documents. These programs are part of the Navy Satellite Communications Program (Navy SATCOM) to provide a communications architecture that will provide seamless, rapid and reliable switching and transfer of large volumes of information (voice, video, data or imagery).

JUSTIFICATION OF BUDGET YEAR REQUIREMENTS:

MINI-DAMA: Demand Assigned Multiple Access (DAMA) quadruples the UHF satellite channel capacity through multiplexing, thus providing adequate satellite access to meet the present user requirements without increasing the number of satellites in the constellation. The shipboard DAMA system consists of multiplexers, control monitor groups, and radios. Equipment will be installed on all SATCOM equipped ships during regular overhaul, restricted availability and by alteration installation teams (AIT). Mini-DAMA is the second phase of the UHF DAMA program. It provides a miniaturized version of the TD-1271B/U as well as incorporating UHF SATCOM and Line of sight (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 submarin configuration requires two channels whether with one chassis or two. FY00 program procures and integrates Mini Dama Field Change Upgrade Kits aboard all SSN's and Minesweepers and selected DDG's and aircraft. FY00 program procures and integrates Mini Dama Field Change Upgrade Kits aboard all SSN's and Minesweepers and selected DDG's and aircraft.

BUDGET ITEM JUSTIFICATION SHEET (Continuation)		DATE February 2000
APPROPRIATION/BUDGET ACTIVITY	**P-1 ITEM NOMENCLATURE**	**SUBHEAD**
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	Satellite Communications Systems 321500	52NR

Special Intelligence Communications(SI COMMS): Sensitive Compartmented (SCI)Automated Digital Network System (ADNS) SCI ADNS has been designated as an evolutionary program allowing for continued growth and expansion paralleling technology changes. The SI COMMS and TACINTEL programs were combined into the SI COMMS architecture to replace the outdated TACINTEL system developed in the early 1970s. It provides the mechanism for phased implementation of both planned improvements and those which surface through advancing technology. SCI ADNS provides for the real-time exchange of SCI COMMS data to Afloat operational commanders. The cornerstone of this program is the versatility and growth potential of the processing and networking equipment which will provide the network centric communications for the SI community. The premise of using Commercial off-the-shelf (COTS), Government off-the-shelf (GOTS), non developmental items (NDI) and existing systems to meet the requirements for Special Intelligence Communications will continue to be followed. To realize the ADNS architecture, FY00 and FY01 funds will procure the SCI ADNS equipment necessary to implement the IT-21 architecture to provide SI Communications to the Fleet. Impact of no ship SCI COMMS is that the ability to detect, identify and prosecute hostile threats and provide warnings of grave danger to U.S. interests will be lost.

The shore terminal interface for Sensitive Compartmented Information (SCI)/Automated Digital Network System (ADNS)/Tactical Intelligence Information Exchange (TACINTEL II+) will use commercial off-the-shelf (COTS), Government off-the-shelf (GOTS), Non-developmental items (NDI) and existing systems to meet the requirements for SI COMMS. The SI COMMS and TACINTEL programs were combined into the SI COMMS architecture to replace the outdated TACINTEL system developed in the early 1970s. The equipment also began the realization of the ADNS architecture. FY00 funds will continue to procure the SCI ADNS equipment necessary to implement the IT-21 architecture to provide SI COMMS to the Fleet. SCI ADNS provides for a real-time exchange of Tactical SCI COMMS to afloat operational commanders. Impact of no shore SCI ADNS is that ships cannot attain their network services.

5/25 KHz SATCOM: Numerous pieces of SATCOM terminal equipment are required to satisfy special communications needs. This line includes procurement of off-the-shlef non-developmental items (NDI) for replacement of obsolete satellite communications terminals and baseband equipment. These items meet the Joint Chief of Staff (JCS) MANDATE (CJCSI 6250.01) for fleet, DOD and allied interoperability. Current implementation of this requirement is being satisfied using the MD-1324A modem, which will be replaced with Digital Modular Radio (DMR). FY00 funds continue the procurement of the COTS/NDI DMR as the main replacement for the non-JCS compliant AN/WSC-3 transceivers and TD-1271 multiplexer modems.

SHF SYSTEMS: The Navy has been expanding its use of SHF for communications in support of Navy Tactical and Joint Task Forge (JTF) Operating Forces Afloat through a phased implementation plan. In FY00 and FY01, the AN/WSC-6(V)2 and AN/WSC-6(V)4 are being modified to a standard AN/WSC-6(V)5 configuration to provide dual RG circuit and current technology controller capabilities to flag capable platforms and large combatants. The ultimate goal is to continue expanding the SHF SATCOM capability to other combatants, combat logistics force ships, and the mine countermeasures support ship, through a combination of modifications to existing production SATCOM terminals and provisioning of additional AN/WSC-6(V) terminal variants matched in capability to individual ship mission requirements. Also procured is ancillary hardware for the Automated Digital Multiplexing System (ADMS). Under the submarine high data rate (SUB HDR) program, the Navy is exploring the technical feasibility of DSCS support of wideband capabilities for attack submarines.

BUDGET ITEM JUSTIFICATION SHEET (Continuation)	DATE	February 2000

APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE		SUBHEAD
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	Satellite Communications Systems	321500	52NR

This line also provides SHF shore based equipment for high data rate communications with Fleet units via the Defense Satellite Communications Systems (DSCS). Shore based terminals have an operational requirement to support joint, theater and Navy unique command, control, communications, support and intelligence circuits for voice, data, video and imagery to the extent they are required on SHF platforms. FY01 - FY05 funds procure and install N-STEP/TELEPORT modems to provide shore side compatibility with SHF equipped ships and to support fleet and added Battle Group capacity requirements. Also procured is ancillary hardware for the Automated Digital Multiplexing System (ADMS). NDCP dated Apr 89 and must be fully fielded with deploying battle groups and shore sites to support tactical information exchange over EHF SATCOM.

EHF TERMINALS: This program provides for the acquisition of the Navy's EHF Satellite Communications Program (NESP) terminals in four semi-concurrent phases. Phase I of the NESP program provides Low Data Rate (LDR) jam resistant, low probability of intercept EHF SATCOM terminals for submarines, surface ships, and shore stations in the electromagnetic threat environment projected into the next decade. This requirement is contained in the NESP NDCP dated Apr 89 and the JROC validated Milstar ORD of Jun 92. There is a requirement to procure a total of 280 operational ship and sub terminals (OPN and SCN), plus five life cycle support systems already bought. This requirement was recently updated per the CNO ltr, Ser N631/8U556125 dated 11 Jun 98.

Phase II of the NESP program procures Navy EHF Communications Controllers (NECCs), as part of the ADNS strategy to provide for the exchange of computer-to-computer tactical communications over the survivable EHF satellite links. NECC provides for network management; multiplexing and channel sharing; resource management; communications management and planning; network control and monitoring; and communications protocols such as circuit switching and packet switching. NECC requirements are outlined in the NESP NDCP dated Apr 89 and must be fully fielded with deploying battle groups and shore sites to support tactical information exchange over EHF SATCOM.

Phase III of the NESP program provides for the procurement of Full Milstar LDR Operational Capabilities (FMLOC). FMLOC efforts include Agile Beam Management (ABM), Over-the-Air-Rekey (OTAR), and In-Band Control (IBC) capabilities required by the JROC validated Milstar ORD. Additionally, the Processor Upgrade Program (PUP) must be implemented to support the terminal throughput and memory requirements of the Phase III capabilities. All of these Phase III efforts will provide essential EHF operational communications capabilities with the current Milstar satellites. Similarly, IBCs will provide interoperable voice communications on all EHF satellites (Milstar, UHF Follow-On (UFO), and FLTSAT EHF Package (FEP)). Phase III also includes procurement of Interim Polar modification kits. An EHF polar communications capability is available using an EHF package on a classified host in the Molniya orbit. To use this polar capability, terminals will require minor modifications. In addition, shore gateways are necessary to provide connectivity from the Interim Polar satellite to other EHF satellite constellations.

BUDGET ITEM JUSTIFICATION SHEET (Continuation)		DATE February 2000
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	SUBHEAD
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	Satellite Communications Systems 321500	52NR

EHF TERMINALS (cont.): 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 appliqués will be procured and retrofitted into existing LDR terminals and the balance of the requirements will be procured as part of the Follow-On Terminal contract award of 20 Mar 98. Follow-on terminals will also have Phase III FMLOC capabilities incorporated into their baseline. The requirement for MDR is outlined in the JROC validated Milstar ORD. By OPNAV paper, Ser N631D/703-693-0024 dated 16 September, the Program Office was directed to accelerate the MDR upgrade program to meet fleet needs. Prior to receiving the MDR appliqué, existing NESP terminals must have Phase III upgrades due to the processing throughput and memory requirements of MDR.

The Follow-on Terminal (FOT) will incorporate the Low Data Rate (LDR)/Medium Data Rate (MDR) capabilities into a consolidated terminal that provides the same EHF functionality as an LDR terminal with an MDR applique. The FOT does not change the LDR/MDR performance envelope. The first article FOT production unit was procured in FY98 and delivered to the Government in August 1999 as noted in the President's Budget of February 1999. An acquisition decision was made in January 2000 to procure the remaining terminal requirement with FOT.

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 Military Satellite Communications (MILSATCOM) systems. This relieves the congestion on military tactical satellite communications systems while enhancing the overall Navy tactical communications capacity and reducing the competition with tactical data on the limited tactical satellite assets. The COMMERSAT program will use commercial off-the-shelf (COTS)/non-developmental item (NDI) equipment, software, and service with minimal adaptation for the naval environment. Variants of the commercially available INMARSAT terminals will be procured in the next few years. The various types are required to satisfy different requirements on flagships, aircraft carriers, amphib ships, combatants and auxiliary ships. The COMMERSAT Operational Requirements Document (ORD) mandates INMARSAT "M" terminals on Mine Counter-Measures ships. There will be INMARSAT "B" upgrades, and dual INMARSAT B upgrades to modify the earlier "A" INMARSAT terminals. FY00 and FY01 funds will continue procurement of C and Ku wide band SATCOM terminals for carriers and large deck amphibs components, supporting ancillary hardware related to Automated Digital Multiplexing System (ADMS) and INMARSAT terminals and high speed data (HSD) kits for network centric warfare on combatants.

Global Broadcast Service (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. FY00 and FY01 funds are a continuation to procure receiving equipment in various configurations customized to each type of ship for Phase II of the GBS program in support of UHF follow-on satellite launches numbers 8, 9, and 10. For ship and submarine procurements, antennas and ancillary equipment such as Asynchronous Transfer Mode (ATM) in-line encryptors will be procured through a SPAWAR contract. Shipboard receive suites broadcast management equipment will be procured through an Air Force contract. FY00 and FY01 continues procurement of shore site terminals at NCTAMS/MOC/MAC/MICFAC, CINC, SPAWAR and other Navy locations. In the shore GBS terminal, components will be procured from the GBS Joint Program Office (Air Force) contract and include the GBS antenna and receiver, and transportable terminals. A Mission Need Statement for GBS was signed, 3 AUG 1995, and an Operational Requirements Document (ORD) was signed on 30 April 97.

BUDGET ITEM JUSTIFICATION SHEET (Continuation)		DATE February 2000
APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE	SUBHEAD
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	Satellite Communications Systems 321500	52NR

JMINI Control System: The Joint ultra high frequency (UHF) Military Satellite Communications Network Integrated Control System (JMINI) is a joint interest program with the Navy designated as the lead service as directed by the Military Communications Electronics Board (MCEB). The JMINI Control System will provide dynamic centralized control of joint 5-kHz and 25-kHz UHF military satellite communications (MILSATCOM) voice and data resources (channels and Time Division Multiple Access (TDMA) time slots) via a globally integrated system of four control stations to be located at each of the three Naval Computer and Telecommunications Area Master Station (NCTAMS) sites plus Naval Computer and Telecommunications Station (NCTS) Guam. The globally integrated system consists of two major subsystems. The first subsystem provides communications resource planning and management via secure Wide Area Network (WAN) connections between the control stations and remote users and is known as the Network Management System (NMS). A total of 14 NMS units are required, one at each control station plus ten remote units to be installed at ORD-defined locations. The second subsystem provides the RF connectivity (modems, radios, antennas) between the NMS and the UHF MILSATCOM user terminals worldwide and is known as the Channel Controller. There are 156 channel controllers required per control station. Funds in FY99 begin procurement of the Digital Modular Radio (DMR), which serves as the JMINI Control System Channel Controller and procures the first two control station NMS units. Funds in FY00 continue procurement of the DMR channel controller hardware and the other two control station NMS units and begin installation of the system. Funds in FY01 continue procurement and installation of the channel controller hardware for the four control station plus begin procurement of the remote NMS units.

COST ANALYSIS										DATE February 2000			
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT			P-1 ITEM NOMENCLATURE Satellite Communications Systems 321500							SUBHEAD 52NR			
			TOTAL COST IN THOUSANDS OF DOLLARS										
				PY		FY 1999		FY 2000			FY 2001		
COST CODE	ELEMENT OF COST	ID CODE	QTY	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
NN101	**MINI DAMA**	**A**			14	363.57	**5,090**						
	MINI DAMA Field Change Upgrade Kits (FY00 Only)							150	66.67	**10,000**			
NN103	**SCI ADNS**			**1,286**			**2,081**			**2,851**			**2,836**
NN103	SCI ADNS Build One/Carry On Build One	A	15	1,286	25	67.04	1,676	2	50	100			
NN103	SCI ADNS Build Two & Three /Carry On Build Two	B					.	23	107	2,461	20	119.3	2,386
NN103	SCI ADNS Carry On TAC II+	A											
NP103	SI-COMMS - SCI ADNS Build 2 and Build 3 (FY99/00)	A			4	101.25	405	4	72.5	290			
NN103	SI-COMMS - SCI ADNS Build 2 and Build 3 (FY01)	A									6	75	450
NN105	**5/25 KHz SATCOM**						**14,724**			**22,281**			**0**
NN105	5/25 KHz SATCOM--GFCP	A											
NN105	5/25 KHz SATCOM--AN/USC-42	A											
NN105	5/25 KHz SATCOM--AN/PSC-5 EMUT (Spit Fire)	A			14	84.5	1,183						
NN105	5/25 KHz SATCOM --AN/WSC-3 Mod Kits	A											
NN105	5/25 KHz SATCOM--OE-82 Mod Kits	A			14	11.86	166	16	11.81	189			
NN105	5/25 KHz SATCOM--UHF Modems	A			57	65.33	3,724						
NN105	5/25 KHz SATCOM--DMR	B			56	172.34	9,651	172	128.44	22,092			
NN106	**SHF Terminals--AN/WSC-6(V)5**			**31,555**			**8,608**			**26,334**			**37,030**
NN106	SHF Terminals--AN/WSC-6(V)5 Mod kits - Ship	A	18	23,100	2	1,238.5	2,477	4	1,320	5,280	12	1,097	13,164
NP108	SHF Terminals --AN/WSC-6(V)5 Mod Kit - Shore (FY99/00)	A			1	698	698	1	698	698			
NN106	SHF Terminals--7 Ft Antenna - Ship	A	7	2,000	4	260	1,040						
NN106	SHF Terminals--AN/WSC-6(V)7 - Ship	A	4	6,200	2	1,138	2,276	15	1,200	18,000	10	1,050	10,500
NP108	SHF Terminals --AN/WSC-6(V)7 - Shore	A	1	255	1	973	973	1	996	996			
NN106	SHF Terminals--AN/WSC-6(V)X - Ship	B	0	0				1	1,360	1,360	11	1,190	13,090
NP108	SHF Terminals --Shore Modems - Shore (FY99/00)	A			44	26	1,144						
NN106	SHF Terminals --Shore Modems - Shore (FY01)	A									18	15.33	276
NN107	**EHF Terminals--AN/USC-38(V)**			**480,439**			**41,671**			**90,828**			**63,161**
NN107	EHF Terminals--AN/USC-38(V)/FOT - Ship	A	194	373,004	Various		9,609	60	956.88	57,413	50	921.78	46,089
NP109	EHF Terminals --AN/USC-38(V)3 - Shore (FY99/00)	A	34	78,800	13	362.31	4,710	14	1,341	18,774			
NN107	EHF Terminals --AN/USC-38(V)3 - Shore (FY01)	A									4	1,847.25	7,389
NN107	EHF Terminals--NECC - Ship	A	68	9,321	35	125.4	4,389	43	124.35	5,347	62	104.03	6,450
NP109	EHF Terminals --NECC - Shore (FY99/00)	A	12	1,231	7	124.86	874	9	124.00	1,116			
NN107	EHF Terminals --NECC - Shore (FY01)	A									19	104.16	1,979
NN107	EHF Terminals--MDR - Ship	A	30	11,622	31	483.23	14,980			6,070			1,001
NP109	EHF Terminals --MDR Appliques - Shore (FY99/00)	A	2	758	5	1,421.8	7,109			2,108			
NN107	EHF Terminals --MDR Appliques - Shore (FY01)	A											253
NP109	EHF Terminals --Interim Polar Gateway - Shore	A	2	5,703									

Remarks:

This program now includes OPN P-1 Line Item SATCOM Shore Terminals (BLI 3220) beginning in FY01. FY99 & FY00 detail information is provided for budget comparability.

NN103 SCI ADNS unit cost is based on average cost. Variances are due to the diverse type of ship system configurations.

NP103 SCI ADNS - Unit cost is based on average cost. Variances are due to the diverse type of shore system configurations.

NN106 C/X - FY00 unit cost is higher than the following years due to award fees/non-recurring expenses (NRE).

NN106 C/X: Due to DT/OT on FY00 terminal, additional terminals will not be procured until full rate of production is approved.

NP108 SHF Terminals - FY98 requirement of $255K was provided to procure one radome for the AN/GSC-52 antenna at Navy Site 10. $455K is provided for installation of SHF DSCS terminal at Navy Site 10.

NP108 SHF Terminals - FY99 and FY01 unit costs vary due to type of equipment. FY99 items are Kosovo FCC-100s; FY01 and out purchases N-STEP modems.

NP108 SHF Terminals - AN/WSC-6(V)7 PY cost is for a singular antenna radome procurement.

NP108 SHF Terminals - Modems for FY01 - FY04 are provided by a PR-01 plus-up. No funding is available in FY00.

NN107 EHF Terminals -AN/USC-38(V) FY99 funds are provided for Follow-On Terminal (FOT) Technical Data Packages, Remote Terminal Control Units (3 ea), Full MILSTAR Low Data Rate Operational Capabilities (FMLOC) (23 Processor Upgrades), and Production Support.

NP109 EHF Terminals - AN/USC-38(V) FY99 - FY99 unit cost reflects procurement of Single Channel Anti-Jam Man Portables (SCAMPS) for SPECWAR use.

NN107/NP109 EHF Terminals - MDR FY00 funds provide MDR satellite simulators, maintainer and operator trainer, field change kits, and ancillary equipment.

NN107/NP109 EHF Terminals - MDR FY01 funds provide field change kits, and ancillary equipment.

NN107/NP109 EHF Terminals - NECC Unit cost includes addition of MDR capability beginning in FY99.

NN107/NP109 EHF Terminals - The Follow-on Terminal (FOT) will incorporate the Low Data Rate (LDR)/Medium Data Rate (MDR) capabilities into a consolidated terminal that provides the same EHF functionality as an LDR terminal with an MDR appliqu
The FOT does not change the LDR/MDR performance envelope. The first article FOT production unit was procured in FY98 and delivered to the Government in August 1999.

DD FORM 2446, JUN 86

COST ANALYSIS											**DATE** February 2000		
APPROPRIATION ACTIVITY					**P-1 ITEM NOMENCLATURE**						**SUBHEAD**		
OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT					Satellite Communications Systems 321500						52NR		
			TOTAL COST IN THOUSANDS OF DOLLARS										
				PY		**FY 1999**		**FY 2000**			**FY 2001**		
COST CODE	**ELEMENT OF COST**	**ID CODE**	**QTY**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**
NN112	**Commercial Satellite**			**34,196**			**14,467**			**13,540**			**4,705**
NN112	Comm. Satellite--INMARSAT M	A	17	400	4	33	132	8	33.0	264			
NN112	Comm. Satellite--INMARSAT B	A	46	2,800	58	49.16	2,851	53	49.43	2,620	15	51	765
NN112	Comm. Satellite--C band/CWSP	B	13	28,300	9	1,095.11	9,856	11	817.36	8,991	4	900	3,600
NN112	Comm. Satellite--INMARSAT B HSD KITS	A	29	2,696	52	31.3	1,628	51	32.65	1,665	10	34	340
NN117	**Global Broadcast System (GBS)**			**12,380**			**11,367**			**9,586**			**0**
NN117	Global Broadcast System-- Single (Receive Suite)	B	4	9,300	6	615.17	3,691	5	584.4	2,922			
NN117	Global Broadcast System--Dual (Receive Suite)	B			4	1,064	4,256	7	623.71	4,366			
NN117	Global Broadcast System--Subs (Receive Suite)	B			6	361.67	2,170	4	369.5	1,478			
NP117	Global Broadcast Service - Shore (FY99/00)	B	4	3,080	7	178.57	1,250	5	164	820			
NN117	Global Broadcast Service - Shore (FY01)	B											
NN118	**JMINI Control System**						**44,003**			**27,045**			**1,505**
NP118	JMINI Control System - NMS (FY99/00)	A			2	6,166	12,332	4	3,892.75	15,571			
NN118	JMINI Control System - NMS (FY01)	A									1	1,505	1,505
NP118	JMINI Control System - DMR (FY99/00)	B			260	121.81	31,671	100	114.74	11,474			
NN118	JMINI Control System - DMR (FY01)	B											

Remarks:

NN112 C-Band - Unit cost lower in FY00 due to upgrades

NN117 GBS - Unit cost varies due to quantity discounts afforded by other Services buys per year.

NN117 GBS - FY98 unit costs reflect procurement of 4 Single Receive Suites; as well as 2 Single Antenna Systems, 8 Dual Antenna Systems and Cryptologic Equipment. Additional terminal and antenna quantity buys were procured with FY98 AF RDTE (GBS JPO) funds.

NN117 GBS - FY99 procurement quantity of 8 was reduced to 7 due to a more expensive ground system being bought.

NN117 GBS - FY99 unit costs reflect 22 upgrade kits ($1.174M) which were procured in that year.

NN117 GBS - FY00 incurred cost to modify antenna system to be RCS compliant.

NN117 GBS - Estimated full rate production is 4/01 as a result of FOT&E slip..

DD FORM 2446, JUN 86

COST ANALYSIS | **DATE** February 2000

APPROPRIATION ACTIVITY: OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT
P-1 ITEM NOMENCLATURE: Satellite Communications Systems 321500
SUBHEAD: 52NR

TOTAL COST IN THOUSANDS OF DOLLARS

COST CODE	ELEMENT OF COST	ID CODE	PY QTY	PY TOTAL COST	FY 1999 QTY	FY 1999 UNIT COST	FY 1999 TOTAL COST	FY 2000 QTY	FY 2000 UNIT COST	FY 2000 TOTAL COST	FY 2001 QTY	FY 2001 UNIT COST	FY 2001 TOTAL COST
NN555	**Production Support**									**11,684**			**10,153**
NN555	Production Support - SATCOM Ship									9,560			10,153
NP555	Production Support - SATCOM Shore									2,124			
NN777	**INSTALLATION**			**253,280**			**63,863**			**67,713**			**133,305**
NN777	**FMP Installation**			**210,390**			**59,967**			**56,340**			**133,305**
NN777	Install - SATCOM Ship			210,310			57,091			49,740			126,713
NN777	DSA - SATCOM Ship			80			2,876			6,600			6,592
NP776	Non-FMP Installation - SATCOM SHORE			42,890			3,896			11,373			
	TOTAL						**205,874**			**281,862**			**252,695**
	TOTAL BLI 3210						**140,812**			**216,518**			
	TOTAL BLI 3220						**65,062**			**65,344**			
	TOTAL BLI 3215												**252,695**

Remarks:

DD FORM 2446, JUN 86

PROCUREMENT HISTORY AND PLANNING

A. DATE: February 2000

B. APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

C. P-1 ITEM NOMENCLATURE: Satellite Communications Systems 321500

SUBHEAD: 52NR

COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
NN101	MINI DAMA	99	TITAN, San Diego, CA	C/FPI (OPT)	SPAWAR		Jul-99	Jul-00	14	363.57	YES	N/A
	MINI DAMA Field Change Upgrade Kits (FY00 Only)	00	TITAN, San Diego, CA	C/FPI (OPT)	SPAWAR	Jan-00	Mar-00	Jan-01	150	66.67	YES	N/A
NN103	SCI ADNS Build One/Carry On Build One	99	SSC San Diego, CA	WX	SPAWAR		Dec-98	Mar-99	25	67.04	YES	N/A
		00	SSC San Diego, CA	WX	SPAWAR		Dec-99	Mar-00	2	50	YES	N/A
NN103	SCI ADNS Build Two & Three /Carry On Build Two											
		00	SSC San Diego, CA	WX	SPAWAR		Dec-99	Mar-00	23	107	YES	N/A
		01	SSC San Diego, CA	WX	SPAWAR		Dec-00	Mar-01	20	119.30	YES	N/A
NP103	SI-COMMS - SCI ADNS Build 2 and Build 3 (FY99/00)	99	SSC, San Diego, CA	WX	SPAWAR		Dec-98	Mar-99	4	101.25		
		00	SSC, San Diego, CA	WX	SPAWAR		Dec-99	Mar-00	4	72.5		
NN103	SI-COMMS - SCI ADNS Build 2 and Build 3 (FY01)	01	SSC, San Diego, CA	WX	SPAWAR		Dec-00	Mar-01	6	75		

D. REMARKS

The FY00 MINI DAMA Program procures Field Change Upgrade Kits.

PROCUREMENT HISTORY AND PLANNING

A. DATE: February 2000

B. APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

C. P-1 ITEM NOMENCLATURE: Satellite Communications Systems 321500

SUBHEAD: 52NR

COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
NN105	5/25 KHz SATCOM--AN/PSC-5 EMUT (Spit Fire)	99	Raytheon	FP (OPT)	PM SPAWAR		Aug-99	Mar-00	14	84.5	YES	N/A
NN105	5/25 KHz SATCOM--OE-82 Mod Kits	99	SSC San Diego, CA	WX	SPAWAR		Jul-99	Dec-99	14	11.86	YES	N/A
		00	SSC San Diego, CA	WX	SPAWAR		Dec-99	May-00	16	11.81	YES	N/A
NN105	5/25 KHz SATCOM--UHF Modems	99	ViaSat, Carlsbad, CA	IDIQ (OPT)	SPAWAR		Dec-98	Jun-99	57	65.33	YES	
NN105	5/25 KHz SATCOM--DMR	99	Motorola, Phoenix, AZ	FFP/IDIQ	SPAWAR		Jan-00	Sep-00	56	172.34		
		00	Motorola, Phoenix, AZ	FFP/IDIQ	SPAWAR		Aug-00	May-01	172	128.44		

D. REMARKS

DD FORM 2446, JUN 87

PROCUREMENT HISTORY AND PLANNING

A. DATE: February 2000

B. APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

C. P-1 ITEM NOMENCLATURE: Satellite Communications Systems 321500

SUBHEAD: 52NR

COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
NN106	SHF Terminals--AN/WSC-6(V)5 Mod kits - Ship	99	SSC, SAN DIEGO, CA	CPAF	SPAWAR		Jan-99	Jan-00	2	1238.5	YES	
		00	SSC, SAN DIEGO, CA	FFP	SPAWAR		Oct-99	Oct-00	4	1320	YES	
		01	SSC, SAN DIEGO, CA	FFP(OPT)	SPAWAR		Oct-00	Oct-01	12	1097	YES	
NP108	SHF Terminals --AN/WSC-6(V)5 Mod Kit - Shore (F	99	SSC-San Diego, CA	WX	SPAWAR	Oct-98	Jan-99	Jan-00	1	698		
		00	SSC-San Diego, CA	WX	SPAWAR		Oct-99	Oct-00	1	698		
NN106	SHF Terminals--7 Ft Antenna - Ship	99	Raytheon, Boston, MA	C/FFP (OPT)	SPAWAR		Jan-99	Jul-99	4	260	YES	
NN106	SHF Terminals--AN/WSC-6(V)7 - Ship	99	Raytheon, Boston, MA	C/FFP (OPT)	SPAWAR		Jan-99	Jan-00	2	1138	YES	
		00	Raytheon, Boston, MA	C/FFP (OPT)	SPAWAR		Oct-99	Oct-00	15	1200	YES	
		01	Raytheon, Boston, MA	C/FFP (OPT)	SPAWAR		Oct-00	Oct-01	10	1050	YES	
NP108	SHF Terminals --AN/WSC-6(V)7 - Shore	99	Raytheon, Boston, MA	C/FFP	SPAWAR	Apr-97	Jan-99	Jan-00	1	973		
		00	Raytheon, Boston, MA	C/FFP	SPAWAR		Oct-99	Oct-00	1	996		
NN106	SHF Terminals--AN/WSC-6(V)X - Ship	00	TBD	C/FFP/OPT	SPAWAR	Jun-99	Feb-00	Sep-00	1	1360	NO	
		01	TBD	C/FFP/OPT	SPAWAR		Oct-00	Jul-01	11	1190	NO	
NP108	SHF Terminals --Shore Modems - Shore (FY99/00)	99	SSC-Charleston	WX	SPAWAR		Oct-98	Jul-99	44	26		
NN106	SHF Terminals --Shore Modems - Shore (FY01)	01	SSC-Charleston	WX	SPAWAR		Jan-01	Nov-01	18	15.33		

D. REMARKS

NN106 AN/WSC-6(7) - FY00-FY01 unit costs include Universal Modem Systems (UMS) units.

DD FORM 2446, JUN 87

PROCUREMENT HISTORY AND PLANNING

A. DATE February 2000

B. APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

C. P-1 ITEM NOMENCLATURE: Satellite Communications Systems 321500

SUBHEAD: 52NR

COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
NN107	EHF Terminals--AN/USC-38(V)/FOT - Ship	99	Raytheon, Marlborough, MA	C/FFP	SPAWAR	Jul-97			Various	0	YES	
		00	Raytheon, Marlborough, MA	C/FFP	SPAWAR		Jan-00	Apr-01	60	956.88	YES	
		01	Raytheon, Marlborough, MA	C/FFP	SPAWAR		Nov-00	Feb-02	50	921.78	YES	
NP109	EHF Terminals --AN/USC-38(V)3 - Shore (FY99/00)	99	Raytheon, Marlborough, MA	C/FFP	SPAWAR/Army		Sep-99	Mar-01	13	362.31	YES	
		00	Raytheon, Marlborough, MA	C/FFP	SPAWAR		Jan-00	Aug-00	14	1,341	YES	
NN107	EHF Terminals --AN/USC-38(V)3 - Shore (FY01)	01	Raytheon, Marlborough, MA	C/FFP	SPAWAR		Nov-00	Feb-02	4	1,847.25	YES	
NN107	EHF Terminals--NECC - Ship	99	AP Labs, CA	C/FFP (OPT), IDIQ	SPAWAR		Dec-98	May-99	35	125.4	YES	
		00	AP Labs, CA	C/FFP (OPT)	SPAWAR		Jan-00	Jun-00	43	124.35	YES	
		01	AP Labs, CA	C/FFP (OPT)	SPAWAR		Nov-00	Apr-01	62	104.03	YES	
NP109	EHF Terminals --NECC - Shore (FY99/00)	99	AP Labs, CA	C/FFP (OPT), IDIQ	SPAWAR		Dec-98	May-99	7	124.86	YES	
		00	AP Labs, CA	C/FFP (OPT)	SPAWAR		Jan-00	Jun-00	9	124	YES	
NN107	EHF Terminals --NECC - Shore (FY01)	01	AP Labs, CA	C/FFP (OPT)	SPAWAR		Nov-00	Apr-01	19	104.16	YES	
NN107	EHF Terminals--MDR - Ship	99	Raytheon, Marlborough, MA	SS (OPT)	SPAWAR	Oct-97	Mar-99	Aug-00	31	483.23	YES	
NP109	EHF Terminals --MDR Appliques - Shore (FY99/00)	99	Raytheon, Marlborough, MA	SS/FFP	SPAWAR		Mar-99	Aug-00	5	1,421.8	YES	

D. REMARKS

NN107/NP109 EHF Terminal - AN/USC-38(V) and MDR FY00 LDR/MDR functionality consolidated in Follow-on terminal. First procurement of this terminal was in FY98.
NP109 EHF Terminal - AN/USC-38(V) FY99 procurement of 13 Single Channel Anti-Jam Man Portables (SCAMPS).
NP109 - EHF Terminals - FY01 AN/USC-38(V)3 includes funds for Navy Automated Communications Management System (ACMS) Capability.

DD FORM 2446, JUN 87

PROCUREMENT HISTORY AND PLANNING

A. DATE: February 2000

B. APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

C. P-1 ITEM NOMENCLATURE: Satellite Communications Systems 321500

SUBHEAD: 52NR

COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
NN112	Comm. Satellite--INMARSAT M	99	Mackay Comm Edison, NJ	SS/FP	SPAWAR	N/A	Jan-99	Mar-99	4	33	YES	N/A
		00	Mackay Comm Edison, NJ	SS/FP	SPAWAR		Jan-00	Mar-00	8	33	YES	N/A
NN112	Comm. Satellite--INMARSAT B	99	Mackay Comm Edison, NJ	C/FP (OPT)	SPAWAR	Oct-95	Nov-98	Mar-99	58	49.16	YES	N/A
		00	Mackay Comm Edison, NJ	C/FP (OPT)	SPAWAR		Nov-99	Feb-00	53	49.43	YES	N/A
		01	Mackay Comm Edison, NJ	C/FP (OPT)	SPAWAR		Nov-00	Feb-01	15	51	YES	N/A
NN112	Comm. Satellite--C band/CWSP	99	Harris Corp., Melbourne FL	C/FP (OPT)	SPAWAR	Feb-98	Feb-99	Nov-99	9	1,095.11	YES	N/A
		00	Harris Corp., Melbourne FL	C/FP (OPT)	SPAWAR		Oct-99	Jun-00	11	817.36	YES	N/A
		01	Harris Corp., Melbourne FL	C/FP (OPT)	SPAWAR		Oct-00	Jul-01	4	900	YES	N/A
NN112	Comm. Satellite--INMARSAT B HSD KITS	99	Mackay Comm. Edison, NJ	C/FP (OPT)	SPAWAR	Oct-95	Nov-98	Mar-99	52	31.3	YES	N/A
		00	Mackay Comm. Edison, NJ	C/FP (OPT)	SPAWAR		Nov-99	Feb-00	51	32.65	YES	N/A
		01	Mackay Comm. Edison, NJ	C/FP (OPT)	SPAWAR		Nov-00	Feb-01	10	34	YES	N/A

D. REMARKS

FY97 - FY01 EHF Terminal - AN/USC-38(V) includes Full Milstar Low Data Rate Operational Capability (FMLOC).
NN107 EHF Terminals - MDR Unit cost includes procurement of MDR upgrade antennas in FY00 - FY03
NN112 C-Band FY00 unit costs are lower because 8 of the 11 units procured are upgrades.

DD FORM 2446, JUN 87

PROCUREMENT HISTORY AND PLANNING

A. DATE: February 2000

B. APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

C. P-1 ITEM NOMENCLATURE: Satellite Communications Systems 321500

SUBHEAD: 52NR

COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
NN117	Global Broadcast System-- Single (Receive S	99	Raytheon, Marlborough, MA	C/FFP/C/(OPT)	SPAWAR/USAF	May-97	Oct-99	May-00	6	615.17	YES	N/A
		00	Raytheon, Marlborough, MA	C/FFP/C/(OPT)	SPAWAR/USAF		Aug-00	Mar-01	5	584.4	YES	N/A
NN117	Global Broadcast System--Dual (Receive Sui	99	Raytheon, Marlborough, MA	C/FFP/C/(OPT)	SPAWAR/USAF	May-97	Oct-99	May-00	4	1,064	YES	N/A
		00	Raytheon, Marlborough, MA	C/FFP/C/(OPT)	SPAWAR/USAF		Aug-00	Mar-01	7	623.71	YES	N/A
NN117	Global Broadcast System--Subs (Receive Sui	99	Raytheon, Reston, VA	C/CPAF	SPAWAR/USAF	May-97	Jan-00	Jun-00	6	361.67	YES	N/A
		00	Raytheon, Reston, VA	C/CPAF	SPAWAR/USAF		Aug-00	Jan-01	4	369.5	YES	N/A
NP117	Global Broadcast Service - Shore (FY99/00)	99	Raytheon, Reston, VA	C/CPAF	USAF		Nov-99	Jun-00	7	178.57	YES	
		00	Raytheon, Reston, VA	C/CPAF	USAF		Aug-00	Mar-01	5	164	YES	

D. REMARKS

NN117 GBS- Unit cost varies due to quantity discounts afforded by other Services buys per year.

NN117 GBS- Additionally, unit cost reflects variances in the composite quantities of different equipment types procured each FY which is driven by IT-21 Fleet requirements.

DD FORM 2446, JUN 87

PROCUREMENT HISTORY AND PLANNING

A. DATE February 2000

B. APPROPRIATION/BUDGET ACTIVITY
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

C. P-1 ITEM NOMENCLATURE
Satellite Communications Systems 321500

SUBHEAD 52NR

COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
NP118	JMINI Control System - NMS (FY99/00)	99	SAIC, San Diego, CA	IDIQ	SPAWAR		Oct-98	Jul-99	2	6166	Yes	
		00	SAIC, San Diego, CA	IDIQ	SPAWAR		Oct-99	Jul-00	4	3892.75	Yes	
NN118	JMINI Control System - NMS (FY01)	01	SAIC, San Diego, CA	IDIQ	SPAWAR		Oct-00	Jul-01	1	1505	Yes	
NP118	JMINI Control System - DMR (FY99/00)	99	Motorola, Phoenix, AZ	FFP/IDIQ	SPAWAR		Jan-00	Sep-00	260	121.81	Yes	
		00	Motorola, Phoenix, AZ	FFP/IDIQ	SPAWAR		Aug-00	May-01	100	114.74	Yes	

NMS unit costs for FY 99 & FY 00 are greater than FY 01 due to the fact that the bulk of NMS funding is dedicated to the complex software enhancement and integration work required to reach IOC at the four primary JMINI Control Stations in FY 00. OPN funding (and unit costs) decrease in FY 01 and out as the program focus shifts to the less complex implementation of the Remote JMINI Control Stations

February-00

MODIFICATION TITLE: Satellite Communications Systems 321500
COST CODE NN101
MODELS OF SYSTEMS AFFECTED: **MINI DAMA**
DESCRIPTION/JUSTIFICATION: Provides 5KHz and 25KHz UHF Communications capability for submarines and other disadvantaged users.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	
RDT&E																							
PROCUREMENT:																							
Kit Quantity																							
Installation Kits																							
Installation Kits Nonrecurring																							
Equipment	63	17.9	0	0.0	14	5.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	77	23.0	1/
Equipment Nonrecurring																							
Field Change Upgrade Kits							150	10.0													150	10.0	2/
Data																							
Training Equipment																							
Support Equipment																							
Other																							
Interm Contractor Support																							
Installation of Hardware*	45	4.5	18	3.9	14	1.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	77	10.2	
PRIOR YR EQUIP	45	4.5	18	3.9																	63	8.4	
FY 98 EQUIP																					0	0.0	
FY 99 EQUIP					14	1.8															14	1.8	
FY 00 EQUIP																					0	0.0	
FY 01 EQUIP																					0	0.0	
FY 02 EQUIP																					0	0.0	
FY 03 EQUIP																					0	0.0	
FY 04 EQUIP																					0	0.0	
FY 05 EQUIP																					0	0.0	
FY TC EQUIP																					0	0.0	
TOTAL INSTALLATION COST		4.5		3.9		1.8		0.0		0.0		0.0		0.0		0.0		0.0		0.0		10.2	
TOTAL PROCUREMENT		22.4		3.9		6.9		10.0		0.0		0.0		0.0		0.0		0.0		0.0		33.2	

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 1999: Jul-99 FY 2000: Mar-00 FY 2001:

DELIVERY DATES: FY 1999: Jul-00 FY 2000: Jan-01 FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT	63								14								
OUTPUT	63								14								

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT														77
OUTPUT														77

Notes/Comments
Quantities represent number of channels regardless of single or dual channel units.
1/ This represents Total Inventory objective
SPAWAR's TITAN Contract ends Sep-99, due to 12 month procurement lead time, FY99 funds will be obligated in FY99 and installation will begin when equipment is delivered.
2/ The FY00 program procures Field Change Upgrade Kits. Units do not require installation.

February-00

MODIFICATION TITLE: Satellite Communications Systems 321500
COST CODE NN103
MODELS OF SYSTEMS AFFECTED: **SCI ADNS Build One/Carry On Build One**
DESCRIPTION/JUSTIFICATION: Provides Shipboard recption and transmission of multi-functional data using various data networks linking battle group commanders with intelligence databases.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	124	3.6	15	1.3	25	1.7	2	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	166	6.7
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	124	15.1	15	1.4	25	1.1	2	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	166	17.6
PRIOR YR EQUIP	124	15.1																			124	15.1
FY 98 EQUIP			15	1.4																	15	1.4
FY 99 EQUIP					25	1.1															25	1.1
FY 00 EQUIP							2	0.0													2	0.0
FY 01 EQUIP																					0	0.0
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		15.1		1.4		1.1		0.0		0.0		0.0		0.0		0.0		0.0		0.0		17.6
TOTAL PROCUREMENT		18.7		2.7		2.7		0.1		0.0		0.0		0.0		0.0		0.0		0.0		24.3

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 1 Months PRODUCTION LEADTIME: 3 Months

CONTRACT DATES: FY 1999: Dec-98 FY 2000: Dec-99 FY 2001:

DELIVERY DATES: FY 1999: Mar-99 FY 2000: Mar-00 FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				FY 02			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT	139		4	12	9		1	1									
OUTPUT	139		4	12	9			1	1								

INSTALLATION SCHEDULE:	FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT														166
OUTPUT														166

Notes/Comments
FY00 Systems are carry-on systems. Therefore, no corresponding installation costs.

February-00

MODIFICATION TITLE: Satellite Communications Systems 321500
COST CODE NN103
MODELS OF SYSTEMS AFFECTED: **SCI ADNS Build Two & Three /Carry On Build Two**
DESCRIPTION/JUSTIFICATION: Provides Shipboard recption and transmission of multi-functional data using various data networks linking battle group commanders with intelligence databases.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	0	0.0	0	0.0	0	0.0	23	2.5	20	2.4	11	1.2	35	3.9	0	0.0	0	0.0	0	0.0	89	10.0
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.0	0	0.0	0	0.0	23	1.1	20	0.5	11	0.5	35	1.8	0	0.0	0	0.0	0	0.0	89	3.9
PRIOR YR EQUIP																					0	0.0
FY 98 EQUIP																					0	0.0
FY 99 EQUIP																					0	0.0
FY 00 EQUIP							23	1.1													23	1.1
FY 01 EQUIP									20	0.5											20	0.5
FY 02 EQUIP											11	0.5									11	0.5
FY 03 EQUIP													35	1.8							35	1.8
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.0		1.1		0.5		0.5		1.8		0.0		0.0		0.0		3.9
TOTAL PROCUREMENT		0.0		0.0		0.0		3.6		2.9		1.7		5.7		0.0		0.0		0.0		13.9

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 1 Months PRODUCTION LEADTIME: 3 Months

CONTRACT DATES: FY 1999: FY 2000: Dec-99 FY 2001: Dec-00

DELIVERY DATES: FY 1999: FY 2000: Mar-00 FY 2001: Mar-01

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT							8	8	7		7	7	6		4	4	3
OUTPUT								8	8	7		7	7	6		4	4

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT		12	12	11									0	89
OUTPUT	3		12	12	11								0	89

Notes/Comments

February-00

MODIFICATION TITLE: Satellite Communications Systems 3215000
COST CODE NP103/NN103
MODELS OF SYSTEMS AFFECTED: **SI-COMMS - SCI ADNS Build 2 and Build 3**
DESCRIPTION/JUSTIFICATION: Provides Shipboard reception and transmission of multi-functional data using various data networks linking battle group commanders with intelligence databases.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	5	0.3	15	0.8	4	0.4	4	0.3	6	0.5	3	0.3	4	0.2	0	0.0	0	0.0	0	0.0	41	2.8
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	5	0.3	15	0.4	4	0.3	4	0.2	6	0.2	3	0.4	4	0.2	0	0.0	0	0.0	0	0.0	41	1.9
PRIOR YR EQUIP	5	0.3																			5	0.3
FY 98 EQUIP			15	0.4																	15	0.4
FY 99 EQUIP					4	0.3															4	0.3
FY 00 EQUIP							4	0.2													4	0.2
FY 01 EQUIP									6	0.2											6	0.2
FY 02 EQUIP											3	0.4									3	0.4
FY 03 EQUIP													4	0.2							4	0.2
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		0.3		0.4		0.3		0.2		0.2		0.4		0.2		0.0		0.0		0.0		1.9
TOTAL PROCUREMENT		0.6		1.2		0.7		0.5		0.7		0.7		0.4		0.0		0.0		0.0		4.7

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 1 Month PRODUCTION LEADTIME: 3 Months

CONTRACT DATES: FY 1999: Dec-98 FY 2000: Dec-99 FY 2001: Dec-00

DELIVERY DATES: FY 1999: Mar-99 FY 2000: Mar-00 FY 2001: Mar-01

INSTALLATION SCHEDULE:		FY 99				FY 00				FY 01				FY 02			
	PY	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT	20		2	2			1	2	1		2	2	2		1	2	
OUTPUT	20			2	2			1	2	1		2	2	2		1	2

INSTALLATION SCHEDULE:	FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT		2	2											41
OUTPUT			2	2										41

Notes/Comments

February-00

MODIFICATION TITLE: Satellite Communications Systems 321500
COST CODE NN105
MODELS OF SYSTEMS AFFECTED: **5/25 KHz SATCOM--OE-82 Mod Kits**
DESCRIPTION/JUSTIFICATION: Provides OE-82 antenna systems with the capability to transmit and receive at a bandwidth of 5KHz as well as 25KHz

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	122	2.3	145	1.1	14	0.2	16	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	297	3.8
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	88	2.2	137	1.0	42	0.5	30	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	297	3.8
PRIOR YR EQUIP	88	2.2	34	0.2																	122	2.4
FY 98 EQUIP			103	0.8	42	0.5															145	1.3
FY 99 EQUIP							14	0.07													14	0.1
FY 00 EQUIP							16	0.07													16	0.1
FY 01 EQUIP																					0	0.0
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		2.2		1.0		0.5		0.1		0.0		0.0		0.0		0.0		0.0		0.0		3.8
TOTAL PROCUREMENT		4.5		2.1		0.7		0.3		0.0		0.0		0.0		0.0		0.0		0.0		7.6

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 1 Month PRODUCTION LEADTIME: 5 Months

CONTRACT DATES: FY 1999: Jul-99 FY 2000: Dec-99 FY 2001:

DELIVERY DATES: FY 1999: Dec-99 FY 2000: May-00 FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT	225	26	16			14		16									
OUTPUT	225	26	16			14		16									

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT														297
OUTPUT														297

Notes/Comments

Exhibit P-3A, Budget Item Justification
Unclassified
Classification

February-00

MODIFICATION TITLE: Satellite Communications Systems 321500
COST CODE NN105
MODELS OF SYSTEMS AFFECTED: **5/25 KHz SATCOM--UHF Modems**
DESCRIPTION/JUSTIFICATION: Provides the modulation demodulation capability at 5 KHz bandwidth in the UHF spectrum

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: ($ in millions)

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	154	5.4	145	5.5	57	3.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	356	14.7
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	83	4.2	188	3.1	60	3.9	25	2.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	356	13.3
PRIOR YR EQUIP	83	4.2	71	0.9																	154	5.1
FY 98 EQUIP			117	2.2	28	1.8															145	4.0
FY 99 EQUIP					32	2.1	25	2.1													57	4.2
FY 00 EQUIP																					0	0.0
FY 01 EQUIP																					0	0.0
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		4.2		3.1		3.9		2.1		0.0		0.0		0.0		0.0		0.0		0.0		13.3
TOTAL PROCUREMENT		9.6		8.6		7.7		2.1		0.0		0.0		0.0		0.0		0.0		0.0		28.0

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 6 Months

CONTRACT DATES: FY 1999: Dec-98 FY 2000: FY 2001:

DELIVERY DATES: FY 1999: Jun-99 FY 2000: FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01				FY 02			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT	271	18	10		32	8	13	4									
OUTPUT	271	18	10		32	8	13	4									

INSTALLATION SCHEDULE:	FY 03				FY 04				FY 05				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT														356
OUTPUT														356

Notes/Comments

February-00

MODIFICATION TITLE: Satellite Communications Systems 321500
COST CODE NN105
MODELS OF SYSTEMS AFFECTED: **5/25 KHz SATCOM--DMR**
DESCRIPTION/JUSTIFICATION: Provides 5KHz and 25 KHz UHF bandwidth capability and will evenually replace the aging AN/WSC-3 radios

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment			32	5.4	56	9.7	172	22.1	0	0.0	192	20.5	384	37.5	156	15.8	80	7.6	412	40.8	1484	159.4
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*			0	0.0	32	1.2	56	2.5	172	7.9	192	8.9	204	9.7	336	16.5	80	4.1	412	21.0	1484	71.8
PRIOR YR EQUIP																					0	0.0
FY 98 EQUIP					32	1.2															32	1.2
FY 99 EQUIP							56	2.5													56	2.5
FY 00 EQUIP									172	7.9											172	7.9
FY 01 EQUIP																					0	0.0
FY 02 EQUIP											192	8.9									192	8.9
FY 03 EQUIP													204	9.7	180	8.9					384	18.6
FY 04 EQUIP															156	7.6					156	7.6
FY 05 EQUIP																	80	4.1			80	4.1
FY TC EQUIP																			412	21.0	412	21.0
TOTAL INSTALLATION COST		0.0		0.0		1.2		2.5		7.9		8.9		9.7		16.5		4.1		21.0		71.8
TOTAL PROCUREMENT		0.0		5.4		10.9		24.6		7.9		29.4		47.2		32.3		11.7		61.8		231.2

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 1 Month PRODUCTION LEADTIME: 9 Months

CONTRACT DATES: FY 1999: Jan-00 FY 2000: Aug-00 FY 2001: Oct-00

DELIVERY DATES: FY 1999: Sep-00 FY 2000: May-01 FY 2001: Jun-00

		FY 99				FY 00				FY 01				FY 02			
INSTALLATION SCHEDULE:	PY	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
INPUT					32				56			80	92			92	100
OUTPUT					32				56			80	92			92	100

	FY 03				FY 04				FY 05					
INSTALLATION SCHEDULE:	1	2	3	4	1	2	3	4	1	2	3	4	TC	TOTAL
INPUT			100	104	180		76	80			80		412	1484
OUTPUT			100	104	180		76	80			80		412	1484

Notes/Comments
FY99 Installation quantity consists of 1 DMR (4 channels), the remaining DMR systems (channels) were procured as lab assets.

MODIFICATION TITLE: Satellite Communications Systems 321500
COST CODE NN106
MODELS OF SYSTEMS AFFECTED: **SHF Terminals--AN/WSC-6(V)5 Mod Kits (Ship)**
DESCRIPTION/JUSTIFICATION: High data rate SHF satellite communications for intra and inter service message, data, voice and video transmission and reception.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	10	16.7	8	6.4	2	2.5	4	5.3	12	13.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	36	44.1
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	4	18.9	3	2.4	9	7.0	4	3.0	4	4.0	12	10.8	0	0.0	0	0.0	0	0.0	0	0.0	36	46.1
PRIOR YR EQUIP	4	18.9	3	2.4	3	2.3															10	23.6
FY 98 EQUIP					6	4.6	2	1.5													8	6.2
FY 99 EQUIP							2	1.5													2	1.5
FY 00 EQUIP									4	4.0											4	4.0
FY 01 EQUIP											12	10.8									12	10.8
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		18.9		2.4		7.0		3.0		4.0		10.8		0.0		0.0		0.0		0.0		46.1
TOTAL PROCUREMENT		35.6		8.8		9.5		8.3		17.2		10.8		0.0		0.0		0.0		0.0		90.2

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 1999: Jan-99 FY 2000: Oct-99 FY 2001: Oct-00

DELIVERY DATES: FY 1999: Jan-00 FY 2000: Oct-00 FY 2001: Oct-01

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT	7	2	1	3	3	1	1	1	1	1	1	1	1	3	3	3	3
OUTPUT	7		2	1	3	3	1	1	1	1	1	1	1	1	3	3	3

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT														36
OUTPUT	3													36

Notes/Comments
Due to funding cuts to support Bosnia efforts, 3 FY 98 installs moved to FY 99.
Due to cuts to fund TRITAC program 2 FY 99 installs moved to FY 00.
Based on latest IT21 Matrix, installation costs will vary due to different requirements for different hulls.
Installation unit costs vary due to varying ship class installs

February-00

MODIFICATION TITLE: Satellite Communications Systems 321500
COST CODE NP108/NN106
MODELS OF SYSTEMS AFFECTED: **SHF Terminals --AN/WSC-6(V)5 Mod Kit (Shore)**
DESCRIPTION/JUSTIFICATION: AN/WSC-6(V)5 terminals provide training and technical support for high data rate SHF satellite communications for inter and intra service message, data, voice and video transmission.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment					1	0.7	1	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	1.4
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.0	0	0.0	0	0.0	1	0.2	1	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	0.9
PRIOR YR EQUIP																					0	0.0
FY 98 EQUIP																					0	0.0
FY 99 EQUIP							1	0.2													1	0.2
FY 00 EQUIP									1	0.7											1	0.7
FY 01 EQUIP																					0	0.0
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.2		0.7		0.0		0.0		0.0		0.0		0.0		0.9
TOTAL PROCUREMENT		0.0		0.0		0.7		0.9		0.7		0.0		0.0		0.0		0.0		0.0		2.3

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 1999: Jan-99 FY 2000: Oct-99 FY 2001: N/A

DELIVERY DATES: FY 1999: Jan-00 FY 2000: Oct-00 FY 2001: N/A

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT							1			1							
OUTPUT								1			1						

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

Notes/Comments

February-00

MODIFICATION TITLE: Satellite Communications Systems 321500
COST CODE NN106
MODELS OF SYSTEMS AFFECTED: **SHF Terminals--7 Ft. Antenna**
DESCRIPTION/JUSTIFICATION: High data rate SHF satellite communications for intra and inter service message, data, voice and video transmission and reception.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	5	1.5	2	0.5	4	1.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	11	3.0
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.0	5	1.1	3	3.0	3	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	11	4.8
PRIOR YR EQUIP			5	1.1																	5	1.1
FY 98 EQUIP					2	2.0															2	2.0
FY 99 EQUIP					1	1.0	3	0.7													4	1.7
FY 00 EQUIP																					0	0.0
FY 01 EQUIP																					0	0.0
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		0.0		1.1		3.0		0.7		0.0		0.0		0.0		0.0		0.0		0.0		4.8
TOTAL PROCUREMENT		1.5		1.6		4.0		0.7		0.0		0.0		0.0		0.0		0.0		0.0		7.8

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 6 Months

CONTRACT DATES: FY 1999: Jan-99 FY 2000: FY 2001:

DELIVERY DATES: FY 1999: Jul-99 FY 2000: FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT	5	1	1		1	2	1										
OUTPUT	5		1	1		1	2	1									

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT														11
OUTPUT														11

Notes/Comments
Installation unit costs vary due to varying ship class installs

February-00

MODIFICATION TITLE: Satellite Communications Systems 321500
COST CODE NN106
MODELS OF SYSTEMS AFFECTED: **SHF Terminals -- AN/WSC-6(V)7 (Ship)**
DESCRIPTION/JUSTIFICATION: Provides high data rate SHF satellite communications for intra and inter service message, data, voice and video transmission and reception.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: ($ in millions)

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	3	5.0	1	1.2	2	2.3	15	18.0	10	10.5	12	17.0	2	2.6	1	1.3	0	0.0	2	2.6	48	60.6
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.0	0	0.0	2	2.9	4	5.6	15	34.4	10	14.7	12	19.8	3	6.5	0	0.0	2	4.3	48	88.3
PRIOR YR EQUIP					2	2.9	1	1.4													3	4.3
FY 98 EQUIP							1	1.4													1	1.4
FY 99 EQUIP							2	2.8													2	2.8
FY 00 EQUIP									15	34.4											15	34.4
FY 01 EQUIP											10	14.7									10	14.7
FY 02 EQUIP													12	19.8							12	19.8
FY 03 EQUIP															2	4.3					2	4.3
FY 04 EQUIP															1	2.2					1	2.2
FY 05 EQUIP																					0	0.0
FY TC EQUIP																			2	4.3	2	4.3
TOTAL INSTALLATION COST		0.0		0.0		2.9		5.6		34.4		14.7		19.8		6.5		0.0		4.3		88.3
TOTAL PROCUREMENT		5.0		1.2		5.2		23.6		44.9		31.7		22.5		7.8		0.0		6.9		148.8

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 1999: Jan-99 FY 2000: Oct-99 FY 2001: Oct-00

DELIVERY DATES: FY 1999: Jan-00 FY 2000: Oct-00 FY 2001: Oct-01

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT		2				2	1	1		4	4	4	3	2	3	3	2
OUTPUT			2				2	1	1		4	4	4	3	2	3	3

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT	3	3	3	3	2	1							2	48
OUTPUT	2	3	3	3	3	2	1						2	48

Notes/Comments

February-00

MODIFICATION TITLE: Satellite Communications Systems 321500
COST CODE NP108/NN106
MODELS OF SYSTEMS AFFECTED: **SHF Terminals --AN/WSC-6(V)7 (Shore)**
DESCRIPTION/JUSTIFICATION: AN/WSC-6(V)X terminals provide training and technical support for high data rate SHF satellite communications for inter and intra service message, data, voice and video transmission.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment			1	0.3	1	1.0	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	2.3
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.0	1	0.4	0	0.0	1	0.3	1	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	1.5
PRIOR YR EQUIP																					0	0.0
FY 98 EQUIP			1	0.4																	1	0.4
FY 99 EQUIP							1	0.3													1	0.3
FY 00 EQUIP									1	0.8											1	0.8
FY 01 EQUIP																					0	0.0
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		0.0		0.4		0.0		0.3		0.8		0.0		0.0		0.0		0.0		0.0		1.5
TOTAL PROCUREMENT		0.0		0.7		1.0		1.3		0.8		0.0		0.0		0.0		0.0		0.0		3.8

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 4 Months PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 1999: Jan-99 FY 2000: Oct-99 FY 2001: N/A

DELIVERY DATES: FY 1999: Jan-00 FY 2000: Oct-00 FY 2001: N/A

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT	1						1			1							
OUTPUT	1							1			1						

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

Notes/Comments

Exhibit P-3A, Budget Item Justification
Unclassified
Classification

February-00

MODIFICATION TITLE: Satellite Communications Systems 321500
COST CODE NN106
MODELS OF SYSTEMS AFFECTED: **SHF Terminals--AN/WSC-6(V)X**
DESCRIPTION/JUSTIFICATION: Provides high data rate SHF satellite communications for intra and inter service message, data, voice and video transmission and reception.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	0	0.0	0	0.0	0	0.0	1	1.4	11	13.1	12	17.4	5	6.8	0	0.0	0	0.0	18	13.0	47	51.7
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.0	0	0.0	0	0.0	0	0.0	1	2.5	11	12.1	12	18.4	5	5.5	0	0.0	18	17.8	47	56.3
PRIOR YR EQUIP																					0	0.0
FY 98 EQUIP																					0	0.0
FY 99 EQUIP																					0	0.0
FY 00 EQUIP									1	2.5											1	2.5
FY 01 EQUIP											11	12.1									11	12.1
FY 02 EQUIP													12	18.4							12	18.4
FY 03 EQUIP															5	5.5					5	5.5
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																			18	17.8	18	17.8
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		2.5		12.1		18.4		5.5		0.0		17.8		56.3
TOTAL PROCUREMENT		0.0		0.0		0.0		1.4		15.6		29.5		25.2		5.5		0.0		30.8		108.0

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 1 Months PRODUCTION LEADTIME: 9 Months

CONTRACT DATES: FY 1999: N/A FY 2000: Feb-00 FY 2001: Oct-00

DELIVERY DATES: FY 1999: N/A FY 2000: Sep-00 FY 2001: Jul-01

INSTALLATION SCHEDULE:	PY	FY 99 1	2	3	4	FY 00 1	2	3	4	FY 01 1	2	3	4	FY 02 1	2	3	4
INPUT									1					3	3	3	2
OUTPUT										1					3	3	3

INSTALLATION SCHEDULE:	FY 03 1	2	3	4	FY 04 1	2	3	4	FY 05 1	2	3	4	TC	TOTAL
INPUT	3	3	3	3	3	2							18	47
OUTPUT	2	3	3	3	3	3	2						18	47

Notes/Comments
FY99 procurement costs include NRE for first unit.
FY01-03: Contract not yet awarded; quantity discount unknown at this time.
Installation costs include HVAC installation

February-00

MODIFICATION TITLE: Satellite Communications Systems 321500
COST CODE NP108
MODELS OF SYSTEMS AFFECTED: **SHF Terminals --Shore Modems**
DESCRIPTION/JUSTIFICATION: Shore side modems for compatibility with the AN/WSC-6(V)7 terminals to support increased SHF capacity.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: ($ in millions)

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment					44	1.1	0	0.0	18	0.3	18	0.3	18	0.3	27	0.4	0	0.0	0	0.0	125	2.3
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.0	0	0.0	44	0.7	0	0.0	0	0.0	18	0.1	18	0.1	18	0.1	27	0.1	0	0.0	125	1.1
PRIOR YR EQUIP																					0	0.0
FY 98 EQUIP																					0	0.0
FY 99 EQUIP					44	0.7															44	0.7
FY 00 EQUIP																					0	0.0
FY 01 EQUIP											18	0.1									18	0.1
FY 02 EQUIP													18	0.1							18	0.1
FY 03 EQUIP															18	0.1					18	0.1
FY 04 EQUIP																	27	0.1			27	0.1
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.7		0.0		0.0		0.1		0.1		0.1		0.1		0.0		1.1
TOTAL PROCUREMENT		0.0		0.0		1.8		0.0		0.3		0.4		0.4		0.5		0.1		0.0		3.4

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 10 Months

CONTRACT DATES: FY 1999: Oct-98 FY 2000: N/A FY 2001: Jan-01

DELIVERY DATES: FY 1999: Jul-99 FY 2000: N/A FY 2001: Nov-01

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT					44									5	5	4	4
OUTPUT					22	22									5	5	4

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT	5	5	4	4	5	5	4	4	7	7	7	6		125
OUTPUT	4	5	5	4	4	5	5	4	4	7	7	7	6	125

Notes/Comments

FY99 modems represent FCC-100 modems for the SHF program.
FY01 - FY04 procurements represent N-Step/Teleport Shore Modems.
Modems required for shore side compatibility with AN/WSC-6(V)5 and AN/WSC-6)V)7 equipped ships and support Battle Group capacity added by the two programs.
Modems for FY01 - FY04 are provided by a PR-01 plus-up. No funding is available in FY00.

February-00

MODIFICATION TITLE: Satellite Communications Systems 321500
COST CODE NN107
MODELS OF SYSTEMS AFFECTED: **EHF Terminals--AN/USC-38(V)**
DESCRIPTION/JUSTIFICATION: Provides jam resistant, low probability of intercept satellite communications and Full Milstar LDR Operational Capabilities (FMLOC) for shore stations, submarines and surface ships in an electromagnetic threat.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	179	356.0	1	9.8	0	0.0	60	57.4	50	46.1	31	35.2	10	10.7	0	0.0	0	0.0	0	0.0	331	515.2
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other			Various	7.1	Various	9.6									Various	9.4	Various	9.3			0	35.4
Interm Contractor Support																						
Installation of Hardware*	150	178.6	8	9.5	17	16.4	4	5.5	58	29.9	50	29.1	31	18.4	13	4.6	0	0.0	0	0.0	331	292.0
PRIOR YR EQUIP	150	178.6	8	9.5	17	16.4	4	5.5													179	210.0
FY 98 EQUIP									1	1.2											1	1.2
FY 99 EQUIP																					0	0.0
FY 00 EQUIP									57	28.7	3	1.8									60	30.5
FY 01 EQUIP											47	27.3	3	1.8							50	29.1
FY 02 EQUIP													28	16.6	3	1.1					31	17.7
FY 03 EQUIP															10	3.5					10	3.5
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		178.6		9.5		16.4		5.5		29.9		29.1		18.4		4.6		0.0		0.0		292.0
TOTAL PROCUREMENT		534.6		26.4		16.4		62.9		76.0		64.3		29.1		4.6		0.0		0.0		842.6

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 1 Month PRODUCTION LEADTIME: 15 Months

CONTRACT DATES: FY 1999: FY 2000: Jan-00 FY 2001: Nov-00

DELIVERY DATES: FY 1999: FY 2000: Apr-01 FY 2001: Feb-02

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT	158	5	5	5	2		3	1		1		27	30	3	11	20	16
OUTPUT	158		5	5	5	2		3	1		1		27	30	3	11	20

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT	3	3	10	15	3	3	7							331
OUTPUT	16	3	3	10	15	3	3	7						331

Notes/Comments

FY98/FY99 unit cost includes procurement of Full Milstar Low Data Rate Operational Capability (FMLOC). FY98 funding also provides for 1st production unit for follow-on terminal (FOT).
FY00 FOT Production Year 1 award.
FY04 - AN/USC-38(V) includes Advanced MILSATCOM EHF compatibility & joint baseband compatibility.

February-00

MODIFICATION TITLE: Satellite Communications Systems 321500
COST CODE NP109/NN107
MODELS OF SYSTEMS AFFECTED: **EHF Terminals --AN/USC-38(V)3**
DESCRIPTION/JUSTIFICATION: Provides jam resistant, low probability of intercept satellite communications and Full Milstar LDR Operational Capabilities (FMLOC) for shore stations, submarines and surface ships in an electromagnetic threat.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	34	78.8	0	0.0	0	0.0	14	18.8	4	7.4	18	14.5	0	0.0	0	0.0	0	0.0	0	0.0	70	119.5
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other - Equipment not requiring installation					13	4.7											Various	2.2			13	6.9
Interm Contractor Support																						
Installation of Hardware*	26	33.9	1	0.8	1	0.8	5	5.5	13	10.8	6	4.9	13	8.8	5	3.4	0	0.0	0	0.0	70	68.9
PRIOR YR EQUIP	26	33.9	1	0.8	1	0.8	3	3.6	1	1.2	2	2.4									34	42.7
FY 98 EQUIP																					0	0.0
FY 99 EQUIP																					0	0.0
FY 00 EQUIP							2	1.9	12	9.6											14	11.5
FY 01 EQUIP											4	2.5									4	2.5
FY 02 EQUIP													13	8.8	5	3.4					18	12.2
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		33.9		0.8		0.8		5.5		10.8		4.9		8.8		3.4		0.0		0.0		68.9
TOTAL PROCUREMENT		112.7		0.8		5.5		24.3		18.2		19.4		8.8		3.4		0.0		0.0		195.3

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 1 Month PRODUCTION LEADTIME: 15 Months

CONTRACT DATES: FY 1999: Sep-99 FY 2000: Jan-00 FY 2001: Nov-00

DELIVERY DATES: FY 1999: Mar-01 FY 2000: Aug-00 FY 2001: Feb-02

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT	27	1					2	1	2	1	0	4	8	2	2	2	
OUTPUT	27		1					2	1	2	1		4	8	2	2	2

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT		2	6	5	5									70
OUTPUT			2	6	5	5								70

Notes/Comments
FY99 cost reflect procurement of 13 Single Channel Anti-Jam Man Portables (SCAMPS). Units do not require installation; however, they are included in the production schedule.
FY99 - FY01 unit cost includes procurement of Full Milstar Low Data Rate Operational Capability (FMLOC).
FY00 FOT Production Year 1 award.
FY00 - Includes early delivery of two assets to support initial schoolhouse training.
FY05 - AN/USC-38(V) includes Advanced MILSATCOM EHF compatibility & joint baseband compatibility.

February-00

MODIFICATION TITLE: Satellite Communications Systems 321500
COST CODE NN107
MODELS OF SYSTEMS AFFECTED: **EHF Terminals -- NECC (Ship)**
DESCRIPTION/JUSTIFICATION: Provides for satellite communications connectivity between shore stations, submarines and surface ships and includes network management; multiplexing and channel sharing; resource management; communications management and planning; network control and monitoring; circuit switching and packet switching.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	50	5.5	18	3.8	31	3.9	43	5.3	62	6.5	55	6.3	34	4.2	13	2.1	0	0.0	0	0.0	306	37.6
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Equipment Not Requiring Installation					4	0.5															4	0.5
Interm Contractor Support																						
Installation of Hardware*	47	4.4	9	1.0	43	3.3	26	1.5	79	4.6	55	3.2	34	2.0	13	0.8	0	0.0	0	0.0	306	20.8
PRIOR YR EQUIP	47	4.4	3	0.4																	50	4.8
FY 98 EQUIP			6	0.6	12	0.9															18	1.5
FY 99 EQUIP					31	2.4															31	2.4
FY 00 EQUIP							26	1.5	17	1.0											43	2.5
FY 01 EQUIP									62	3.6											62	3.6
FY 02 EQUIP											55	3.2									55	3.2
FY 03 EQUIP													34	2.0							34	2.0
FY 04 EQUIP															13	0.8					13	0.8
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		4.4		1.0		3.3		1.5		4.6		3.2		2.0		0.8		0.0		0.0		20.8
TOTAL PROCUREMENT		9.9		4.8		7.7		6.8		11.1		9.5		6.2		2.9		0.0		0.0		58.9

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 1 Month PRODUCTION LEADTIME: 5 Months

CONTRACT DATES: FY 1999: Dec-98 FY 2000: Jan-00 FY 2001: Nov-00

DELIVERY DATES: FY 1999: May-99 FY 2000: Jun-00 FY 2001: Apr-01

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT	56	12		13	18			6	20	17		30	32			27	28
OUTPUT	56	12		13	18			6	20	17		30	32			27	28

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT			24	10			13							306
OUTPUT			24	10			13							306

Notes/Comments
NECC unit cost includes addition of MDR capability beginning in FY99.
Four test units procured in FY99 will not be installed.

February-00

MODIFICATION TITLE: Satellite Communications Systems 321500
COST CODE NP109/NN107
MODELS OF SYSTEMS AFFECTED: **EHF Terminals --NECC (Shore)**
DESCRIPTION/JUSTIFICATION: Provides for satellite communications connectivity between shore stations, submarines, and surface ships; includes network management, multiplexing and channel sharing, resource management, communications management and planning; network control and monitoring; circuit switching and packet switching.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	9	0.9	3	0.3	5	0.6	9	1.1	19	2.0	6	0.7	13	1.6	5	0.8	0	0.0	0	0.0	69	8.0
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other- Equipment not requiring installation					2	0.3															2	0.3
Interm Contractor Support																						
Installation of Hardware*	9	0.9	3	0.3	5	0.5	9	0.5	19	1.1	6	0.4	13	0.8	5	0.3	0	0.0	0	0.0	69	4.8
PRIOR YR EQUIP	9	0.9																			9	0.9
FY 98 EQUIP			3	0.3																	3	0.3
FY 99 EQUIP					5	0.5															5	0.5
FY 00 EQUIP							9	0.5													9	0.5
FY 01 EQUIP									19	1.1											19	1.1
FY 02 EQUIP											6	0.4									6	0.4
FY 03 EQUIP													13	0.8							13	0.8
FY 04 EQUIP															5	0.3					5	0.3
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		0.9		0.3		0.5		0.5		1.1		0.4		0.8		0.3		0.0		0.0		4.8
TOTAL PROCUREMENT		1.8		0.6		1.4		1.6		3.1		1.1		2.4		1.1		0.0		0.0		13.1

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 1 Month PRODUCTION LEADTIME: 5 Months

CONTRACT DATES: FY 1999: Dec-98 FY 2000: Jan-00 FY 2001: Nov-00

DELIVERY DATES: FY 1999: May-99 FY 2000: Jun-01 FY 2001: Apr-01

INSTALLATION SCHEDULE:	PY	FY 99 1	2	3	4	FY 00 1	2	3	4	FY 01 1	2	3	4	FY 02 1	2	3	4
INPUT	12			2	3			4	5			10	9		6		
OUTPUT	12			2	3			4	5			10	9		6		

INSTALLATION SCHEDULE:	FY 03 1	2	3	4	FY 04 1	2	3	4	FY 05 1	2	3	4	TC	TOTAL
INPUT			9	4			5							69
OUTPUT			9	4			5							69

Notes/Comments
Unit cost includes addition of MDR capability beginning in FY99.
Two test units procured in FY99 will not be installed.

February-00

MODIFICATION TITLE: Satellite Communications Systems 321500
COST CODE NN107
MODELS OF SYSTEMS AFFECTED: **EHF Terminal--MDR (Ship)**
DESCRIPTION/JUSTIFICATION: Provides for Applique and Antenna upgrades to the existing AN/USC-38 Low Data Rate (LDR) terminal to enable Medium Data Rate (MDR) communications capability.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	0	0.0	30	11.6	31	15.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	61	26.6
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other								6.1		1.0												7.1
Interm Contractor Support																						
Installation of Hardware*	0	0.0	0	0.0	0	0.0	22	7.8	39	12.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	61	20.4
PRIOR YR EQUIP																					0	0.0
FY 98 EQUIP							22	7.8	8	2.7											30	10.5
FY 99 EQUIP									31	9.9											31	9.9
FY 00 EQUIP																					0	0.0
FY 01 EQUIP																					0	0.0
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.0		7.8		12.6		0.0		0.0		0.0		0.0		0.0		20.4
TOTAL PROCUREMENT		0.0		11.6		15.0		7.8		12.6		0.0		0.0		0.0		0.0		0.0		47.0

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 1 Month PRODUCTION LEADTIME: 17 Months

CONTRACT DATES: FY 1999: Mar-99 FY 2000: FY 2001:

DELIVERY DATES: FY 1999: Aug-00 FY 2000: FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT							8	7	7	8	10	10	11				
OUTPUT							8	7	7	8	10	10	11				

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT														61
OUTPUT														61

Notes/Comments

FY99 satellite failure delayed installs in FY99
FY00 Procurement includes satellite simulators, maintainer and operator trainer, field change kits, IDIQ PM costs and ancillary equipment.
MDR functionality incorporated in AN/USC-38(V)
FY01 Procurement includes field change kits, and ancillary equipment.

February-00

MODIFICATION TITLE: Satellite Communications Systems 321500
COST CODE NP109/NN107
MODELS OF SYSTEMS AFFECTED: **EHF Terminals --MDR Appliques**
DESCRIPTION/JUSTIFICATION: Provides for Applique upgrades to the existing AN/USC-38 Low Data Rate (LDR) terminal to enable Medium Data Rate communications capability.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	0	0.0	2	0.8	5	7.1	0	0.0	0	0.0		0.0	0	0.0	0	0.0	0	0.0	0	0.0	7	7.9
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other							Various	2.1	Various	0.3											0	2.4
Interm Contractor Support																						
Installation of Hardware*	0	0.0	0	0.0	0	0.0	7	2.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	7	2.7
PRIOR YR EQUIP																					0	0.0
FY 98 EQUIP							2	0.7													2	0.7
FY 99 EQUIP							5	2.0													5	2.0
FY 00 EQUIP																					0	0.0
FY 01 EQUIP																					0	0.0
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.0		2.7		0.0		0.0		0.0		0.0		0.0		0.0		2.7
TOTAL PROCUREMENT		0.0		0.8		7.1		2.7		0.0		0.0		0.0		0.0		0.0		0.0		10.6

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 1 Month PRODUCTION LEADTIME: 17 Months

CONTRACT DATES: FY 1999: Mar-99 FY 2000: FY 2001:

DELIVERY DATES: FY 1999: Aug-00 FY 2000: FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99 1	2	3	4	FY 00 1	2	3	4	FY 01 1	2	3	4	FY 02 1	2	3	4
INPUT							2		5								
OUTPUT							2		5								

INSTALLATION SCHEDULE:	FY 03 1	2	3	4	FY 04 1	2	3	4	FY 05 1	2	3	4	TC	TOTAL
INPUT														7
OUTPUT														7

Notes/Comments
FY98 unit cost reflects procurement of MDR Appliques only.
FY99 - FY01 unit cost includes procurement of MDR upgrade antennas.
MDR functionality incorporated in AN/USC-38(V).

February-00

MODIFICATION TITLE: Satellite Communications Systems 321500
COST CODE NN112
MODELS OF SYSTEMS AFFECTED: **Comm. Satellite--INMARSAT M**
DESCRIPTION/JUSTIFICATION: For smaller ships INMARSAT M provides the capability for Official phones, STU III, Debit Card Crew Phones, Internet, E-Mail, PC to PC, Video Teleconferencing and Facsimile.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: ($ in millions)

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	8	0.2	9	0.2	4	0.1	8	0.3	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	29	0.8
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	8	0.3	7	0.2	6	0.2	8	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	29	0.9
PRIOR YR EQUIP	8	0.3																			8	0.3
FY 98 EQUIP			7	0.2	2	0.1															9	0.3
FY 99 EQUIP					4	0.1															4	0.1
FY 00 EQUIP							8	0.2													8	0.2
FY 01 EQUIP																					0	0.0
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		0.3		0.2		0.2		0.2		0.0		0.0		0.0		0.0		0.0		0.0		0.9
TOTAL PROCUREMENT		0.5		0.4		0.3		0.5		0.0		0.0		0.0		0.0		0.0		0.0		1.7

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 1 Month PRODUCTION LEADTIME: 2 Months

CONTRACT DATES: FY 1999: Jan-99 FY 2000: Jan-00 FY 2001:

DELIVERY DATES: FY 1999: Mar-99 FY 2000: Mar-00 FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT	15		2	2	2			4	4								
OUTPUT	15			2	2	2			4	4							

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT														29
OUTPUT														29

Notes/Comments

February-00

MODIFICATION TITLE: Satellite Communications Systems 321500
COST CODE NN112
MODELS OF SYSTEMS AFFECTED: **Comm. Satellite--INMARSAT B**
DESCRIPTION/JUSTIFICATION: Provides upgrade to the older INMARSAT A terminals giving ships the capability for Official phones, STU III, Debit Card Crew Phones, Internet, E-Mail, PC to PC, Video Teleconferencing and Facsimile.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	31	2.2	15	0.6	58	2.9	53	2.6	15	0.8	39	2.1	0	0.0	0	0.0	0	0.0	0	0.0	211	11.2
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	16	2.0	29	2.7	53	2.8	59	3.2	15	0.9	39	2.8	0	0.0	0	0.0	0	0.0	0	0.0	211	14.4
PRIOR YR EQUIP	16	2.0	15	1.4																	31	3.4
FY 98 EQUIP			14	1.3	1	0.1															15	1.4
FY 99 EQUIP					52	2.7	6	0.3													58	3.0
FY 00 EQUIP							53	2.9													53	2.9
FY 01 EQUIP									15	0.9											15	0.9
FY 02 EQUIP											39	2.8									39	2.8
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		2.0		2.7		2.8		3.2		0.9		2.8		0.0		0.0		0.0		0.0		14.4
TOTAL PROCUREMENT		4.2		3.3		5.7		5.8		1.7		4.9		0.0		0.0		0.0		0.0		25.6

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 3 Months

CONTRACT DATES: FY 1999: Nov-98 FY 2000: Nov-99 FY 2001: Nov-00

DELIVERY DATES: FY 1999: Mar-99 FY 2000: Feb-00 FY 2001: Feb-01

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT	45	1	18	17	17	6	18	18	17		5	5	5		15	15	9
OUTPUT	45	1		18	17	17	6	18	18	17		5	5	5		15	15

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT														211
OUTPUT	9													211

Notes/Comments

Exhibit P-3A, Budget Item Justification
Unclassified
Classification

February-00

MODIFICATION TITLE: Satellite Communications Systems 321500
COST CODE NN112
MODELS OF SYSTEMS AFFECTED: **Comm. Satellite--C band/CWSP**
DESCRIPTION/JUSTIFICATION: Provides C and Ku wide band SATCOM terminals supporting capabilities such as Automated Digital Multiplexing System (ADMS). Telemedicine, official and unofficial phones, public affairs officer information, imagery, Meteorology and Oceanography Command (METOC).

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	8	21.1	5	7.2	9	9.9	11	9.0	4	3.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	37	50.8
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	8	9.8	0	4.0	5	5.3	16	8.9	8	6.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	37	34.7
PRIOR YR EQUIP	8	9.8																			8	9.8
FY 98 EQUIP			0	4.0	5	5.3															5	9.3
FY 99 EQUIP							9	5.0													9	5.0
FY 00 EQUIP							7	3.9	4	3.2											11	7.1
FY 01 EQUIP									4	3.5											4	3.5
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		9.8		4.0		5.3		8.9		6.7		0.0		0.0		0.0		0.0		0.0		34.7
TOTAL PROCUREMENT		30.9		11.2		15.2		17.9		10.3		0.0		0.0		0.0		0.0		0.0		85.5

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 9 Months

CONTRACT DATES: FY 1999: Feb-99 FY 2000: Oct-99 FY 2001: Oct-00

DELIVERY DATES: FY 1999: Nov-99 FY 2000: Jun-00 FY 2001: Jul-01

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT	8		5			6	3	1	6	4			4				
OUTPUT	8			5			6	3	1	6	4			4			

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT														37
OUTPUT														37

Notes/Comments
FY00 procurement and installations include 8 upgrades.
FY01 procurements and installations include 1 upgrade.
FY 98 C Band install cost includes $900K preinstallation costs.

February-00

MODIFICATION TITLE: Satellite Communications Systems 321500
COST CODE NN112
MODELS OF SYSTEMS AFFECTED: **Comm. Satellite--INMARSAT B HSD Kits**
DESCRIPTION/JUSTIFICATION: Provides upgrade to the INMARSAT B terminals giving ships the capability for simultaneous official phones, STU III, debit card crew phones, internet, e-mail, PC to PC, video teleconferencing and facsimile over a 64 kpbs channel.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	0	0.0	29	2.7	52	1.6	51	1.7	10	0.3	17	0.6	0	0.0	0	0.0	0	0.0	0	0.0	159	6.9
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.0	29	1.7	52	2.4	51	2.3	10	0.5	17	1.1	0	0.0	0	0.0	0	0.0	0	0.0	159	8.0
PRIOR YR EQUIP																					0	0.0
FY 98 EQUIP			29	1.7																	29	1.7
FY 99 EQUIP					52	2.4															52	2.4
FY 00 EQUIP							51	2.3													51	2.3
FY 01 EQUIP									10	0.5											10	0.5
FY 02 EQUIP											17	1.1									17	1.1
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		0.0		1.7		2.4		2.3		0.5		1.1		0.0		0.0		0.0		0.0		8.0
TOTAL PROCUREMENT		0.0		4.4		4.0		4.0		0.8		1.7		0.0		0.0		0.0		0.0		14.9

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 3 Months

CONTRACT DATES: FY 1999: Nov-98 FY 2000: Nov-99 FY 2001: Nov-00

DELIVERY DATES: FY 1999: Mar-99 FY 2000: Feb-00 FY 2001: Feb-01

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT	29		17	17	18		17	17	17		5	5			6	6	5
OUTPUT	29			17	17	18		17	17	17		5	5				6	6

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT														159
OUTPUT	5													159

Notes/Comments

Exhibit P-3A, Budget Item Justification
Unclassified
Classification

February-00

MODIFICATION TITLE: Satellite Communications Systems 321500
COST CODE NN117
MODELS OF SYSTEMS AFFECTED: **Global Broadcast System--Single (Receive Suite)**
DESCRIPTION/JUSTIFICATION: GBS with **single** antenna configuration: Commercial off the shelf (COTS) receive only satellite communications terminals with a single antenna, modems and ancillary hardware and processing equipment.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	0	1.9	4	7.4	6	3.7	5	2.9	0	0.0	14	4.8	14	4.8	19	6.4	1	0.7	126	50.5	189	83.1
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.6	0	0.9	4	3.5	6	1.2	5	1.0	6	1.2	14	2.8	16	3.2	12	2.4	126	28.9	189	45.7
PRIOR YR EQUIP		0.6																			0	0.6
FY 98 EQUIP				0.9	4	3.5															4	4.4
FY 99 EQUIP							6	1.2													6	1.2
FY 00 EQUIP									5	1.0											5	1.0
FY 01 EQUIP																					0	0.0
FY 02 EQUIP											6	1.2	8	1.6							14	2.8
FY 03 EQUIP													6	1.2	8	1.6					14	2.8
FY 04 EQUIP															8	1.6	11	2.2			19	3.8
FY 05 EQUIP																	1	0.2			1	0.2
FY TC EQUIP																			126	28.9	126	28.9
TOTAL INSTALLATION COST		0.6		0.9		3.5		1.2		1.0		1.2		2.8		3.2		2.4		28.9		45.7
TOTAL PROCUREMENT		2.5		8.3		7.2		4.1		1.0		6.0		7.6		9.6		3.1		79.4		128.8

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 8 Months

CONTRACT DATES: FY 1999: Oct-99 FY 2000: Aug-00 FY 2001:

DELIVERY DATES: FY 1999: May-00 FY 2000: Mar-01 FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT		1	1	1	1			3	3		1	3	1			3	3
OUTPUT			1	1	1	1			3	3		1	3	1			3

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT	4	4	3	3	4	4	4	4	5	5	2		126	189
OUTPUT	3	4	4	3	3	4	4	4	4	5	5	2	126	189

Notes/Comments

February-00

MODIFICATION TITLE: Satellite Communications Systems 321500
COST CODE NN117
MODELS OF SYSTEMS AFFECTED: **Global Broadcast System--Dual (receive Suite)**
DESCRIPTION/JUSTIFICATION: GBS with **dual** antenna configuration: Commercial off the shelf (COTS) receive only satellite communications terminals with a single antenna, modems and ancillary hardware and processing equipment.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	0	1.7	0	0.0	4	4.3	7	4.4	0	0.0	8	3.3	8	3.3	8	4.4	0	0.0	18	9.7	53	31.1
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.4	0	0.0	0	0.0	4	1.1	5	1.5	6	1.8	8	2.4	8	2.4	4	1.2	18	5.5	53	16.3
PRIOR YR EQUIP		0.4																			0	0.4
FY 98 EQUIP																					0	0.0
FY 99 EQUIP							4	1.1													4	1.1
FY 00 EQUIP									5	1.5	2	0.6									7	2.1
FY 01 EQUIP																					0	0.0
FY 02 EQUIP											4	1.2	4	1.2							8	2.4
FY 03 EQUIP													4	1.2	4	1.2					8	2.4
FY 04 EQUIP															4	1.2	4	1.2			8	2.4
FY 05 EQUIP																					0	0.0
FY TC EQUIP																			18	5.5	18	5.5
TOTAL INSTALLATION COST		0.4		0.0		0.0		1.1		1.5		1.8		2.4		2.4		1.2		5.5		16.3
TOTAL PROCUREMENT		2.1		0.0		4.3		5.5		1.5		5.1		5.7		6.8		1.2		15.2		47.4

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 8 Months

CONTRACT DATES: FY 1999: Oct-99 FY 2000: Aug-00 FY 2001:

DELIVERY DATES: FY 1999: May-00 FY 2000: Mar-01 FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT								2	2		1	2	2	2		2	2
OUTPUT									2	2		1	2	2	2		2

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT	2	2	2	2	2	2	2	2	2	2			18	53
OUTPUT	2	2	2	2	2	2	2	2	2	2	2		18	53

Notes/Comments
Unit cost varies due to quantity discounts afforded by other Services buys per year.
Additionally, unit cost reflects variances in the composite quantities.

February-00

MODIFICATION TITLE: Satellite Communications Systems 321500
COST CODE NN117
MODELS OF SYSTEMS AFFECTED: **Global Broadcast System--Subs (Receive Suite)**
DESCRIPTION/JUSTIFICATION: GBS with **submarine** configuration: Commercial off the shelf (COTS) receive only satellite communications terminals with a SubHdr antenna modification, modems and ancillary hardware and processing equipment.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment					6	2.2	4	1.5	0	0.0	13	2.5	18	3.5	0	0.0	0	0.0	0	0.0	41	9.7
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.0	0	0.0	0	0.0	6	0.7	4	0.5	13	1.6	18	2.2	0	0.0	0	0.0	0	0.0	41	5.0
PRIOR YR EQUIP																					0	0.0
FY 98 EQUIP																					0	0.0
FY 99 EQUIP							6	0.7													6	0.7
FY 00 EQUIP									4	0.5											4	0.5
FY 01 EQUIP																					0	0.0
FY 02 EQUIP											13	1.6	18	2.2							31	3.8
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.7		0.5		1.6		2.2		0.0		0.0		0.0		5.0
TOTAL PROCUREMENT		0.0		0.0		2.2		2.2		0.5		4.1		5.7		0.0		0.0		0.0		14.7

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 6 Months

CONTRACT DATES: FY 1999: Jan-00 FY 2000: Aug-00 FY 2001:

DELIVERY DATES: FY 1999: Jun-00 FY 2000: Jan-01 FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT								2	4		2	2				6	7
OUTPUT								2	4		2	2				6	7

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT			9	9										41
OUTPUT			9	9										41

Notes/Comments
Unit cost varies due to quantity discounts afforded by other Services buys per year.
Unit cost reflects variances in the composite quantities.

February-00

MODIFICATION TITLE: Satellite Communications Systems 321500
COST CODE NP117/NN117
MODELS OF SYSTEMS AFFECTED: **Global Broadcast Service**
DESCRIPTION/JUSTIFICATION: Global Broadcast Service, commercial off-the-shelf (COTS) receive only satellite communications terminals with antennas, modems, and ancillary hardware and processing equipment
Navy portion of joint services program to deliver continuous, high speed, one way information flow of high volume data to ship and shore units and special operations.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	4	3.1	0	0.0	7	1.3	5	0.8	0	0.0	10	1.5	2	0.4	4	0.6	5	0.9	12	3.5	49	12.1
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.4	2	0.2	2	0.3	7	0.7	5	0.5	5	0.5	7	0.7	4	0.4	5	0.1	12	2.5	49	6.3
PRIOR YR EQUIP		0.4	2	0.2	2	0.3															4	0.9
FY 98 EQUIP																					0	0.0
FY 99 EQUIP							7	0.7													7	0.7
FY 00 EQUIP									5	0.5											5	0.5
FY 01 EQUIP																					0	0.0
FY 02 EQUIP											5	0.5	5	0.5							10	1.0
FY 03 EQUIP													2	0.2							2	0.2
FY 04 EQUIP															4	0.4					4	0.4
FY 05 EQUIP																	5	0.1			5	0.1
FY TC EQUIP																			12	2.5	12	2.5
TOTAL INSTALLATION COST		0.4		0.2		0.3		0.7		0.5		0.5		0.7		0.4		0.1		2.5		6.3
TOTAL PROCUREMENT		3.5		0.2		1.6		1.5		0.5		2.0		1.1		1.0		1.0		6.0		18.4

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 1 Month PRODUCTION LEADTIME: 8 Months

CONTRACT DATES: FY 1999: Nov-99 FY 2000: Aug-00 FY 2001:

DELIVERY DATES: FY 1999: Jun-00 FY 2000: Mar-01 FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT	2	1	1					2	5		1	3	1			2	3
OUTPUT	2		1	1					2	5		1	3	1			2

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT	3	2	1	1			2	2			2	3	12	49
OUTPUT	3	3	2	1	1		2	2			2	3	12	49

Notes/Comments

February-00

MODIFICATION TITLE: Satellite Communications Systems 321500
COST CODE NP118/NN118
MODELS OF SYSTEMS AFFECTED: **JMINI Control System - NMS**
DESCRIPTION/JUSTIFICATION: The Network Management System (NMS) component of the JMINI Control System provides communications resource planning and management via secure WAN connections between the control stations and remote user. Will provide dynamic centralized control of joint operable 5 KHz and 25 KHz ultra high frequency military satellite communications.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	0	0.0	0	1.4	2	12.3	4	15.6	1	1.5	4	3.7	3	3.2	0	0.0	0	0.0	0	0.0	14	37.7
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.0	0	0.0	0	0.5	6	0.4	1	0.2	4	0.3	3	0.2	0	0.0	0	0.0	0	0.0	14	1.6
PRIOR YR EQUIP																					0	0.0
FY 98 EQUIP																					0	0.0
FY 99 EQUIP					0	0.5	2	0.1													2	0.6
FY 00 EQUIP							4	0.3													4	0.3
FY 01 EQUIP									1	0.2											1	0.2
FY 02 EQUIP											4	0.3									4	0.3
FY 03 EQUIP													3	0.2							3	0.2
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.5		0.4		0.2		0.3		0.2		0.0		0.0		0.0		1.6
TOTAL PROCUREMENT		0.0		1.4		12.8		16.0		1.7		4.0		3.4		0.0		0.0		0.0		39.3

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 1 Month PRODUCTION LEADTIME: 9 Months

CONTRACT DATES: FY 1999: Oct-98 FY 2000: Oct-99 FY 2001: Oct-00

DELIVERY DATES: FY 1999: Jul-99 FY 2000: Jul-00 FY 2001: Jul-01

INSTALLATION SCHEDULE:	PY	FY 99 1	2	3	4	FY 00 1	2	3	4	FY 01 1	2	3	4	FY 02 1	2	3	4
INPUT						2			4				1				4
OUTPUT							2		4				1				4

INSTALLATION SCHEDULE:	FY 03 1	2	3	4	FY 04 1	2	3	4	FY 05 1	2	3	4	TC	TOTAL
INPUT				3										14
OUTPUT				3										14

Notes/Comments

February-00

MODIFICATION TITLE: Satellite Communications Systems 321500
COST CODE NP118
MODELS OF SYSTEMS AFFECTED: **JMINI Control System - DMR**
DESCRIPTION/JUSTIFICATION: Channel controller hardware (radio/modem/antenna) to meet ORD-mandated satellite channel access requirement. Will provide dynamic centralized control of joint operable 5 KHz and 25 KHz ultra high frequency military satellite communications

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total		
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	
RDT&E																							
PROCUREMENT:																							
Kit Quantity																							
Installation Kits																							
Installation Kits Nonrecurring																							
Equipment	0	0.0	0	0.0	260	31.7	100	11.5	0	0.0	96	8.9	168	14.0	0	0.0	8	0.6	28	2.3	660	69.0	
Equipment Nonrecurring																							
Engineering Change Orders																							
Data																							
Training Equipment																							
Support Equipment																							
Other																							
Interm Contractor Support																							
Installation of Hardware*	0	0.0	0	0.0	0	0.9	40	0.9	320	6.0	96	1.8	168	3.3	0	0.0	8	0.2	28	0.6	660	13.7	
PRIOR YR EQUIP																					0	0.0	
FY 98 EQUIP																					0	0.0	
FY 99 EQUIP					0	0.9	40	0.9	220	4.0											260	5.8	1/
FY 00 EQUIP									100	2.0											100	2.0	
FY 01 EQUIP																					0	0.0	
FY 02 EQUIP											96	1.8									96	1.8	
FY 03 EQUIP													168	3.3							168	3.3	
FY 04 EQUIP																					0	0.0	
FY 05 EQUIP																	8	0.2			8	0.2	
FY TC EQUIP																			28	0.6	28	0.6	
TOTAL INSTALLATION COST		0.0		0.0		0.9		0.9		6.0		1.8		3.3		0.0		0.2		0.6		13.7	
TOTAL PROCUREMENT		0.0		0.0		32.6		12.4		6.0		10.7		17.3		0.0		0.8		2.9		82.7	

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 1 Month PRODUCTION LEADTIME: 9 Months

CONTRACT DATES: FY 1999: Jan-00 FY 2000: Aug-00 FY 2001: Oct-00

DELIVERY DATES: FY 1999: Sep-00 FY 2000: May-01 FY 2001: Jun-00

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4	FY 02 1	FY 02 2	FY 02 3	FY 02 4
INPUT									40	120	100	50	50			50	46
OUTPUT									40	120	100	50	50			50	46

INSTALLATION SCHEDULE:	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT			84	84							8		28	660
OUTPUT			84	84							8		28	660

Notes/Comments
1/ FY99 Installation funds spent for FY00 and out installation preparation work.

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February 2000

APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: Satellite Communications Systems 321500

SUBHEAD NO.: 52NR

COST CODE	ITEM/MANUFACTURER	FY	SERV	PROC QTY	ACCEP PRIOR TO 1-Oct	BAL DUE AS OF 1-Oct	FISCAL YEAR 99 / CALENDAR YEAR 98 OCT	NOV	DEC	FISCAL YEAR 99 / CALENDAR YEAR 99 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	FISCAL YEAR 00 / CALENDAR YEAR 00 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	FISCAL YEAR 01 / CALENDAR YEAR 01 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
NN101	MINI DAMA	99		14		14										A											14															
	MINI DAMA Field Change Upgrade Ki			150		150																		A										50	50	50							
NN103	SCI ADNS Build One/Carry On Build On	99		25		25			A			11			14																											
		00		2		2															A			1			1															
NN103	SCI ADNS Build Two & Three /Carry On Build Two	99																																								
		00		23		23															A			8	2	3	3	2	2	3												
		01		20		20																											A			7	2	2	3	2	2	2

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

NAVMAT FORM 7110/4 (REVISED 11/77)

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February 2000

APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: Satellite Communications Systems 321500

SUBHEAD NO.: 52NR

COST CODE	ITEM/MANUFACTURER	FY	SERV	PROC QTY	ACCEPT PRIOR TO 1-Oct	BAL DUE AS OF 1-Oct	FISCAL YEAR 99 / CALENDAR YEAR 98 OCT	NOV	DEC	FISCAL YEAR 99 / CALENDAR YEAR 99 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	FISCAL YEAR 00 / CALENDAR YEAR 00 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	FISCAL YEAR 01 / CALENDAR YEAR 01 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
NP103	SI-COMMS - SCI ADNS Build 2 and Build 3	99		4		4			A			2			2																											
		00		4		4															A			1		1	1		1													
NN103	SI-COMMS - SCI ADNS Build 2 and Build 3	01		6		6																											A			2		1	1		1	1

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

NAVMAT FORM 7110/4 (REVISED 11/77)

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February 2000

APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: Satellite Communications Systems 321500

SUBHEAD NO.: 52NR

COST CODE	ITEM/MANUFACTURER	FY	SERV	PROC QTY	ACCEP PRIOR TO 1-Oct	BAL DUE AS OF 1-Oct	FISCAL YEAR 99 / CALENDAR YEAR 98			FISCAL YEAR 99 / CALENDAR YEAR 99										FISCAL YEAR 00 / CALENDAR YEAR 99			FISCAL YEAR 00 / CALENDAR YEAR 00										FISCAL YEAR 01 / CALENDAR YEAR 00			FISCAL YEAR 01 / CALENDAR YEAR 01									
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
NN105	5/25 KHz SATCOM--AN/PSC-5 EMUT (Spit Fire)	99		14		14											A						14																		
NN105	5/25 KHz SATCOM--OE-82 Mod Kits	99		14		14										A					14																					
		00		16		16															A					16																
NN105	5/25 KHz SATCOM--UHF Modems	99		57		57			A						32				25																							

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

NAVMAT FORM 7110/4 (REVISED 11/77)

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February 2000

APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: Satellite Communications Systems 321500

SUBHEAD NO.: 52NR

COST CODE	ITEM/MANUFACTURER	FY	SERV	PROC QTY	ACCEP PRIOR TO 1-Oct	BAL DUE AS OF 1-Oct	FISCAL YEAR 99 / CALENDAR YEAR 98			CALENDAR YEAR 99										CALENDAR YEAR 00										FISCAL YEAR 01 / CALENDAR YEAR 01									
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
NN105	5/25 KHz SATCOM--DMR	99		56		56																A							56											
		00		172		172																						A								48	52	52	20	
NN106	SHF Terminals--AN/WSC-6(V)5 Mod Kits	99		2		2				A												2																			
		00		4		4													A											1			1				1			
		01		12		12																								A											
NP108	SHF Terminals --AN/WSC-6(V)5 Mod Kit	99		1		1				A												1																			
		00		1		1													A											1											
NN106	SHF Terminals--7 ft Antenna	99		4		4				A						1			2			1																			

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

NAVMAT FORM 7110/4 (REVISED 11/77)

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February 2000

APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: Satellite Communications Systems 321500

SUBHEAD NO.: 52NR

COST CODE	ITEM/MANUFACTURER	FY	SERV	PROC QTY	ACCEPT PRIOR TO 1-Oct	BAL DUE AS OF 1-Oct	FISCAL YEAR 99												FISCAL YEAR 00												FISCAL YEAR 01											
							98			CALENDAR YEAR 99													CALENDAR YEAR 00												CALENDAR YEAR 01								
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
NN106	SHF Terminal--AN/WSC-6(V)7 Ship	99		2		2				A												1			1															
		00		15		15													A											2	1	1	2	1	1	2	1	1	1	1	1
		01		10		10																								A											
NP108	SHF Terminals --AN/WSC-6(V)7 Shore	99		1		1				A												1																			
		00		1		1													A											1											
NN106	SHF Terminals--AN/WSC-6(V)X Ship	99		0		0																																		
		00		1		1															A								1												
		01		11		11																								A								2	3	3
NP108	SHF Terminals --Shore Modems Shore	99		44		44	A									16	16	12																							
NN106	SHF Terminals --Shore Modems Shore	01		18		18																												A								
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP

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

NAVMAT FORM 7110/4 (REVISED 11/77)

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February 2000

APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: Satellite Communications Systems 321500

SUBHEAD NO.: 52NR

COST CODE	ITEM/MANUFACTURER	FY	SERV	PROC QTY	ACCEP PRIOR TO 1-Oct	BAL DUE AS OF 1-Oct	FISCAL YEAR 99												FISCAL YEAR 00												FISCAL YEAR 01											
							98			CALENDAR YEAR 99													CALENDAR YEAR 00												CALENDAR YEAR 01								
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
NN107	EHF Terminals--AN/USC-38(V) Ship	99		Various																																				
		00		60		60																A													7	10	10	10	10	10
		01		50		50																									A										
NP109	EHF Terminals --AN/USC-38(V)3 Shore	99		13		13												A																	3	3	3	3	1		
		00		14		14																A							1	1					1	1	2	2	3	3
NN107	EHF Terminals --AN/USC-38(V)3 Shore	01		4		4																									A										
NN107	EHF Terminals--NECC Ship	99		35		35			A					7	7	7	7	7																							
		00		43		43																A					6	6	7	7	7	7	3						
		01		62		62																									A					10	10	10	11	11	10
NP109	EHF Terminals --NECC - Shore	99		7		7			A					1	1	1	2	2																							
		00		9		9																A					4	5											
NN107	EHF Terminals --NECC - Shore	01		19		19																									A					3	3	4	4	5	
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP

ITEM	Manufacturer's Name and Location											

NAVMAT FORM 7110/4 (REVISED 11/77)

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CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February 2000

APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: Satellite Communications Systems 321500

SUBHEAD NO.: 52NR

COST CODE	ITEM/MANUFACTURER	FY	SERV	PROC QTY	ACCEP PRIOR TO 1-Oct	BAL DUE AS OF 1-Oct	FISCAL YEAR 99																FISCAL YEAR 00												FISCAL YEAR 01											
							98			CALENDAR YEAR 99													CALENDAR YEAR 00												CALENDAR YEAR 01											
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
NN107	EHF Terminals--MDR - Ship	99		31		31						A																6	5	5	5	5	5									
NP109	EHF Terminals --MDR Appliques - Shore	99		5		5						A																3	2													
NN112	Comm. Satellite--INMARSAT M	99		4		4				A		2	2																													
		00		8		8																A		2	2	2	2															
NN112	Comm.Satellite--INMARSAT B	99		58		58		A				18	6	6	5	6	6	5	2	2	2																					
		00		53		53														A			9	9	6	6	6	6	6	5													
		01		15		15																									A			5	5	5							

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

NAVMAT FORM 7110/4 (REVISED 11/77)

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February 2000

APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: Satellite Communications Systems 321500

SUBHEAD NO.: 52NR

COST CODE	ITEM/MANUFACTURER	FY	SERV	PROC QTY	ACCEP PRIOR TO 1-Oct	BAL DUE AS OF 1-Oct	FISCAL YEAR 99																FISCAL YEAR 00												FISCAL YEAR 01											
							98			CALENDAR YEAR 99													CALENDAR YEAR 00												CALENDAR YEAR 01											
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
NN112	Comm. Satellite--C Band/CWSP	99		9		9					A									3	3	3																				
		00		11		11													A								1	2	2	2	2	2										
		01		4		4																									A									2	2	
NN112	Comm. Satellite--INMARSAT B HSD Kits	99		52		52		A				17	6	6	5	6	6	6																								
		00		51		51														A			9	8	6	6	5	6	6	5											
		01		10		10																										A					5	5				
NN117	Global Broadcast System--Single (Receive Suite	99		6		6													A							1	2	1	1	1												
		00		5		5																							A								1	1	1	1	1		

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

NAVMAT FORM 7110/4 (REVISED 11/77)

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February 2000

APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: Satellite Communications Systems 321500

SUBHEAD NO.: 52NR

COST CODE	ITEM/MANUFACTURER	FY	SERV	PROC QTY	ACCEP PRIOR TO 1-Oct	BAL DUE AS OF 1-Oct	FISCAL YEAR 99												FISCAL YEAR 00												FISCAL YEAR 01								
							98			CALENDAR YEAR 99														CALENDAR YEAR 00												CALENDAR YEAR 01								
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
NN117	Global Broadcast System--Dual (Recei	99		4		4													A							1	1	1	1											
		00		7		7																						A						1	1	1	1	1	1	1
NN117	Global Broadcast System--Subs(Receiv	99		6		6																A				2	2	1	1											
		00		4		4																						A						1	1	1	1			
NP117	Global Broadcast Service - Shore	99		7		7														A						2	2	2	1											
		00		5		5																						A						1	1	1	1	1		

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

NAVMAT FORM 7110/4 (REVISED 11/77)

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February 2000

APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: Satellite Communications Systems 321500

SUBHEAD NO.: 52NR

COST CODE	ITEM/MANUFACTURER	FY	SERV	PROC QTY	ACCEPT PRIOR TO 1-Oct	BAL DUE AS OF 1-Oct	FISCAL YEAR 99																		FISCAL YEAR 00												FISCAL YEAR 01											
							98			CALENDAR YEAR 99															CALENDAR YEAR 00												CALENDAR YEAR 01											
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
NP118	JMINI Control System - NMS	99		2		2	A									1			1																																
		00		4		4													A									4																						
		01		1		1																								A											1										
NP118	JMINI Control System - DMR	99		260		260																A							40	72	72	76																		
		00		100		100																						A									52		48										

ITEM	Manufacturer's Name and Location										

NAVMAT FORM 7110/4 (REVISED 11/77)

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE February 2000

APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: Satellite Communications Systems 321500

SUBHEAD NO.: 52NR

COST CODE	ITEM/MANUFACTURER/ PROCUREMENTY YEAR	FISCAL YEAR	CARRY OVER	FISCAL YEAR 02												FISCAL YEAR 03												FISCAL YEAR 04												LATER
				CY01			CALENDAR YEAR 02												CALENDAR YEAR 03												CALENDAR YEAR 04											
				OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
NN106	SHF Terminals--AN/WSC-6(V)5 Mod	99	0																																			0
		00	0																																			0
		01	12	1	1	1	1	1	1	1	1	1	1	1	1																							0
NN106	SHF Terminals --AN/WSC-6(V)7	99	0																																			0
		00	0																																			0
		01	10	1	1		1	1	1	1	1	1	1	1																							0
NN106	SHF Terminals--AN/WSC-6(V)X	99	0																																			0
		00	0																																			0
		01	3	2	1																																	0
NP108	SHF Terminals --Shore Modems	99	0																																			0
		01	18		3	2	1	3	1	1	2	1	1	2	1																							0

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

NAVMAT FORM 7110/4 (REVISED 11/77)

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE February 2000

APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: Satellite Communications Systems 321500

SUBHEAD NO.: 52NR

COST CODE	ITEM/MANUFACTURER/ PROCUREMENT YEAR	FISCAL YEAR	CARRY OVER	FISCAL YEAR 02													FISCAL YEAR 03												FISCAL YEAR 04										LATER
				CY01			CALENDAR YEAR 02													CALENDAR YEAR 03												CALENDAR YEAR 04										
				OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
NN107	EHF Terminals--AN/USC-38(V) Ship	99																																				0
		00	3	3																																		0
		01	50					5	6	6	7	7	7	7	5																								0
NP109	EHF Terminals --AN/USC-38(V)3 Shore	99	0																																			0
		00	0																																			0
NN107	EHF Terminals --AN/USC-38(V)3 Shore	01	4					1	1	1	1																												0

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

NAVMAT FORM 7110/4 (REVISED 11/77)

BUDGET ITEM JUSTIFICATION SHEET								DATE February 2000		
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					P-1 ITEM NOMENCLATURE SATCOM Shore Terminals (Space) 322000				SUBHEAD 52NP	
	PY	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY										
COST (in millions)	$132.7	$65.1	$65.3							

Note: SATCOM Shore Terminals transfers to the SATCOM Systems budget (BLI 3215) in FY 01. Detail budget justification material for PY through FY00 is included in the SATCOM Systems budget (BLI 3215) for budget comparability.

PROGRAM COVERAGE: The Satellite Communications (SATCOM) Shore Terminals P-1 line provides funds for procurement of shore based equipment for shore-to-shore and shore-to-ship tactical communications via earth orbiting relay satellites operating in the Ultra High Frequency (UHF), Super High Frequency (SHF), and Extremely High Frequency (EHF) bands. This includes Radio Frequency (RF) equipment and baseband equipment assembled and grouped into systems and subsystems structured to address specific Naval communications requirements. These systems provide processors and peripheral equipment that control the RF links for message traffic, direct data transfer and secure voice communications. They are selected and oriented by communications traffic levels, types of communications and operational missions. These shore terminals provide the satellite communications interface between the at-sea fleet and the shore establishment communications network and are an integral part of the Navy Satellite Communications Program.

JUSTIFICATION OF BUDGET YEAR REQUIREMENTS:

Special Intelligence Communications (SI COMMS): The shore terminal interface for Sensitive Compartmented Information (SCI)/Automated Digital Network System (ADNS)/Tactical Intelligence Information Exchange (TACINTEL II+) will use commercial off-the-shelf (COTS), Government off-the-shelf (GOTS), Non-developmental items (NDI) and existing systems to meet the requirements for SI COMMS. The SI COMMS and TACINTEL programs were combined into the SI COMMS architecture to replace the outdated TACINTEL system developed in the early 1970s. The equipment also began the realization of the ADNS architecture. FY00 funds will continue to procure the SCI ADNS equipment necessary to implement the IT-21 architecture to provide SI COMMS to the Fleet. SCI ADNS provides for a real-time exchange of Tactical SCI COMMS to afloat operational commanders. Impact of no shore SCI ADNS is that ships cannot attain their network services.

BUDGET ITEM JUSTIFICATION SHEET (Continuation)		DATE February 2000
APPROPRIATION/BUDGET ACTIVITY	**P-1 ITEM NOMENCLATURE**	**SUBHEAD**
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	SATCOM Shore Terminals (Space) 322000	52NP

SHF Terminals: This line provides SHF shore based equipment for high data rate communications with Fleet units via the Defense Satellite Communications Systems (DSCS). Shore based terminals have an operational requirement to support joint, theater and Navy unique command, control, communications, support and intelligence circuits for voice, data, video and imagery to the extent they are required on SHF platforms. FY01 - FY05 funds procure and install N-STEP/TELEPORT modems to provide shore side compatibility with SHF equipped ships and to support fleet and added Battle Group capacity requirements. Also procured is ancillary hardware for the Automated Digital Multiplexing System (ADMS). Under the submarine high data rate (SUB-HDR) program, the Navy is exploring the technical feasibility of DSCS support of wideband capabilities for attack submarines.

EHF Terminals: This program provides for the acquisition of the Navy's EHF Satellite Communications Program (NESP) terminals in four semi-concurrent phases. Phase I of the NESP program provides Low Data Rate (LDR) jam resistant, low probability of intercept EHF SATCOM terminals for submarines, surface ships, and shore stations in the electromagnetic threat environment projected into the next decade. This requirement is contained in the NESP NDCP dated Apr 89 and the JROC validated Milstar ORD of Jun 92. There is a requirement to procure a total of 43 operational shore terminals, four transportable terminals, thirteen SCAMPs (Several Channel Anti-jam Man Pack) to provide multi-channel portable communications, and ten trainers. This requirement was recently updated per the CNO ltr, Ser N631/8U556125 dated 11 Jun 98.

Phase II of the NESP program procures Navy EHF Communications Controllers (NECCs), as part of the ADNS strategy to provide for the exchange of computer-to-computer tactical communications over the survivable EHF satellite links. NECC provides for network management; multiplexing and channel sharing; resource management; communications management and planning; network control and monitoring; and communications protocols such as circuit switching and packet switching. NECC requirements are outlined in the NESP NDCP dated Apr 89 and must be fully fielded with deploying battle groups and shore sites to support tactical information exchange over EHF SATCOM.

Phase III of the NESP program provides for the procurement of Full Milstar LDR Operational Capabilities (FMLOC). FMLOC efforts include Agile Beam Management (ABM), Over-the-Air-Rekey (OTAR), and In-Band Control (IBC) capabilities required by the JROC validated Milstar ORD. Additionally, the Processor Upgrade Program (PUP) must be implemented to support the terminal throughput and memory requirements of the Phase III capabilities. All of these Phase III efforts will provide essential EHF operational communications capabilities with the current Milstar satellites. Similarly, IBCs will provide interoperable voice communications on all EHF satellites (Milstar, UHF Follow-On (UFO), and FLTSAT EHF Package (FEP)). Phase III also includes procurement of Interim Polar modification kits. An EHF polar communications capability is available using an EHF package on a classified host in the Molniya orbit. To use this polar capability, terminals will require minor modifications. In addition, shore gateways are necessary to provide connectivity from the Interim Polar satellite to other EHF satellite constellations.

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 appliqués will be procured and retrofitted into existing LDR terminals and the balance of the requirements will be procured as part of the Follow-On Terminal contract award of 20 Mar 98. Follow-on terminals will also have Phase III FMLOC capabilities incorporated into their baseline. The requirement for MDR is outlined in the JROC validated Milstar ORD and must be fielded by FY 99 in order to support the launch schedule of the first Milstar II satellite. By OPNAV paper, Ser N631D/703-693-0024 dated 16 September, the Program Office was directed to accelerate the MDR upgrade program to meet fleet needs. Prior to receiving the MDR appliqué, existing NESP terminals must have Phase III upgrades due to the processing throughput and memory requirements of MDR.

FY 99 funds will be used to continue procurement of MDR retrofit appliqués, SCAMPS, NECCs and FMLOC equipment. The procurement of MDR retrofit appliques, NECCs, FMLOC, will continue in FY00 and FY01. FY 00 funds will also be used to begin procurement of Follow-On Terminals and continue into FY01.

BUDGET ITEM JUSTIFICATION SHEET (Continuation)		DATE February 2000
APPROPRIATION/BUDGET ACTIVITY	**P-1 ITEM NOMENCLATURE**	**SUBHEAD**
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	SATCOM Shore Terminals (Space) 322000	52NP

Global Broadcast Service: This is the Navy shore portion of the joint program with the Air Force as Executive Service. The GBS will augment other Military Satellite Communications (MILSATCOM) systems and provide a continuous , high speed , one way information flow of high volume data to units ashore, afloat or special operations. GBS will support routine operations, training and military exercises, special activities, crises, situational awareness, weapons targeting, reconnaissance and the transition to and conduct of opposed operations short of nuclear war. GBS shore terminals will provide the capability of quick dissemination of large information products to various Navy fixed sites and small combat and combat support elements. FY00 and FY01 continues procurement of shore site terminals at NCTAMS/MOC/MAC/MICFAC, CINC, SPAWAR and other Navy locations.. In the shore GBS terminal, components will be procured from the GBS Joint Program Office (Air Force) contract and include the GBS antenna and receiver, and transportable terminals. A Mission Need Statement for GBS was signed, 3 AUG 1995, and a Joint Operational Requirements Document (JORD) was signed 7 April 1997. For shore procurements, antennas and ancillary equipment such as Asynchronous Transfer Mode (ATM) in-line encryptors will be procured.

JMINI Control System: The Joint ultra high frequency (UHF) Military Satellite Communications Network Integrated Control System (JMINI) is a joint interest program with the Navy designated as the lead service as directed by the Military Communications Electronics Board (MCEB). The JMINI Control System will provide dynamic centralized control of joint 5-kHz and 25-kHz UHF military satellite communications (MILSATCOM) voice and data resources (channels and Time Division Multiple Access (TDMA) time slots) via a globally integrated system of four control stations to be located at each of the three Naval Computer and Telecommunications Area Master Station (NCTAMS) sites plus Naval Computer and Telecommunications Station (NCTS) Guam. The globally integrated system consists of two major subsystems. The first subsystem provides communications resource planning and management via secure Wide Area Network (WAN) connections between the control stations and remote users and is known as the Network Management System (NMS). A total of 14 NMS units are required, one at each control station plus ten remote units to be installed at ORD-defined locations. The second subsystem provides the RF connectivity (modems, radios, antennas) between the NMS and the UHF MILSATCOM user terminals worldwide and is known as the Channel Controller. There are 156 channel controllers required per control station. Funds in FY99 begin procurement of the Digital Modular Radio (DMR), which serves as the JMINI Control System Channel Controller and procures the first two control station NMS units. Funds in FY00 continue procurement of the DMR channel controller hardware and the other two control station NMS units and begin installation of the system. Funds in FY01 continue procurement and installation of the channel controller hardware for the four control station plus begin procurement of the remote NMS units.

INSTALLATION AGENT: Various

BUDGET ITEM JUSTIFICATION SHEET

DATE February 2000

APPROPRIATION/BUDGET ACTIVITY
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE:
Joint Communications Support Element (JCSE) 330200

SUBHEAD
52L4

	PY	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	TO COMP	TOTAL
QUANTITY											
COST (in millions)		**$3.3**	**$3.7**	**$2.5**	**$3.3**	**$3.0**	**$3.1**	**$3.1**	**$0.0**	**Cont.**	**Cont.**

PROGRAM COVERAGE:
This line represents the Navy's share of the Joint Communications Support Element (JCSE) Program. This program is jointly funded by Army, Navy, Marine Corps and Air Force. Funds procure various communications equipment including the following: Ultra High Frequency (UHF) Satellite Communications (SATCOM) Demand Assigned Multiple Access (DAMA) radios, Extremely High Frequency (EHF) Secure, Mobile, Antijam, Reliable Tactical Terminals (SMART-T), Super High Frequency (SHF) Tri-band Advanced Range Extension Terminals (STAR-T), Deployable Global Command and Control System (D-GCCS), C4 Extension Package, Integrated Digital Network Exchange (IDNX) upgrades, Asynchronous Transfer Mode (ATM) interface, Defense Message System (DMS) Tactical, Joint Worldwide Intelligence Communication System (JWICS), Communications Security (COMSEC) Secure Telephone Equipment (STE) STU-IIIs and KY-68s, Joint Defense Information Infrastructure Control System-Deployable (JDIICS-D), Personal Communications Systems (PCS) to provide seamless integration of commercial cellular service to the tactical network, manpack multi-mode multi-band radios for the quick reaction element, 20 foot quick reaction satellite antenna replacements, cellular phone systems serving between 300-400 subscribers, Contract the Shelf (COTS) replacements for SB-3614AT small switchboards, next generation multi-media switches and high data rate tactical satellite terminals, assorted switches, transit cases, multiplexers and antennas.

JUSTIFICATION OF BUDGET YEAR REQUIREMENTS:
SPACE AND NAVAL WARFARE SYSTEMS COMMAND, SAN DIEGO, CA will act as JCSE's Executive Agent for distribution of funds.

INSTALLATION AGENT:
N/A

COST ANALYSIS														**DATE** February 2000		
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT														**SUBHEAD** 52L4		
			TOTAL COST IN THOUSANDS OF DOLLARS													
				PY				**FY 1999**			**FY 2000**			**FY 2001**		
COST CODE	**ELEMENT OF COST**	**ID CODE**	**QTY**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**
L4001	JCSE Modernization	A						1	3,328	3,328	1	3,682	3,682	1	2,460	2,460
L4002	Production Support	A								0			0			0
	TOTAL CONTROL						**0**			**3,328**			**3,682**			**2,460**

DD FORM 2446, JUN 86

COMNAVRESFOR P-40 Exibit		DATE	Feb-00
APPROPRIATION/BUDGET ACTIVITY Other Procurement, Navy/BA-2	**P-1 Nomenclature FY 2001 President's Budget** BLI: 3306		
	FY 1999	**FY 2000**	**FY 2001**
QUANTITY			
COST **(in thousands)**	**$5.1**	**$7.0**	**$1.8**

PROGRAM COVERAGE/JUSTIFICATION FOR BUDGET YEAR REQUIREMENTS: The Navy Standard Integrated Personnel System (NSIPS) is a special-interest, major Automated Information System (AIS) to collect, process and distribute personnel and pay data within Navy and to various corporate level activities within DoD. NSIPS will achieve the integration of active, reserve, and retired military personnel systems within the Navy, improve the military personnel tracking process, consolidate processes and systems within life cycle areas of military personnel, and the functionalilty of existing Navy source data collection requirements. NSIPS will operate on shore and afloat servers, client workstations, stand-alone workstations, portable stand-alone workstations, LANs and miscellaneous hardware and will maintain regional data warehouses as well as an all-Navy archival data warehouse.

Systems Management Center (SMC) Facility provides the means for end-to-end management of all information technology (IT) assets. The facility will provide for the correlation and reporting of information about software and hardware events to system administrative and other appropriate support personnel, and execute system corrections and policy changes issued by administrative and support personnel. SMC Facility provides a common repository of system information, a user interface that will be used to manage and monitor Department of Defense (DoD), Department of Navy (DoN), and Commander, Naval Reserve Force (COMNAVRESFOR) IT assets. The SMC Facility provides an oversight capability into workstation and remote server configuration, and a method for updating operating system and applications to maintain software currency and configuration standardization.

FY 1999 through 2001 NSIPS funding is for hardware and software at all reserve sites and PSDs supporting reserve sites.

FY 2000 SMC funding is for additional software and hardware (workstations, headquarters and field servers, etc.) to facilitate automated, distributed software delivery, asset management, and server performance monitoring to include NSIPS and COMNAVRESFOR field sites.

COMNAVRESFOR
P5 Exhibit

UNCLASSIFIED

Feb-00

Appropriation/Budget Activity
Other Procurement, Navy/BA-2

COST CODE	ELEMENT OF COST	IDENT CODE	FY 1999 TOTAL COST	FY 2000 TOTAL COST	FY 2001 TOTAL COST
VAR	NSIPS Equipment	3306	$5,130	$4,828	$1,785
	Systems Management Center			$2,202	
	TOTAL		$5,130	$7,030	$1,785

PROCUREMENT HISTORY AND PLANNING Feb-00

APPROPRIATION/BUDGET ACTIVITY OTHER PROCUREMENT, NAVY/BA-2 COMMUNICATIONS & ELECTRONIC EQUIPMENT							P-1 ITEM NOMENCLATURE NSIPS EQUIPMENT			
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
FY 1999										
NSIPS	Various	IDIQ	SPAWAR	Jul-99	Jan-00		$5,130	YES	NO	
FY 2000										
NSIPS	TBD	IDIQ	TBD	Jan-00	Jun-00		$4,828	YES	NO	
SMC	TBD	IDIQ	TBD	May-00	Jun-00		$2,202	YES	NO	
FY 2001										
NSIPS	TBD	IDIQ	TBD	Nov-00	Jan-01		$1,785	YES	NO	

CLASSIFICATION:

BUDGET ITEM JUSTIFICATION SHEET P-40										DATE: FEBRUARY 2000	
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY/BA2**						P-1 ITEM NOMENCLATURE **JEDMICS Joint Engineering Drawing Management Information and Control System**					
Program Element for Code B Items:						Other Related Program Elements					
	Prior Years	ID Code	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
QUANTITY			**3000**	**4000**							
COST (In Millions)	*		**$7.0**	**$16.9**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**		**$23.9**

*Note: All previous procurement budgets for this item were submitted from the Project Management Function from the Naval Supply Systems Command (NAVSUP). CNO letter dated 21 Dec 98 transferred the JEDMICS Project Office to the Naval Air Systems Command (NAVAIR) beginning 1 January 99.

JEDMICS is the Joint DoD system for permanently storing, managing and controlling digital engineering drawings and associated technical data. The JEDMICS System replaced labor intensive, inefficient manual and semi-automated technical repositiories with automated central respositiories 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. The JEDMICS system is deployed at 31 interoperable sites that service 600 locations worldwide. As of April 1999, JEDMICS manages and controls 72,000,000 engineering images and has 35,000 authorized users responsible for over 70,000 user sessions per month. On average 1,500,000 digital images are retrieved each month. The effective utilization of JEDMICS by the contractor and Government communities will require secure network access and adequate security for all data stored within the repositiory.

FY99 funding will be used to continue the effort begun in FY98 for the acquisition and installation of a JEDMICS WAN "Security Solution". The FY99 funds will also be used for the certification and integration of this solution.

FY00 funding will be used for two complimentary efforts. First, $12.0M will be used to expand the existing JEDMICS WAN "Security Solution" IAW Congressional direction. Three sites will receive enhanced "security solutions" including technical data packages defining access and additional Diamond NIC Secure Network Interface cards. The remaining $5.0M will be used to enhance the JEDMICS systems' interface making it accessible to all authorized web users using open interface standards compatible with commercial Product Data Management Tools and Product Data Mark-Up Language (PDML).

CLASSIFICATION:

BUDGET ITEM JUSTIFICATION SHEET FOR AGGREGATED ITEMS P-40a								DATE: FEBRUARY 2000			
APPROPRIATION/BUDGET ACTIVITY **OTHER PROCUREMENT, NAVY/ BA2**						P-1 ITEM NOMENCLATURE **JEDMICS**					
Procurement Items	ID Code	Prior Years	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total
Diamond NIC Secure Network Interface System	A										
Quantity			**3000**	**4000**							
Cost			**$3.3**	**$4.2**							
Installation and Support			**$2.2**	**$3.3**							
Certification			**$1.5**	**$4.4**							
JEDMICS PDM Compatible Open Interface				**$5.0**							
Total Funding			**$7.0**	**$16.9**							

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

IT SYSTEM COST ANALYSIS P-5	IT System JEDMICS	DATE: **FEBRUARY 2000**
APPROPRIATION/BUDGET ACTIVITY **Other Procurement, Navy, BA2 JEDMICS**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **JEDMICS/42JD**

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS									
			Prior Years	FY 1999			FY 2000			FY 2001		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
JE100	DiamondNIC Secure Network Interface System	A		3000	1	3,183	4,000	1	4,220			
JE100	Cryptek Engineering and Support Services					2,288			3,238			
JE100	Certification/Accreditation					1,500			4,475			
JE100	JEDMICS PDM Compatible Open Interface								4,972			
						6,971			**16,905**			

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

ITEM NO. 110 PAGE NO. 3

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	IT System JEDMICS	A. DATE FEBRUARY 2000

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Other Procurement, Navy BA2, JEDMICS	JEDMICS	42JD

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
DiamondNIC Secure Network Interface cards Related Installation and Support			NAVAIR,PaxR, Md	N/A	Sole Source/FFP/LOE	CRYPTEK Secure Communications,LLC Chantilly, Va	7/00	12/00	Yes	N/A
Certification			NAVSEA, Arlington,Va	N/A	Delivery Order/LOE	XETA International Corp,Indian Head, Md	7/00	12/00	N/A	N/A
JEDMICS PDM Compatible Open Interface			NAVICP Mechanicsburg	N/A	Deliver Order/GSA Schedules	Litton/PRC, Reston, VA & Lockheed Martin, Owego, NY	3/00	10/00	N/A	N/A

D. REMARKS

								DATE February 2000		
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT						**P-1 ITEM NOMENCLATURE** GCCS (#3350)			**SUBHEAD** 52NW	
	PY	**FY 1999**	**FY 2000**	**FY 2001**	**FY 2002**	**FY 2003**	**FY 2004**	**FY 2005**	**TO COMP**	**TOTAL**
QUANTITY										
COST (in millions)		**$2.5**								

NOTE: GCCS transfers to theGCCS-M BLI 2608 in FY00. Detail budget justification material for FY99 is included in the GCCS-M P-1 for budget comparability.

PROGRAM COVERAGE:

This line item contains equipment to support the Global Command and Control System (GCCS). GCCS is an operational multi-service/agency C3 program encompassing both strategic and tactical C3 functions. GCCS supports the National Command Authority (NCA) and the CINCs by providing Command, Control and Communication (C3) data processing capabilities, including status of forces and support requirements for use in national security decision making, force preparation and operational planning execution. The Navy's procurement provides equipment to support the GCCS Automated Data Processing Equipment (ADPE) configuration at USACOM , USPACOM, CINCLANTFLT, CINCPACFLT, CNO/NCC, CINCUSNAVEUR, NAVCENTCOM, US FORCES JAPAN, and their remote user sites.

JUSTIFICATION OF BUDGET YEAR REQUIREMENTS:

All procurements will directly support Navy GCCS and is in accordance with Joint Staff direction. GCCS consists of standard hardware, standard software, and service/site unique software. GCCS is an open systems client-server environment using COTS and NDI software and hardware and service/site unique software. Procurements will include Intelligent Workstations to replace obsolete terminals, Servers, Local Area Network (LAN) hardware and software and communications equipment.

INSTALLATION DATA: All equipment is scheduled for installation at Navy supported GCCS shore sites.

FY 99 funds provided Intelligent Workstations, Servers LAN hardware and software, communications equipment, as well as Non-FMP installations for equipment installations.

BUDGET ITEM JUSTIFICATION SHEET								DATE	February 2000
APPROPRIATION/BUDGET ACTIVITY OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT					P-1 ITEM NOMENCLATURE 336800 NAVAL SHORE COMMUNICATIONS			SUBHEAD 52D6	
	PY	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY										
COST (in millions)		$105.8	$118.4	$176.1	$120.8	$151.6	$155.0	$198.3	Continuing	Continuing

PROGRAM COVERAGE: The Naval Shore Communications program procures and installs communications equipment at shore stations. The equipment upgrades and/or replaces existing systems that are inadequate in mission performance due to obsolescence or cost-prohibitive maintenance. New equipment is predominately non-developmental items (NDI)/ commercial off the shelf (COTS) and provides maximum automated capabilities to accommodate remote control systems from unmanned or minimally manned locations.

(1) Information Exchange Systems (D6001): The purpose of the information exchange systems is to provide a transparent, completely automated, interoperable, and integrated shore communications environment which will expedite an orderly transition to Global Grid. Information exchange systems will result in increased throughput via faster system processing speeds and more capable end terminal devices. Additionally, Information Exchange Systems will accomplish more efficient upgrades through the use of modularity and backward-compatible technology applications. Information Exchange Systems consists of the Defense Messaging System (DMS) and Technical Control Upgrade (TCU). Beginning in FY00 Information Exchange consists only of the Defense Messaging System. Technical Control Upgrade (TCU) funding is transferred to BLI 3050 (Subhead 52PQ).

Defense Messaging System: DMS will replace the present AUTODIN/TCC message delivery architecture with a single messaging system with seamless strategic (ashore) and tactical (afloat) interoperability. The tactical portion of DMS is funded in BLI 3050 (Subhead 52PQ cost code PQ065 and PQ777 NAVMACS/SMS). The DMS program provides for the planning, analysis, procurement, integration, implementation, and installation of the DMS components at all DON, USMC, and USCG activities.

Technical Control Upgrade: TCU provides for the shore segment interconnect of an end-to-end dynamic bandwidth management, Internet Protocol, and Channel Access Protocol capability to deploying Battle Groups/Amphibious Ready Groups, and other support units. TCU Automates the major shore nodes which allow network centric and lights-out operations. TCU (which includes Automated Network Control Center (ANCC), and Automated Technical Control (ATC)) is the key enabling mechanism for the execution of the Joint Maritime Communications System (JMCOMS)/Automated Digital Network System (ADNS) strategy which is essential to meeting the IT-21 vision.[1]

(2) Transmission Systems (D6002): Transmission Systems projects provide a broad range of Navy shore communications enhancements. As the Defense Communications System (DCS) backbone evolves toward a totally digital environment, Navy transmission systems must be upgraded, modified, and replaced with digital systems. Transmission Systems consists of the Shore Remote Control System (SRCS), the Automated Digital Multiplexer System(ADMS) and Terrestrial Connectivity (TC).

Shore Remote Control Systems/Element Management System (SRCS/EMS): SRCS automates and remotely controls communications, switching and quality monitoring equipment which eliminates manual operations. EMS provides operator controlled automatic configuration of the Radio Communications System (RCS) circuits, computerized communications plan development, and quality monitoring and reporting.[1]

Automated Digital Multiplexer System: ADMS is an automated network management capability which is fully compatible with various switching technologies and in compliance with national & intl. standards.[1]

1 / Beginning in FY 00, these ADNS IT-21 enabler programs have been reclassed and associated funding transferred to BLI 3050 (Subhead 52PQ, Cost Codes PQ070, PQ075, PQ776, and PQ777). This funding consolidation realigns all ADNS systems into one budget line item.

BUDGET ITEM JUSTIFICATION SHEET		DATE February 2000
APPROPRIATION/BUDGET ACTIVITY	**P-1 ITEM NOMENCLATURE**	**SUBHEAD**
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	336800 NAVAL SHORE COMMUNICATIONS	**52D6**

Automated Digital Network System (ADNS) Build 2 implements Asynchronous Transfer Mode multiplexing technology, and JDIICS-D compliant Integrated Network Management tools. It adds SCI ADNS Architecture, Integrated Network Management Architecture, and supports legacy system protocols during transition[1].

Terrestrial Connectivity: Enhances current and future C4I operational requirements by providing interoperability/redundant links to enhance survivability and reduces effects of jamming and destruction. This Project is included as part of BLII (D6005) starting in FY00.

(3) Shore Life Cycle Support (D6004): Procures equipment necessary to enhance existing Naval Shore Communications equipment . This Project is included as part of BLII (D6005) starting in FY00.

(4) Base Level Information Infrastructure (D6005): Procures shore Local Area Network, Base Area Network, Wide Area Networks and Metropolitan Area Network cable plant, switches, telephone switch and peripheral upgrades, hubs, routers, basic network and information distribution servers and workstations, network management and system operations equipment and software to provide voice, video and data connectivity and integrated networking capabilities from Defense Information Infrastructure and Public Service Delivery Points up to and including the user desktop.

(5) Joint Warfighting Center (D6006): The JWFC is tasked to assist the Chairman, Joint Chiefs of Staff (CJCS), Commanders in Charge (CINCs) and Service Chiefs in their preparation for joint and multinational operations in the conceptualization, development and assessment of current and future joint doctrine and in the accomplishment of joint and multinational training and exercises. JWFC is a focal point for the use of computer based simulation in joint training and exercises and joint doctrine application. Procures necessary equipment for the infrastructure to support the stated mission.

(6) Joint Battle Center (D6007): The Joint Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) Battle Center (JBC) is the Chairman, Joint Chiefs of Staff (CJCS) facility for warfighter exploration and assessment of C4ISR capabilities. The Center provides the combatant commands, at the Joint Task Force (JTF) level, with a joint assessment and experimental environment for the warfighter and technologist in support of Joint Vision 2010 (JV2010). It serves as the technical analysis and assessment agency for the Joint Requirement Operating Council (JROC) in determining C4ISR syster "value-added" prior to introduction to the CINCs and in advance of system fielding in operational environments. The intent is for the JBC to be a forcing function for joint synchronization and a means to foster rapid, ne term insertion of C4ISR technology. The mission of the JBC is to provide rapid assessment of required C4ISR interoperability and warfighter utility, join emerging C4ISR technology with new operational doctrine, and result in fielding C4ISR capabilities that meet the joint warfighters needs. Initial attention is focused on developing the experimentation and assessment methodology for implementing JV 2010. Procures necessary equipment for the infrastructure to support the stated mission.

(7) Equipment Installation (D6776): Installs the above procured equipment at shore stations worldwide. Installations include quality assurance, test evaluation, and as-built drawings.

JUSTIFICATION OF BUDGET YEAR REQUIREMENTS: Defense Communication System Six Year Plan.

1/ Beginning in FY 00, these ADNS IT-21 enabler programs have been reclassed and associated funding transferred to BLI 3050 (Subhead 52PQ, Cost Codes PQ070, PQ075, PQ776, and PQ777). This funding consolidation realigns all ADNS systems into one budget line item.

EXHIBIT P-5, COST ANALYSIS																DATE: February 2000
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT								**P-1 ITEM NOMENCLATURE** 336800 NAVAL SHORE COMMUNICATIONS						**SUBHEAD** 52D6		
								FY 1999			**FY 2000**			**FY2001**		
COST CODE	**ELEMENT OF COST**	**ID CODE**						**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**
D6001	Information Exchange Systems	A						16	1,934.66	30,955	4	7,921.75	31,687	4	2,722.50	10,890
D6002	Transmission Systems	A						31	327.10	10,140			0			0
D6004	Shore Life Cycle Support	A														
D6005	**Base Level Information Infrastructure (BLII)**	**A**								**30,915**			**50,299**			**92,064**
	BLII Gulf Region							6	5,152.57	30,915	6	7,549.83	45,299	1	3,322.00	3,322
	BLII Europe Region													9	4,426.00	39,834
	BLII Far East Region													9	3,981.00	35,829
	BLII Caribbean Sites - Other													6	2,179.83	13,079
	BLII USCINCPAC ***1**												5,000			
D6006	Joint Warfighting Center	A								2,497			0			0
D6007	Joint Battle Center	A								2,677			0			0
D6008	**Production Support**												**2,467**			**2,143**
	D6001 Defense Messaging Systems												950			393
	D6005 Base Level Information Infrastructure (BLII)												1,517			1,750
D6776	**Non-FMP Installation**	**A**								**27,876**			**33,903**			**71,035**
	Defense Messaging Systems									4,354			11,700			2,670
	Transmissions Systems									3,886						
	Shore Life Cycle Support															
	Base Level Information Infrastructure (BLII) *2									**19,636**			**22,203**			**68,365**
	BLII Gulf Region									19,636			22,203			1,963
	BLII Europe Region									0			0			28,176
	BLII Far East Region									0			0			26,306
	BLII Caribbean Sites - Other									0			0			11,920
	Smartcard									745						
	TOTAL CONTROL									**105,805**			**118,356**			**176,132**

Remarks:

1/ Anticipating Congressional Approval of DD-1415 Internal Reprogramming from PMC to OPN of 5M

2/ In accordance with redirection of BLII effort, work will be focused in the three OCONUS regions (CENTCOM/Bahrain and PAC far East

PROCUREMENT HISTORY AND PLANNING

A. DATE: February 2000

B. APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

C. P-1 ITEM NOMENCLATURE: 336800 NAVAL SHORE COMMUNICATIONS

SUBHEAD: 52D6

COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
D6001	Defense Messaging Systems	99	SSC Charleston/SSC San Diego	Various	SPAWAR	N/A	Dec-98	Feb-99	4	7,512	Yes	N/A
		00	SSC Charleston/SSC San Diego	Various	SPAWAR	N/A	Dec-99	Feb-00	4	7,922	Yes	N/A
		01	SSC Charleston/SSC San Diego	Various	SPAWAR	N/A	Dec-00	Feb-01	4	2,723	Yes	N/A
D6001	Technical Control Upgrade/ANCC 1/3	99	SSC Charleston	WX	SPAWAR	N/A	Dec-98	Jan-99	6	180	Yes	N/A
D6001	Technical Control Upgrade/ATC 1/3	99	SSC Charleston	WX	SPAWAR	N/A	Dec-98	Apr-99	6	156	Yes	N/A
D6002	Shore Remote Control System/ Element Management System 1/	99	SSC Charleston	WX	SPAWAR	N/A	Dec-98	Jun-99	5	636	Yes	N/A
D6002	Shore Remote Control System 2/	99	SSC Charleston	WX	SPAWAR	N/A	Jul-99	Aug-99	20	6	Yes	N/A
D6002	Automated Digital Multiplexer 1/4	99	SSC Charleston	WX	SPAWAR	N/A	Dec-98	May-99	1	2,905	Yes	N/A
D6002	ADNS Build 2 1/	99	SAIC	C/FP-O	GSA	Sep-98	Dec-98	May-99	4	541	Yes	N/A
D6002	Terrestrial Connectivity	99	Various	FP	SSC Charleston	N/A	May-99	Jul-99	1	134	Yes	N/A

D. REMARKS

1/ Beginning in FY 00, these ADNS IT-21 enabler programs have been reclassed and associated funding transferred to BLI 3050 (Subhead 52PQ, Cost Codes PQ070, PQ075, PQ776, and PQ777). This funding consolidation realigns all ADNS systems into one budget line item. The unit cost includes non recurring engineering costs to integrate 3 shore equipment types into the basic EMS software configuration.
2/ Directed to fund Y2K upgrades at 20 SRCS sites.
3/ Directed to perform Y2K upgrades of ANCC and ATC sites.
4/ Directed to upgrade 1 site with 38 pieces of equipment to support Kosovo operations.
D6002 Terrestrial Connectivity/D6004 Shore Life Cycle Support - equipment purchased using various existing COTS contracts. (except FY 98, see D6004 note)
D6004 - In FY 98, Shore Life Cycle Support funding was reprogrammed to Defense Red Switch. The FY 98 data reflects Defense Red Switch.

PROCUREMENT HISTORY AND PLANNING

A. DATE February 2000

B. APPROPRIATION/BUDGET ACTIVITY
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

C. P-1 ITEM NOMENCLATURE
336800 NAVAL SHORE COMMUNICATIONS

SUBHEAD
52D6

COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
D6005	Base Level Information Infrastructure (BLII)[1]	99	Various	Var	Various	N/A	Var	Var	0	0	Yes	N/A
		00	Various	Var	Various	N/A	Var	Var	0	0	Yes	N/A
		01	Various	Var	Various	N/A	Var	Var	0	0	No	N/A

D. REMARKS

1/ In accordance with refocusing of the BLII effort, work will be focused in the three OCONUS regions (NAVEUR, CENTCOM/Bahrain and PAC Far East).

D6005/D6006/D6007 - equipment procured using various existing COTS contracts
D6006/D6007 - equipment procured does not require installation

February 2000

MODIFICATION TITLE: Defense Messaging Systems (ASHORE)
COST CODE D6001
MODELS OF SYSTEMS AFFECTED: Various
DESCRIPTION/JUSTIFICATION: State of the art technologies for messaging functions which will replace AUTODIN. Quantities reflect areas of coverage **(East CONUS, West CONUS, PAC and MED [4 total areas])**.
DMS will procure and install at 299 worldwide shore sites (8,500 individual activities). Costs vary by site size, requirements and configuration
Funding provides for procurement and installation of TS Genser & SCI capabilities at ACC/LCC's, EC's for Mobile environments, software upgrades for all shore environments and upgrade of EC hardware to provide capability improvement for stand alone PC dial up users as they gain LAN connections
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:
FINANCIAL PLAN: ($ in millions)

	PY			FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$		Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																							
PROCUREMENT:																							
Kit Quantity																							
Installation Kits																							
Installation Kits Nonrecurring																							
Equipment	4	33.8		4	17.4	4	28.9	4	31.7	4	10.9	4	10.0	4	6.3	4	9.1	4	12.2			4	126.5
Equipment Nonrecurring																							
Engineering Change Orders																							
Data																							
Training Equipment																							
Support Equipment																							
Other																							
Interm Contractor Support																							
Installation of Hardware[1]	4	10.1		4	11.1	4	3.7	4	11.7	4	2.7	4	1.0	4	3.0	4	3.3	4	3.1			4	39.6
PRIOR YR EQUIP	4	10.1																				0	0.0
FY 97 EQUIP																						0	0.0
FY 98 EQUIP				4	11.1																	4	11.1
FY 99 EQUIP						4	3.7															4	3.7
FY 00 EQUIP								4	11.7													4	11.7
FY 01 EQUIP										4	2.7											4	2.7
FY 02 EQUIP												4	1.0									4	1.0
FY 03 EQUIP														4	3.0							4	3.0
FY 04 EQUIP																4	3.3					4	3.3
FY 05 EQUIP																		4	3.1			4	3.1
FY TC EQUIP																						0	0.0
TOTAL INSTALLATION COST		10.1			11.1		3.7		11.7		2.7		1.0		3.0		3.3		3.1		0.0		39.6
TOTAL PROCUREMENT COST		43.9			28.4		32.7		43.4		13.6		11.0		9.3		12.4		15.3		0.0		166.1

METHOD OF IMPLEMENTATION: SPAWAR Sys Center Install ADMINISTRATIVE LEADTIME 2 Mos. PRODUCTION LEAD TIME 2 Mos.

CONTRACT DATES: FY 1999: Dec-98 FY 1999: Dec-99 FY 2000: Dec-00

DELIVERY DATES: FY 1999: Feb-99 FY 1999: Feb-00 FY 2000: Feb-01

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

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

Notes/Comments
1/ Total quantity meets inventory objective. Program continues indefinitely
Quantities reflect **areas of coverage**. Costs vary by site requirements and configuration.

February 2000

MODIFICATION TITLE: Technical Control Upgrade (TCU)[1]
COST CODE D6001
MODELS OF SYSTEMS AFFECTED Automated Network Control Center (ANCC)/ Automated Technical Control (ATC)
DESCRIPTION/JUSTIFICATION: Modifications to operational ADNS/ANCC/ATCs to maintain current technology, modernization of manual patch and test facilities
Quantities reflect the following areas of coverage: Med, Lant, Eastpac and Westpac. Costs vary by site requirements and configuration.

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

	PY				FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment[3]	14	19.2			4	4.8	12	2.0															30	6.8
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware[2,3]	14	3.5			4	2.3	12	0.6															30	2.9
PRIOR YR EQUIP	10	3.2																					10	0.0
FY 97 EQUIP	4	0.3																					4	0.0
FY 98 EQUIP					4	2.3																	4	2.3
FY99 EQUIP[3]							12	0.6															12	0.6
FY 00 EQUIP																							0	0.0
FY 01 EQUIP																							0	0.0
FY 02 EQUIP																							0	0.0
FY 03 EQUIP																							0	0.0
FY 04 EQUIP																							0	0.0
FY 05 EQUIP																							0	0.0
FY TC EQUIP																							0	0.0
TOTAL INSTALLATION COST		3.5				2.3		0.6																2.9
TOTAL PROCUREMENT COST		22.7				7.1		2.6																9.7

METHOD OF IMPLEMENTATION ADMINISTRATIVE LEADTIME: 2 Mos. PRODUCTION LEAD TIME 2 Mos.

CONTRACT DATES: FY 1999: Dec-98 FY 2000: N/A FY 2001:

DELIVERY DATES: FY 1999: Jan-99 FY 2000: N/A FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99 1	2	3	4	FY 00 1	2	3	4	FY 01 1	2	3	4
INPUT	18		1	6	5								
OUTPUT	18		1	6	5								

INSTALLATION SCHEDULE:	FY 02 1	2	3	4	FY 03 1	2	3	4	FY 04 1	2	3	4	FY 05 1	2	3	4	TC	TOTAL[2]
INPUT																		30
OUTPUT																		30

Notes/Comments
1/ Beginning in FY 00, these ADNS IT-21 enabler programs have been reclassed and associated funding transferred to BLI 3050 (Subhead 52PQ, Cost Codes PQ070, PQ075, PQ776, and PQ777). This funding consolidation realigns all ADNS systems into one budget line item.
2/ Total quantity meets inventory objective.
3/ 5 ANCC Y2K upgrades plus 1 major ANCC site upgrade and 6 ATC Y2K upgrades

February 2000

MODIFICATION TITLE: Shore Remote Control Systems (SRCS)/Element Management System (EMS)[1]
COST CODE D6002
MODELS OF SYSTEMS AFFECTED: Various transmission media.
DESCRIPTION/JUSTIFICATION: Automates and remotely controls communications switching and quality monitoring equipment which eliminates manual operations.
Quantities reflect the following areas of coverage: Med, Lant, Eastpac, and Westpac. Cost vary by site size, requirements and configuration.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment **(EMS)**	12	4.3			4	2.4	5	4.8													21	7.2
Equipment **(SRCS Y2K Upgrade)**							20	0.1													20	0.1
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware[2]	12	1.5			4	1.5	25	0.4													41	1.9
PRIOR YR EQUIP	8	0.9																			8	0.0
FY 97 EQUIP	4	0.0																			4	0.0
FY 98 EQUIP					4	1.5															4	1.5
FY 99 EQUIP **(EMS) 4/**							5	0.3													5	0.3
FY 99 EQUIP **(SRCS Y2K Upgrade)**							20	0.0													20	0.0
FY 00 EQUIP																					0	0.0
FY 01 EQUIP																					0	0.0
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		1.5				1.5		0.4														1.9
TOTAL PROCUREMENT COST		5.8				3.9		5.3														9.0

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIM 2 Mos. PRODUCTION LEAD TIME 7 Mos.

CONTRACT DATES: FY 1999: Dec-98 Jul-99 FY 2000: N/A FY 2001:

DELIVERY DATES: FY 1999: May-99 Aug-99 FY 2000: FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4
INPUT	16			2	23								
OUTPUT	16			2	23								

INSTALLATION SCHEDULE:	FY 02 1	FY 02 2	FY 02 3	FY 02 4	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL[2]
INPUT																		41
OUTPUT																		41

Notes/Comments
1/ Beginning in FY 00, these ADNS IT-21 enabler programs have been reclassed and associated funding transferred to BLI 3050 (Subhead 52PQ, Cost Codes PQ070, PQ075, PQ776, and PQ777). This funding consolidation realigns all ADNS systems into one budget line item.
2/ Total quantity meets inventory objective.
3/ 5 EMS procurements plus non-recurring engineering cost to integrate 3 shore equipment types into the basic EMS software configuration
4/ 5 lab installs (no installation support, SOVT, initial training included)

February 2000

MODIFICATION TITLE: Automated Digital Multiplexer System (ADMS)/Automated Digital Network System (ADNS) Build 2[1]
COST CODE D6002
MODELS OF SYSTEMS AFFECTED: Various transmission and network management systems.
DESCRIPTION/JUSTIFICATION: Automated Network management capability which is fully compatible with switching technologies and in compliance with national and international standards
Quantities reflect the following areas of coverage: Med, Lant, Eastpac, and Westpac. Costs vary by site size, requirements and configuration

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment[3]	8	5.3			4	2.7	5	5.1													17	7.8
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware[2,3]	8	2.5			4	2.6	5	3.3													17	5.9
PRIOR YR EQUIP	4	0.5																			4	0.0
FY 97 EQUIP	4	0.0																			4	0.0
FY 98 EQUIP					4	2.6															4	2.6
FY 99 EQUIP							5	3.3													5	3.3
FY 00 EQUIP																					0	0.0
FY 01 EQUIP																					0	0.0
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		2.5		2.6		3.3																5.9
TOTAL PROCUREMENT COST		7.8		5.3		8.4																13.7

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 1 Mos. PRODUCTION LEAD TIME 2 Mos.

CONTRACT DATES: FY 1999: Dec-98 FY 2000: N/A FY 2001: N/A

DELIVERY DATES: FY 1999: May-99 FY 2000: FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4
INPUT	12			5									
OUTPUT	12				4	1							

INSTALLATION SCHEDULE:	FY 02 1	FY 02 2	FY 02 3	FY 02 4	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT																		17
OUTPUT																		17

Notes/Comments
1/ Beginning in FY 00, these ADNS IT-21 enabler programs have been reclassed and associated funding transferred to BLI 3050 (Subhead 52PQ, Cost Codes PQ070, PQ075, PQ776, and PQ777). This funding consolidatic realigns all ADNS systems into one budget line item.
2/ Total quantity meets inventory objective.
3/ Directed to upgrade 1 site in FY99 with 30 pieces of equipment to support Kosovo operations and to perform production engineering to enhance technology upgrades to move from legacy bent pipe systems to a more robust crossbanding multiplexing system.

February 2000

MODIFICATION TITLE: Terrestrial Connectivity
COST CODE D6002
MODELS OF SYSTEMS AFFECTED: Various transmission media.
DESCRIPTION/JUSTIFICATION: Enhances current and future C4I operational requirements by providing interoperability/redundant links to enhance survivability and reduce effects of jamming and destruction. Quantity reflects regions of coverage. FYs 97 - 99: Mediterranean (1 total region)

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

	PY				FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment	1	0.3			1	0.3	1	0.1															1	0.4
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware	1	0.1			1	0.1	1	0.2															1	0.3
PRIOR YR EQUIP																							0	0.0
FY 97 EQUIP																							0	0.0
FY 98 EQUIP	1	0.1			1	0.1																	1	0.1
FY 99 EQUIP							1	0.2															1	0.2
FY 00 EQUIP																							0	0.0
FY 01 EQUIP																							0	0.0
FY 01 EQUIP																							0	0.0
FY 02 EQUIP																							0	0.0
FY 03 EQUIP																							0	0.0
FY 04 EQUIP																							0	0.0
FY TC EQUIP																							0	0.0
TOTAL INSTALLATION COST		0.1				0.1		0.2																0.3
TOTAL PROCUREMENT COST		0.4				0.4		0.3																0.7

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 4 Mos. PRODUCTION LEAD TIM 2 Mos.

CONTRACT DATES: FY 1999: Jul-99 FY 2000: FY 2001:

DELIVERY DATES: FY 1999: Sep-99 FY 2000: FY 2001:

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

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

February 2000

MODIFICATION TITLE: Shore Life Cycle Support[1]
COST CODE D6004
MODELS OF SYSTEMS AFFECTED: Various
DESCRIPTION/JUSTIFICATION: Procures equipment necessary to enhance existing equipment or to sufficiently meet operational requirements at shore sites worldwide
Quantities reflect regions of coverage. FY 97 - Mediterranean, FY 98 - Bahrain and FY 99 - Mediterranean (2 total regions)

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment	2	1.0			1	1.1															2	1.1
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware	2	0.6			1	0.8															2	0.8
PRIOR YR EQUIP	2	0.6																			0	0.0
FY 97 EQUIP																					0	0.0
FY 98 EQUIP					1	0.8															1	0.8
FY 99 EQUIP																					0	0.0
FY 00 EQUIP																					0	0.0
FY 01 EQUIP																					0	0.0
FY 02 EQUIP																					0	0.0
FY 03 EQUIP																					0	0.0
FY 04 EQUIP																					0	0.0
FY 05 EQUIP																					0	0.0
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		0.6				0.8		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.8
TOTAL PROCUREMENT COST		1.6				1.8		0.0		0.0		0.0		0.0		0.0		0.0		0.0		1.8

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 4 mos PRODUCTION LEAD TIME 2 Mos

CONTRACT DATES: FY 1999 Var FY 2000: FY 2001:

DELIVERY DATES: FY 1999 Var FY 2000: FY 2001:

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

Notes/Comments
1/ FY 98 data reflects the procurement and installation of Defense Red Switch at ASU Bahrain.
2/ Quantities reflect areas of coverage.

February 2000

MODIFICATION TITLE: Base Level Information Infrastructure (BLII) [1,4,5] Gulf Region [6]
COST CODE D6005
MODELS OF SYSTEMS AFFECTED: All ship and shore voice, video and data requirements.
DESCRIPTION/JUSTIFICATION: Procures shore Local Area Network, Base Are Network and Metropolitan Area Network cable plant, switches, telephone switch and peripheral upgrades, hubs, routers, basic network and information distribution servers and workstations network management and system operations equipment and software to provide voice video and data connectivity and integrated networking capabilities from Defense Information infrastructure and Public Service Delivery Points up to the user desktop.

Quantities reflect regions of coverage (10 total) [3], all of which will have been serviced at the completion of the program. Costs vary by site size, requirements and configuration.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: ($ in millions)

	PY		PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment					4	37.9	6	30.9	6	50.3	1	3.3	1	3.7	1	3.7	1	3.8	1	3.9			10	137.5
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware [2]					4	15.1	6	19.6	6	22.2	1	2.0	1	2.0	1	2.0	1	2.0	1	2.1			10	67.0
PRIOR YR EQUIP																								
FY 97 EQUIP																								
FY 98 EQUIP					4	15.1																	4	15.1
FY 99 EQUIP							6	19.6															6	19.6
FY 00 EQUIP									6	22.2													6	22.2
FY 01 EQUIP											1	2.0											1	2.0
FY 02 EQUIP													1	2.0									1	2.0
FY 03 EQUIP															1	2.0							1	2.0
FY 04 EQUIP																	1	2.0					1	2.0
FY 05 EQUIP																			1	2.1			1	2.1
FY TC EQUIP																							0	0.0
TOTAL INSTALLATION COST		0.0				15.1		19.6		22.2		2.0		2.0		2.0		2.0		2.1		0.0		67.0
TOTAL PROCUREMENT COST		0.0				53.0		50.6		72.5		5.3		5.6		5.7		5.8		6.0		0.0		204.5

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 mos PRODUCTION LEADTIME: 3 mos

CONTRACT DATES: FY 1999: Var FY 2000: Var FY 2001: Var

DELIVERY DATES: FY 1999: Var FY 2000: Var FY 2001: Var

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

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

Notes/Comments

1/ 12 regions in FY99, realigned to 10 regions beginning in FY00. In FY01 and out, only three OCONUS regions (Europe, Bahrain/Gulf and PAC Far East) plus Caribbean sites will be touched by BLII in accordance with the redirection of BLII. Production quantities have been updated to reflect the number of sites touched within each region within the budget year.
2/ Total quantity meets inventory objective. Program continues indefinitely.
3/ Quantities reflect areas of coverage. In FY01, significant increase in building of infrastructure to meet the CNO's direction.
4/ Beginning in FY01, 52D6 funding for execution of the OCONUS has been transferred to BLII funding lines.
5/ For continuity, the FY98 - FY00 BLII summary is included on this budget exhibit with the Gulf Region.
6/ Gulf Region includes Bahrain.
7/ US CINCPAC included in 00

February 2000

MODIFICATION TITLE: Base Level Information Infrastructure (BLII)[1,4] - Europe Region[5]
COST CODE D6005
MODELS OF SYSTEMS AFFECTED: All ship and shore voice, video and data requirements.
DESCRIPTION/JUSTIFICATION: Procures shore Local Area Network, Base Are Network and Metropolitan Area Network cable plant, switches, telephone switch and peripheral upgrades hubs, routers, basic network and information distribution servers and workstations network management and system operations equipment and software to provide voic video and data connectivity and integrated networking capabilities from Defense Information infrastructure and Public Service Delivery Points up to the user desktop Quantities reflect regions of coverage (10 total)[3], all of which will have been serviced at the completion of the program. Costs vary by site size, requirements and configuration.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES

FINANCIAL PLAN: ($ in millions)

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment									9	39.8	9	20.7	9	21.1	9	21.6	9	22.0			9	125.3
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware[2]									9	28.2	9	11.2	9	11.4	9	11.6	9	11.9			9	74.2
PRIOR YR EQUIP																						
FY 97 EQUIP																						
FY 98 EQUIP																					0	0.0
FY 99 EQUIP																					0	0.0
FY 00 EQUIP																					0	0.0
FY 01 EQUIP									9	28.2											9	28.2
FY 02 EQUIP											9	11.2									9	11.2
FY 03 EQUIP													9	11.4							9	11.4
FY 04 EQUIP															9	11.6					9	11.6
FY 05 EQUIP																	9	11.9			9	11.9
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		0.0				0.0		0.0		0.0		28.2		11.2		11.4		11.6		11.9		0.0		74.2
TOTAL PROCUREMENT COST		0.0				0.0		0.0		0.0		68.0		31.9		32.5		33.2		33.9		0.0		199.4

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 mos PRODUCTION LEADTIME: 3 mos

CONTRACT DATES: FY 1999: Var FY 2000: Var FY 2001: Var

DELIVERY DATES: FY 1999: Var FY 2000: Var FY 2001: Var

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT											5	4	
OUTPUT													5

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL[4]
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT		5		4			5	4			5	4			5	4		9
OUTPUT	4				5	4			5	4			5	4			9	9

Notes/Comments

1/ 12 regions in FY99, realigned to 10 regions beginning in FY00. In FY01 and out, only three OCONUS regions (Europe, Bahrain/Gulf and PAC Far East) plus Caribbean sites will be touched by BLII in accordance with the redirection of BLII. Production quantities have been updated to reflect the number of sites touched within each region within the budget year.
2/ Total quantity meets inventory objective. Program continues indefinitely
3/ Quantities reflect areas of coverage. In FY01, significant increase in building of infrastructure to meet the CNO's direction
4/ Beginning in FY01, 52D6 funding for execution of the OCONUS has been transferred to BLII funding lines
5/ Europe Region includes Naples, Sigonella, La Maddalena, Rota, St Mawgan, London, Souda Bay, Stuttgart, Keflavich

February 2000

MODIFICATION TITLE: Base Level Information Infrastructure (BLII)[1,4] - Far East Region[5]
COST CODE D6005
MODELS OF SYSTEMS AFFECTED: All ship and shore voice, video and data requirements.
DESCRIPTION/JUSTIFICATION: Procures shore Local Area Network, Base Are Network and Metropolitan Area Network cable plant, switches, telephone switch and peripheral upgrades hubs, routers, basic network and information distribution servers and workstations network management and system operations equipment and software to provide voic video and data connectivity and integrated networking capabilities from Defense Information infrastructure and Public Service Delivery Points up to the user desktop Quantities reflect regions of coverage (10 total)[3], all of which will have been serviced at the completion of the program. Costs vary by site size, requirements and configuration.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES

FINANCIAL PLAN: ($ in millions)

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment									9	35.8	9	18.8	9	19.2	9	19.6	9	20.0			9	113.3
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware[2]									9	26.3	9	10.1	9	10.3	9	10.5	9	10.7			9	68.0
PRIOR YR EQUIP																						
FY 97 EQUIP																						
FY 98 EQUIP																					0	0.0
FY 99 EQUIP																					0	0.0
FY 00 EQUIP																					0	0.0
FY 01 EQUIP									9	26.3											9	26.3
FY 02 EQUIP											9	10.1									9	10.1
FY 03 EQUIP													9	10.3							9	10.3
FY 04 EQUIP															9	10.5					9	10.5
FY 05 EQUIP																	9	10.7			9	10.7
FY TC EQUIP																					0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		26.3		10.1		10.3		10.5		10.7		0.0		68.0
TOTAL PROCUREMENT COST		0.0		0.0		0.0		0.0		62.1		29.0		29.5		30.1		30.7		0.0		181.4

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 mos PRODUCTION LEADTIME: 3 mos

CONTRACT DATES: FY 1999: Var FY 2000: Var FY 2001: Var

DELIVERY DATES: FY 1999: Var FY 2000: Var FY 2001: Var

INSTALLATION SCHEDULE:	PY	FY 99				FY 00				FY 01			
		1	2	3	4	1	2	3	4	1	2	3	4
INPUT											5	4	
OUTPUT													5

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL[4]
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT		5	4				5	4			5	4			5	4		9
OUTPUT	4				5	4			5	4			5	4			9	9

Notes/Comments
1/ 12 regions in FY99, realigned to 10 regions beginning in FY00. In FY01 and out, only three OCONUS regions (Europe Bahrain/Gulf and PAC Far East) plus Caribbean sites will be touched by BLII in accordance with the redirection of BLII to execute the OCONUS portion. Production quantities have been updated to reflect the number of sites touched within each region within the budget year.
2/ Total quantity meets inventory objective. Program continues indefinitely
3/ Quantities reflect areas of coverage. In FY01, significant increase in building of infrastructure to meet the CNO's direction
4/ Beginning in FY01, 52D6 funding for execution of the OCONUS has been transferred to BLII funding lines
5/ Far East Region includes Yokosuka, Sasebo, Atsugi, Ikego, Korea, Guam, Diego Garcia, Hong Kong, Manila, Singapore

P-1 SHOPPING LIST

Exhibit P-3a, Individual Modification Program
Unclassified
Classification

February 2000

MODIFICATION TITLE: Base Level Information Infrastructure (BLII)[1,4] (Caribbean - Other requirements)[5]
COST CODE D6005
MODELS OF SYSTEMS AFFECTED: All ship and shore voice, video and data requirements.
DESCRIPTION/JUSTIFICATION: Procures shore Local Area Network, Base Are Network and Metropolitan Area Network cable plant, switches, telephone switch and peripheral upgrades hubs, routers, basic network and information distribution servers and workstations network management and system operations equipment and software to provide voic video and data connectivity and integrated networking capabilities from Defense Information infrastructure and Public Service Delivery Points up to the user desktop Quantities reflect regions of coverage (10 total)[3], all of which will have been serviced at the completion of the program. Costs vary by site size, requirements and configuration.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES

FINANCIAL PLAN: ($ in millions)

	PY				FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment											6	13.1	6	22.3	5	44.8	4	43.2	4	67.1			6	190.5
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware[2]											6	11.9	6	18.0	5	26.5	4	26.6	4	41.8			6	124.8
PRIOR YR EQUIP																								
FY 97 EQUIP																								
FY 98 EQUIP																							0	0.0
FY 99 EQUIP																							0	0.0
FY 00 EQUIP																							0	0.0
FY 01 EQUIP											6	11.9											6	11.9
FY 02 EQUIP													6	18.0									6	18.0
FY 03 EQUIP															5	26.5							5	26.5
FY 04 EQUIP																	4	26.6					4	26.6
FY 05 EQUIP																			4	41.8			4	41.8
FY TC EQUIP																							0	0.0
TOTAL INSTALLATION COST		0.0				0.0		0.0		0.0		11.9		18.0		26.5		26.6		41.8		0.0		124.8
TOTAL PROCUREMENT COST		0.0				0.0		0.0		0.0		25.0		40.3		71.3		69.8		108.9		0.0		315.2

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 mos PRODUCTION LEADTIME: 3 mos

CONTRACT DATES: FY 1999: Var FY 2000: Var FY 2001: Var

DELIVERY DATES: FY 1999: Var FY 2000: Var FY 2001: Var

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

INSTALLATION SCHEDULE:	FY 02				FY 03				FY 04				FY 05				TC	TOTAL[1]
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
INPUT		3	3				3	2			2	2			2	2		6
OUTPUT	3				3	3			3	2			2	2			4	6

Notes/Comments

1/ 12 regions in FY99, realigned to 10 regions beginning in FY00. In FY01 and out, only three OCONUS regions (Europe, Bahrain/Gulf and PAC Far East) plus Caribbean sites will be touched by BLII in accordance with the redirection of BLII to execute the OCONUS. Production quantities have been updated to reflect the number of sites touched within each region within the budget year.

2/ Total quantity meets inventory objective. Program continues indefinitely

3/ Quantities reflect areas of coverage. In FY01, significant increase in building of infrastructure to meet the CNO's direction

4/ Beginning in FY01, 52D6 funding for execution of the OCONUS portion has been transferred to BLII funding lines

5/ Region inculdes Cuba, Puerto Rico, NOC Test Facility, DISN-E, NTCSS PACOM

UNCLASSIFIED
CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February 2000

APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: 336800 NAVAL SHORE COMMUNICATIONS

SUBHEAD NO.: 52D6

COST CODE	ITEM/MANUFACTURER	FY	SERV	PROC QTY	ACCEP PRIOR TO 1-Oct	BAL DUE AS OF 1-Oct	FISCAL YEAR 99 / CY98			FISCAL YEAR 99 / CALENDAR YEAR 99										FISCAL YEAR 00 / CALENDAR YEAR 00										FISCAL YEAR 01 / CALENDAR YEAR 01									
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
D6001	Defense Messaging Systems	99		4		4			A		4																													
		00		4		4															A		4																	
		01		4		4																										A		4							
D6001	Technical Control Upgrade ANCC[1]	99		6		6			A	1			5																											
D6001	Technical Control Upgrade ATC[1]	99		6		6			A				6																											
D6002	Shore Remote Control System/ EMS[1]	99		5		5			A						1	2	2																							
D6002	Shore Remote Control System/ EMS[1,2]	99		20		20										A	10	10																						

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

1/ Beginning in FY 00, these ADNS IT-21 enabler programs have been reclassed and associated funding transferred to BLI 3050 (Subhead 52PQ, Cost Codes PQ070, PQ075, PQ776, and PQ777). This funding consolidation realigns all ADNS systems into one budget

2/ Directed to fund Y2K Upgrades at 20 SRCS sites.

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February 2000

APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: 336800 NAVAL SHORE COMMUNICATIONS

SUBHEAD NO.: 52D6

COST CODE	ITEM/MANUFACTURER	FY	SERV	PROC QTY	ACCEP PRIOR TO 1-Oct	BAL DUE AS OF 1-Oct	FISCAL YEAR 99 / CY98			FISCAL YEAR 99 / CALENDAR YEAR 99												FISCAL YEAR 00 / CALENDAR YEAR 00												FISCAL YEAR 01 / CALENDAR YEAR 01											
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
D6002	ADMS/ADNS Build 2[1]	99		5		5			A					5																												
D6002	Terrestrial Connectivity	99		1		1												A			1																					
D6004	Shore Life Cycle Support[2]	99		0																																						
D6005	BLII *[2]	99		6		6			A			3	1	1	1																											
	BLII Gulf Region			6		6																																				
	BLII Europe Region			0		0																																				
	BLII Far East Region			0		0																																				
	BLII Caribbean Sites - Other			0		0																																				
		00		6		6															A			3	1	1	1															
	BLII Gulf Region			6		6																																				
	BLII Europe Region			0		0																																				
	BLII Far East Region			0		0																																				
	BLII Caribbean Sites - Other			0		0																																				
		01		25		25																																				
	BLII Gulf Region			1		1																										A			1							
	BLII Europe Region			9		9																											A			5		4				
	BLII Far East Region			9		9																											A			5		4				
	BLII Caribbean Sites - Other			6		6																										A			6							

* Quantities reflect total number of regions serviced

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

1/ Beginning in FY 00, these ADNS IT-21 enabler programs have been reclassed and associated funding transferred to BLI 3050 (Subhead 52PQ, Cost Codes PQ070, PQ075, PQ776, and PQ777). This funding consolidation realigns all ADNS systems into one budget

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February 2000

APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: 336800 NAVAL SHORE COMMUNICATIONS

SUBHEAD NO.: 52D6

COST CODE	ITEM/MANUFACTURER/ PROCUREMENTY YEAR	FISCAL YEAR	CARRY OVER	FISCAL YEAR 02 / CY01 / CALENDAR YEAR 02																																		LATER
				OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
D6001	Defense Messaging Systems	02	4			A			4																														0
		03	4															A			4																		0
		04	4																											A			4						0
D6005	BLII *[1]	02	25						1																														25
	BLII Gulf Region		1			A			1																														
	BLII Europe Region		9				A			5		4																											
	BLII Far East Region		9				A			5		4																											
	BLII Caribbean Sites - Other		6			A			3		3																											
		03	24																																			24
	BLII Gulf Region		1															A			1																	
	BLII Europe Region		9																A			5		4														
	BLII Far East Region		9																A			5		4														
	BLII Caribbean Sites - Other		5															A			3		2														
		04	23																											A			1						22
	BLII Gulf Region		1																												A			5		4			
	BLII Europe Region		9																												A			5		4			
	BLII Far East Region		9																											A			2		2				
	BLII Caribbean Sites - Other		4																																				

* Quantities reflect total number of regions serviced

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

NAVMAT FORM 7110/4 (REVISED 11/77)

P-1 Shopping List-Item No 112-18 of 112-18

BUDGET ITEM JUSTIFICATION SHEET

DATE February 2000

APPROPRIATION/BUDGET ACTIVITY
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE
341500-ISSP (INFO SYS SECURITY PRGM)

SUBHEAD
52DA

	PY	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY										
COST (in millions)		**$39.2**	**$66.8**	**$46.6**	**$90.8**	**$60.6**	**$88.2**	**$94.8**	**Continuing**	**Continuing**

P.E. #0303140N

PROGRAM COVERAGE: The Information Systems Security Program (ISSP) provides funds for procurement of secure communications equipment for Navy Ships, shore sites, aircraft, Marine Corps, and U.S. Coast Guard to **protect** information systems from unauthorized access or modification of information, and against the denial of service to authorized users or provision of service to unauthorized users. Information Assurance is a layered protection strategy, using Commercial off the shelf (COTS) and Government off the shelf (GOTS) hardware and software products, that collectively provides an effective Network Security Infrastructure (multiple level security mechanisms and ability to detect and react to intrusions). Information Assurance is critical in protecting our ability to wage Network Centric Warfare. The following ISSP specific efforts will be funded under this program:

SECURE VOICE: The Secure Voice program procures equipment to secure voice communications. Equipment to be procured in FY00 and FY01 include Secure Terminal Equipment (STE), Advanced Narrowband Digital Voice Terminal (ANDVT) - AIRTERM's /RCU's (KY-100/Z-AVH), ancillaries, associated ancillary, production and installation support efforts. The STE is a ship, shore and desktop terminal for classified voice, data, facsimile, video and voice conferencing and will replace the existing STU-III units via a phased approach and also replaces the TA-970 (SA-2112). Various configurations of STE's will be procured (Office, Tactical, C2, Condor (wireless), Portable UPS, PTT handsets, Data, Cellular, Direct Dial IWF) along with companion Security Token cards. The ANDVT upgrades will provide multiple voice encoding algorithms at increased selectable data rates. The AIRTERM (KY-100) is a lightweight, low power, single channel half duplex narrowband/wideband terminal, providing secure voice/data communications in tactical airborne/ground environments. The Z-AVH (Remote Control Unit) provides the KY-100 with all of the front panel control capabilities available on the AIRTERM equipment.

SECURE DATA: The Secure Data program procures equipment to secure record and data communications. Equipment to be procured in FY 00 and FY 01 includes Network Security Systems (NSS)/COMSEC Equipment, Network Vulnerability Assessment Countermeasures (NVACM), and associated production/ installation support. Procurements within the NSS/COMSEC equipment line are: AMODSM is a Navy aircraft and shipboard encryption communication security module that secures telemetry data to ground systems and supports the JTCS (Joint Tactical Combat Training System). Procurement of COMSEC equipment devices includes KG family of cryptos, Fastlanes (KG-75), Taclanes (KG-175), Sonets (KG-189), KIV-6, KIV-7's, KIV-19's, KGV-XX, and PEIP (Programmable Embeddable Infosec Product). The Network Security System (NSS) program procures equipment to secure Navy network information systems. Specific products include the Standard Mail Guard (SMG), which allows two way flow between SECRET high Local Area Networks (LANs) and Unclassified LANs, the Security Token (Fortezza) card which provides writer to reader security for LANs, and FIREWALL components which provide protection for networks from unauthorized users. Network security systems also covers Certification Authority Workstations (CAWs) which creates, initializes, programs, and distributes the Security Token card and provides certificate management infrastructure. NSS budget line procures IDS (Intrusion Detection Systems) , Administrator Tool Kits, Network Security tools, Network Intrusion filters, and token access controllers. PKI (Public Key Infrastructure) provides digital certificate management to authenticate the identity of users on networks as well as to encrypt electronic information flowing over those networks. Procurements include: KOV-11 (Fortezza cards, Token access control servers, Medium Assurance PKI servers, and Medium Assurance RA (Registration Authority).

KEY MANAGEMENT: The Key Management program is a COMSEC key distribution and hardware management system consisting of interoperable Joint Service and Civil Agency key management systems. NSA established the Electronic Key Management System (EKMS) program to meet multiple objectives, which includes supplying electronic key in a secure and operationally responsive manner and providing COMSEC managers with an automated system capable of ordering, generation, distribution, storage, security, accounting, and access control. The FY00 and FY01 procurements include Local Management Device (LMD)/Local COMSEC Management System (LCMS) Tier 1 replacement upgrades, KPE (Key Processor Equipment) upgrades, along with EKMS Upgrades (hardware and software), Data Transfer Devices (DTDs), ancillaries, associated production and installation support efforts. The LMD is a commercial off the shelf computer that runs LCMS software which controls the Key Processor Equipment (KPE), and provides the COMSEC manager with improved security and enhanced management capabilities. The Key Processor equipment (KPE) will perform cryptographic key management functions including encryption, decryption, public key encryption and cryptographic signature operations. The DTD (Tier 3) stores, manages, transfers and loads key and COMSEC data through automatic loading of ECU's (End Crypto Units) in a COTS palmtop computer configuration. DTD-2000 (AN/CYZ-10) Tier 3 provides next generation DTD 2000 which is based on a PCMCIA card (crypto engine) and COTS (Commercial Off-The-Shelf) commercial notebook/palmtop computer.

BUDGET ITEM JUSTIFICATION SHEET		DATE February 2000
APPROPRIATION/BUDGET ACTIVITY	**P-1 ITEM NOMENCLATURE**	**SUBHEAD**
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	341500-ISSP (INFO SYS SECURITY PRGM)	**52DA**

JUSITIFICATION OF BUDGET YEAR REQUIREMENTS: The procurement profile has been phased in accordance with internally generated and validated requirements by N643 for Navy, Marine Corps, and Coast Guard implementation plans and availability of NSA procured key management items.

INSTALLING AGENT: The ISSP equipment will be installed by the In-Service Engineering Activity (ISEA).

COST ANALYSIS													**DATE** February 2000
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT			**P-1 ITEM NOMENCLATURE** 341500-ISSP (INFO SYS SECURITY PRGM)										**SUBHEAD** 52DA
			TOTAL COST IN THOUSANDS OF DOLLARS										
				PY	**FY 1999**			**FY 2000**			**FY 2001**		
COST CODE	**ELEMENT OF COST**	**ID CODE**	**QTY**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**
	SECURE VOICE:						**6,765**			**14,722**			**4,035**
DA013	STE	A			503	5.66	2,847	3066	3.49	10,700	1102	3.66	4,035
DA041	ANDVT UPGRADE/AIRTERM	A			260	10.2	2,652	529	7.6	4,022			0
DA029	SECURE VOICE ANCILLARIES	A					1,266			0			0
	SECURE DATA:												
DA021	COMSEC EQUIPMENT	A					**23,030**			**39,160**			**30,978**
DA070	NSS/COMSEC EQUIPMENT	A					20,204			39,160			30,978
DA001	TEMPEST	A					149			0			0
DA050	COMSEC ANCILLARIES	A					748			0			0
DA002	NVACM	A					1,929			0			0
	KEY MANAGEMENT:						**1,665**			**1,948**			**3,809**
DA009	DTD (DATA TRANSFER DEVICE)	A						1500	0.317	475	190	2	381
DA023	KPE UPGRADES	A									487	1	487
DA003	LMD REPLACEMENT	A									365	2.83	1,032
DA004	EKMS UPGRADES	A			909	1.53	1,395	1195	1.23	1,473	1258	1.517	1,909
DA016	KEY MANAGEMENT ANCILLARIES	A					270			0			0
	PRODUCTION SUPPORT:						**2,598**			**3,575**			**2,778**
DA030	ISSP PRODUCTION SUPPORT	N/A					2,598						
DA555	ISSP PRODUCTION SUPPORT	N/A								3,575			2,778
DA777	**INSTALLATION:**						**5,118**			**7,360**			**4,963**
DA776	INSTALLATION NON FMP	N/A					3,749			5,155			
DA777	INSTALLATION NON FMP	N/A											3,890
DA777	INSTALLATION FMP	N/A					1,276			1,182			648
DA777	DSA	N/A					93			1,023			425
	TOTAL CONTROL						**39,176**			**66,765**			**46,563**

Remarks: STE unit cost based on average of 9 different STE configurations. Ref NSA bulletin #140 of Aug 97.
AIRTERM unit cost based on average of KY-100 and RCU unit.

DD FORM 2446, JUN 86

PROCUREMENT HISTORY AND PLANNING

A. DATE: February 2000

B. APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

C. P-1 ITEM NOMENCLATURE: 341500-ISSP (INFO SYS SECURITY PRGM)

SUBHEAD: 52DA

COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
DA013	STE	98	L3 Comms Corp., Camden NJ	SS/FFP	DIR NSA		Mar-98	Aug-99	290	4	YES	N/A
DA013	STE	99	L3 Comms Corp., Camden NJ	SS/FFP	DIR NSA		Mar-99	Aug-00	503	5.66	YES	N/A
DA013	STE	00	L3 Comms Corp., Camden NJ	SS/FFP	DIR NSA		Mar-00	Aug-01	3,066	3.49	YES	N/A
DA013	STE	01	L3 Comms Corp., Camden NJ	SS/FFP	DIR NSA		Mar-01	Aug-02	1,102	3.66	YES	N/A
DA041	ANDVT UPGRADE/AIRTERM	98	ITT FT WAYNE, IN	SS/FFP	DIR NSA		Jun-98	Jun-99	44	10	YES	N/A
DA041	ANDVT UPGRADE/AIRTERM	99	ITT FT WAYNE, IN	SS/FFP OPT	DIR NSA		Dec-98	Dec-99	260	10.2	YES	N/A
DA041	ANDVT UPGRADE/AIRTERM	00	TBD	TBD	DIR NSA		Mar-00	Mar-01	529	7.6	YES	N/A
DA021	COMSEC EQUIPMENT	98	TELEDYNE/LOCKHEED MARTIN NJ	IDIQ/FFP	NSA/NAVAIR		Sep-98	Sep-99	45	13	YES	N/A
DA009	DTD (DATA TRANSFER DEVICE)	00	VARIOUS *	VARIOUS	SSC SD		Mar-00	Mar-01	1,500	0.317	YES	N/A
DA009	DTD (DATA TRANSFER DEVICE)	01	VARIOUS*	VARIOUS	NSA/SSC CH		Mar-01	Mar-02	190	2	YES	N/A
DA023	KPE UPGRADES	01	VARIOUS*	VARIOUS	SSC CH		Mar-01	Mar-02	487	1	YES	N/A
DA003	LMD REPLACEMENT	98	L3 Comms Corp., Camden NJ	C/IDIQ	DIR NSA		Mar-99	Mar-00	2,000	1	YES	N/A
DA003	LMD REPLACEMENT	01	L3 Comms Corp., Camden NJ	C/IDIQ	DIR NSA		Mar-01	Mar-02	365	2.83	YES	N/A
DA004	EKMS UPGRADES	99	VARIOUS*	VARIOUS	VARIOUS		Mar-99	Mar-00	909	1.53	YES	N/A
DA004	EKMS UPGRADES	00	VARIOUS*	VARIOUS	VARIOUS		Mar-00	Mar-01	1,195	1.23	YES	N/A
DA004	EKMS UPGRADES	01	VARIOUS*	VARIOUS	VARIOUS		Mar-01	Mar-02	1,258	1.517	YES	N/A

D. REMARKS

*VARIOUS EQUIPMENTS FROM VARIOUS VENDORS/CONTRACTORS.

DD FORM 2446, JUN 87

Feb-00

MODIFICATION TITLE: STE (SECURE TERMINAL EQUIPMENT) (SHIPBOARD)
COST CODE DA013/DA777
MODELS OF SYSTEMS AFFECTED: NONE
DESCRIPTION/JUSTIFICATION: STE (SECURE TELEPHONE EQUIPMENT) IS A SHIP/SHORE, AND DESKTOP TERMINAL FOR CLASSIFIED VOICE, DATA, FACSIMILE, VIDEO AND VOICE CONFERENCING. (SECURE VOICE AREA). VARIOUS CONFIGURATIONS INCLUDED ARE: OFFICE, DATA, TACTICAL, NARROWBAND, CONDOR (WIRELESS), C2 (TACTERM), HANDSETS, POWER SUPPLIES, IWF (INTERWORKING FUNCTION), PUP SLEEVES, AND FNDBT UPGRADE KITS.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment		0.0	168	9.0	0	0.0	0	0.0	292	1.0	120	0.4	120	0.4	192	0.5	0	0.0	0	0.0	CONT	CONT	CONT	CONT
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	120	0.2	340	0.6	120	0.3	120	0.2	192	0.4	0	0.0	892	1.7
PRIOR YR EQUIP																							0	0.0
FY 97 EQUIP											120	0.2	48	0.1									168	0.3
FY 98 EQUIP																							0	0.0
FY 99 EQUIP																							0	0.0
FY 00 EQUIP													292	0.5									292	0.5
FY 01 EQUIP															120	0.3							120	0.3
FY 02 EQUIP																	120	0.2					120	0.2
FY 03 EQUIP																			192	0.4			192	0.4
FY 04 EQUIP																							0	0.0
FY 05 EQUIP																							0	0.0
FY TC EQUIP																							0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		0.0		0.2		0.6		0.3		0.2		0.4	CONT	CONT	892	1.7
TOTAL PROCUREMENT COST		0.0		9.0		0.0		0.0		1.0		0.6		1.0		0.8		0.2		0.4	CONT	CONT		CONT

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 5 MOS PRODUCTION LEADTIME: 18 MOS

CONTRACT DATES: FY 1999: Mar-99 FY 2000: Mar-00 FY 2001: Mar-01

DELIVERY DATES: FY 1999: Aug-00 FY 2000: Aug-01 FY 2001: Aug-02

INSTALLATION SCHEDULE:	PY	FY 99 1	2	3	4	FY 00 1	2	3	4	FY 01 1	2	3	4
INPUT										42	42	36	
OUTPUT										42	42	36	

INSTALLATION SCHEDULE:	FY 02 1	2	3	4	FY 03 1	2	3	4	FY 04 1	2	3	4	FY 05 1	2	3	4	TC	TOTAL
INPUT	170	170			60	60			60	60			96	96				CONT
OUTPUT	170	170			60	60			60	60			96	96				CONT

Notes/Comments

INVENTORY OBJECTIVE FOR STE IS 70,000 UNITS FOR NAVY, MARINES, AND COAST GUARD

Feb-00

MODIFICATION TITLE: STE (SECURE TERMINAL EQUIPMENT) (SHORE)
COST CODE DA013/DA776
MODELS OF SYSTEMS AFFECTED: NONE
DESCRIPTION/JUSTIFICATION: STE (SECURE TELEPHONE EQUIPMENT) IS A SHIP/SHORE, AND DESKTOP TERMINAL FOR CLASSIFIED VOICE, DATA, FACSIMILE, VIDEO AND VOICE CONFERENCING. (SECURE VOICE AREA). VARIOUS CONFIGURATIONS INCLUDED ARE: OFFICE, DATA, TACTICAL, NARROWBAND, CONDOR (WIRELESS), C2 (TACTERM), HANDSETS, POWER SUPPLIES, IWF (INTERWORKING FUNCTION), PUP SLEEVES, AND FNDBT UPGRADE KITS.

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment	0	0.0	72	0.4	290	1.1	503	2.8	2774	9.7	982	3.6	1468	7.1	1929	9.8	6306	34.8	8305	35.9	CONT	CONT	CONT	CONT
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware*	0	0.0	0	0.0	0	0.0	0	0.0	314	0.1	551	0.9	2774	0.6	982	0.6	1468	0.8	1929	2.9	14578	0.0	22596	5.9
PRIOR YR EQUIP																							0	0.0
FY 97 EQUIP									24	0.01	48	0.08											72	0.1
FY 98 EQUIP									290	0.134													290	0.1
FY 99 EQUIP											503	0.9											503	0.9
FY 00 EQUIP													2774	0.6									2774	0.6
FY 01 EQUIP															982	0.6							982	0.6
FY 02 EQUIP																	1468	0.80					1468	0.8
FY 03 EQUIP																			1929	2.9			1929	2.9
FY 04 EQUIP																						CONT	0	0.0
FY 05 EQUIP																					6306	CONT	6306	0.0
FY TC EQUIP																					8272	CONT	8272	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		0.1		0.9		0.6		0.6		0.8		2.9	CONT	CONT		5.9
TOTAL PROCUREMENT COST		0.0		0.4		1.1		2.8		9.8		4.5		7.7		10.4		35.6		38.8	CONT	CONT		CONT

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 5 MOS PRODUCTION LEADTIME: 18 MOS

CONTRACT DATES: FY 1999: Mar-99 FY 2000: Mar-00 FY 2001: Mar-01

DELIVERY DATES: FY 1999: Aug-00 FY 2000: Aug-01 FY 2001: Aug-02

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4
INPUT						157	157			276	275		
OUTPUT							157	157			276	275	

INSTALLATION SCHEDULE:	FY 02 1	FY 02 2	FY 02 3	FY 02 4	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT	1387	1387			491	491			734	734			965	964				CONT
OUTPUT		1387	1387			491	491			734	734			965	964			CONT

Notes/Comments

INVENTORY OBJECTIVE FOR STE IS 70,000 UNITS FOR NAVY, MARINES, AND COAST GUARD

Feb-00

MODIFICATION TITLE: SECURE VOICE ANCILLARIES (SHIPBOARD)
COST CODE DA029/DA777
MODELS OF SYSTEMS AFFECTED: NONE
DESCRIPTION/JUSTIFICATION: SECURE VOICE ANCILLARY INSTALLATIONS OF TIMEPLEX. (SECURE VOICE AREA)

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment		0.0		0.0	VAR	0.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.5
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware*	0	0.0	0	0.0	0	0.0	VAR	0.2	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.2
PRIOR YR EQUIP																							0	0.0
FY 97 EQUIP																							0	0.0
FY 98 EQUIP							VAR	0.2															0	0.2
FY 99 EQUIP									0	0.0													0	0.0
FY 00 EQUIP											0	0.0											0	0.0
FY 01 EQUIP													0	0.0									0	0.0
FY 02 EQUIP															0	0.0							0	0.0
FY 03 EQUIP																							0	0.0
FY 04 EQUIP																							0	0.0
FY 05 EQUIP																							0	0.0
FY TC EQUIP																							0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.2		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.2
TOTAL PROCUREMENT COST		0.0		0.0		0.6		0.2		0.0		0.0		0.0		0.0		0.0		0.0		CONT		CONT

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: VARIOUS PRODUCTION LEADTIME: VARIOUS

CONTRACT DATES: FY 1999: FY 2000: FY 2001:

DELIVERY DATES: FY 1999: FY 2000: FY 2001:

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

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

Notes/Comments

Feb-00

MODIFICATION TITLE: SECURE VOICE ANCILLARIES (SHORE)
COST CODE DA029/DA776
MODELS OF SYSTEMS AFFECTED: NONE
DESCRIPTION/JUSTIFICATION: SECURE VOICE INSTALLATIONS OF TIMEPLEX, CIPHER TAC, DSD -421'S) (SECURE VOICE AREA)

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment		0.0		0.0	VAR	0.5	VAR	1.3	VAR	0.6	VAR	0.0	VAR	0.0	VAR	0.0	VAR	0.0	VAR	0.0	CONT	CONT	CONT	CONT
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware*	0	0.0	0	0.0	0	0.0	VAR	0.6	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.6
PRIOR YR EQUIP																							0	0.0
FY 97 EQUIP																							0	0.0
FY 98 EQUIP																							0	0.0
FY 99 EQUIP							VAR	0.6	0	0.0													0	0.6
FY 00 EQUIP											0	0.0											0	0.0
FY 01 EQUIP													0	0.0									0	0.0
FY 02 EQUIP															0	0.0							0	0.0
FY 03 EQUIP																							0	0.0
FY 04 EQUIP																							0	0.0
FY 05 EQUIP																							0	0.0
FY TC EQUIP																							0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.6		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.6
TOTAL PROCUREMENT COST		0.0		0.0		0.5		1.9		0.6		0.0		0.0		0.0		0.0		0.0		CONT		CONT

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: VARIOUS PRODUCTION LEADTIME: VARIOUS

CONTRACT DATES: FY 1999: FY 2000: FY 2001:

DELIVERY DATES: FY 1999: FY 2000: FY 2001:

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

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

Notes/Comments

Feb-00

MODIFICATION TITLE: KPE (KEY PROCESSOR EQUIPMENT) KOK-22 - SHIPBOARD
COST CODE 1X013/DA777
MODELS OF SYSTEMS AFFECTED: NONE
DESCRIPTION/JUSTIFICATION: KEY PROCESSOR EQUIPMENT GENERATES ELECTRONIC CRYPTOGRAPHIC VARIABLES. TIER 2 (KEY MGMT AREA)

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment	501	2.7	0	0.0																			501	2.7
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware*	0	0.0	272	0.8	0	0.0	107	0.9	122	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	501	2.5
PRIOR YR EQUIP		0.0	272	0.8			107	0.9	122	0.8	0	0.0											501	2.5
FY 97 EQUIP																							0	0.0
FY 98 EQUIP																							0	0.0
FY 99 EQUIP																							0	0.0
FY 00 EQUIP																							0	0.0
FY 01 EQUIP																							0	0.0
FY 02 EQUIP																							0	0.0
FY 03 EQUIP																							0	0.0
FY 04 EQUIP																							0	0.0
FY 05 EQUIP																							0	0.0
FY TC EQUIP																							0	0.0
TOTAL INSTALLATION COST		0.0		0.8		0.0		0.9		0.8		0.0		0.0		0.0		0.0		0.0		0.0		2.5
TOTAL PROCUREMENT COST		2.7		0.8		0.0		0.9		0.8		0.0		0.0		0.0		0.0		0.0		0.0		5.2

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 6 MOS PRODUCTION LEADTIME: 23 MOS

CONTRACT DATES: FY 1999: FY 2000: FY 2001:

DELIVERY DATES: FY 1999: FY 2000: FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99 1	FY 99 2	FY 99 3	FY 99 4	FY 00 1	FY 00 2	FY 00 3	FY 00 4	FY 01 1	FY 01 2	FY 01 3	FY 01 4
INPUT	272	49	12	32	14	23	55	20	24	0	0	0	0
OUTPUT	272	49	12	32	14	23	55	20	24	0	0	0	0

INSTALLATION SCHEDULE:	FY 02 1	FY 02 2	FY 02 3	FY 02 4	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT																		501
OUTPUT																		501

Notes/Comments

INVENTORY OBJECTIVE IS 1,530

501 WILL BE INSTALLED ON SHIPS AND 738 ASHORE. REMAINING WILL BE SELF-INSTALLS.

Feb-00

MODIFICATION TITLE: KPE (KEY PROCESSING EQUIPMENT) (SHORE)
COST CODE 1X013/DA776 - DA777
MODELS OF SYSTEMS AFFECTED: NONE
DESCRIPTION/JUSTIFICATION: KEY PROCESSOR (KOK-22) GENERATES ELECTRONIC CRYPTOGRAPHIC VARIABLES. TIER 2 (KEY MGMT AREA)

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment	738	14.5																					738	14.5
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware*	0	0.0	240	0.6	320	0.3	178	0.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	738	1.7
PRIOR YR EQUIP			240	0.6	320	0.3	178	0.8	0	0.0	0	0.0											738	1.7
FY 97 EQUIP																							178	0.8
FY 98 EQUIP																							0	0.0
FY 99 EQUIP																							0	0.0
FY 00 EQUIP																							0	0.0
FY 01 EQUIP																							0	0.0
FY 02 EQUIP																							0	0.0
FY 03 EQUIP																							0	0.0
FY 04 EQUIP																							0	0.0
FY 05 EQUIP																							0	0.0
FY TC EQUIP																							0	0.0
TOTAL INSTALLATION COST		0.0		0.6		0.3		0.8		0.0		0.0		0.0		0.0		0.0		0.0		0.0		1.7
TOTAL PROCUREMENT COST		14.5		0.6		0.3		0.8		0.0		0.0		0.0		0.0		0.0		0.0		0.0		16.2

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 6 MOS PRODUCTION LEADTIME: 23 MOS

CONTRACT DATES: FY 1999: FY 2000: FY 2001:

DELIVERY DATES: FY 1999: FY 2000: FY 2001:

INSTALLATION SCHEDULE:	PY	FY 99 1	2	3	4	FY 00 1	2	3	4	FY 01 1	2	3	4
INPUT	560	14	20	72	72	0	0			0	0	0	0
OUTPUT	560	14	20	72	72	0	0			0	0	0	0

INSTALLATION SCHEDULE:	FY 02 1	2	3	4	FY 03 1	2	3	4	FY 04 1	2	3	4	FY 05 1	2	3	4	TC	TOTAL
INPUT																		738
OUTPUT																		738

Notes/Comments

INVENTORY OBJECTIVE IS 1,530

501 WILL BE INSTALLED ON SHIPS AND 738 ASHORE. REMAINING WILL BE SELF-INSTALLS.

Feb-00

MODIFICATION TITLE: NSS (NETWORK SECURITY SYSTEMS)/COMSEC EQUIPMENT - SHIPBOARD
COST CODE DA070/DA777
MODELS OF SYSTEMS AFFECTED: NONE
DESCRIPTION/JUSTIFICATION: COMSEC EQUIPMENT INCLUDES: KG FAMILY OF CRYPTOS, FASTLANES (KG-75), TACLANES (KG-175), SONETS (KG-189), KIV-6, KIV-7, KGV-XX AND EIP (EMBEDDABLE INFOSEC PRODUCT. NSS ITEMS INCLUDE: SMG (STANDARD MAIL GUARDS), SECURITY TOKENS, CAW'S (CERTIFICATION AUTHORITY WORKSTATIONS), FIREWALL COMPONENTS AND SECURITY TOOLS. PKI (PUBLIC KEY INFRASTRUCTURE) INCLUDES DIGITAL CERTIFICATE MANAGEMENT ITEMS (KOV-11 FORTEZZA CARDS, TOKEN ACCESS CONTROL SERVERS, MEDIUM ASSURANCE PKI SERVERS, MEDIUM ASSURANCE PKI RA (REGISTRATION AUTHORITY).
SECURE DATA AREA

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment			VAR	0.0	VAR	0.8	VAR	4.0	VAR	8.0	VAR	5.8	VAR	7.5	VAR	5.0	VAR	5.4	VAR	5.8	CONT	0.0	CONT	CONT
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware*	0	0.0	VAR	0.0	VAR	0.8	VAR	0.0	VAR	0.4	VAR	0.4	VAR	0.3	VAR	0.2	VAR	0.2	VAR	0.1	CONT	0.0	CONT	CONT
PRIOR YR EQUIP																							0	0.0
FY 97 EQUIP			VAR	0.0																			0	0.0
FY 98 EQUIP					0	0.8																	0	0.8
FY 99 EQUIP							VAR	0.0															0	0.0
FY 00 EQUIP									VAR	0.4													0	0.4
FY 01 EQUIP											VAR	0.4											0	0.4
FY 02 EQUIP													VAR	0.3									0	0.3
FY 03 EQUIP															VAR	0.2							0	0.2
FY 04 EQUIP																	VAR	0.2					0	0.2
FY 05 EQUIP																			VAR	0.1			0	0.1
FY TC EQUIP																					CONT		0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.8		0.0		0.4		0.4		0.3		0.2		0.2		0.1	CONT	0.0	CONT	CONT
TOTAL PROCUREMENT COST		0.0		0.0		1.6		4.0		8.4		6.2		7.8		5.2		5.6		5.9	CONT	0.0	CONT	CONT

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: VARIOUS PRODUCTION LEADTIME: VARIOUS

CONTRACT DATES: FY 1999: FY 2000: FY 2001

DELIVERY DATES: FY 1999: FY 2000: FY 2001

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

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

Notes/Comments

Feb-00

MODIFICATION TITLE: NSS (NETWORK SECURITY SYSTEMS)/COMSEC EQUIPMENT - SHORE
COST CODE DA070/DA776
MODELS OF SYSTEMS AFFECTED: NONE
DESCRIPTION/JUSTIFICATION: COMSEC EQUIPMENT INCLUDES: KG FAMILY OF CRYPTOS, FASTLANES (KG75), TACLANES (KG175), SONETS (KG189), KIV6, KIV7, KGV-XX AND EIP (EMBEDDABLE INFOSEC PRODUCT. NSS ITEMS INCLUDE: SMG (STANDARD MAIL GUARDS), SECURITY TOKENS, CAW'S (CERTIFICATION AUTHORITY WORKSTATIONS), FIREWALL COMPONENTS AND SECURITY TOOLS. PKI (PUBLIC KEY INFRASTRUCTURE) INCLUDES DIGITAL CERTIFICATE MANAGEMENT ITEMS (KOV-11 FORTEZZA CARDS, TOKEN ACCESS CONTROL SERVERS, MEDIUM ASSURANCE PKI SERVER, AND PKI RA (REGISTRATION AUTHORITY).
SECURE DATA AREA

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment	VAR	6.1	VAR	5.4	VAR	12.1	VAR	16.0	VAR	31.2	VAR	25.2	VAR	59.7	VAR	31.0	VAR	32.3	VAR	33.7	CONT	0.0	CONT	0.0
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware*	VAR	3.0	VAR	3.1	VAR	2.1	VAR	2.4	VAR	5.0	VAR	3.0	VAR	3.5	VAR	2.9	VAR	2.8	VAR	2.6	CONT	0.0	CONT	0.0
PRIOR YR EQUIP	VAR	3.0																					0	3.0
FY 97 EQUIP			VAR	3.1																			0	3.1
FY 98 EQUIP					VAR	2.1																	0	2.1
FY 99 EQUIP							VAR	2.4															0	2.4
FY 00 EQUIP									VAR	5.0													0	5.0
FY 01 EQUIP											VAR	3.0											0	3.0
FY 02 EQUIP													VAR	3.5									0	3.5
FY 03 EQUIP															VAR	2.9							0	2.9
FY 04 EQUIP																	VAR	2.8					0	2.8
FY 05 EQUIP																			VAR	2.6			0	2.6
FY TC EQUIP																					CONT		0	0.0
TOTAL INSTALLATION COST		3.0		3.1		2.1		2.4		5.0		3.0		3.5		2.9		2.8		2.6	CONT	0.0	CONT	0.0
TOTAL PROCUREMENT COST		9.1		8.5		14.2		18.4		36.2		28.2		63.2		33.9		35.1		36.3	CONT	0.0	CONT	0.0

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: VARIOUS PRODUCTION LEADTIME: VARIOUS

CONTRACT DATES: FY 1999: FY 2000: FY 2001

DELIVERY DATES: FY 1999: FY 2000: FY 2001

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

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

Notes/Comments

Feb-00

MODIFICATION TITLE: NVACM (NETWORK VULNERABILITY ASSESSMENT COUNTERMEASURES) -SHIPBOARD
COST CODE DA002/DA777
MODELS OF SYSTEMS AFFECTED: NONE
DESCRIPTION/JUSTIFICATION: INTRUSION DETECTION SYSTEMS.

(SECURE DATA AREA)

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment			VAR	0.0	VAR	0.8	VAR	1.9	VAR	0.0	VAR	0.0	VAR	0.0	VAR	0.0	VAR	0.0	VAR	0.0	CONT	0.0	CONT	CONT
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware*	0	0.0	0	0.0	0	0.0	VAR	0.2	VAR	0.0	VAR	0.0	VAR	0.0	VAR	0.0	VAR	0.0	VAR	0.0	CONT	0.0	CONT	CONT
PRIOR YR EQUIP																							0	0.0
FY 97 EQUIP																							0	0.0
FY 98 EQUIP					0	0.0																	0	0.0
FY 99 EQUIP							VAR	0.2															0	0.2
FY 00 EQUIP									VAR	0.0													0	0.0
FY 01 EQUIP											VAR	0.0											0	0.0
FY 02 EQUIP													VAR	0.0									0	0.0
FY 03 EQUIP															VAR	0.0							0	0.0
FY 04 EQUIP																	VAR	0.00					0	0.0
FY 05 EQUIP																			VAR	0.0			0	0.0
FY TC EQUIP																					CONT		0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.2		0.0		0.0		0.0		0.0		0.0		0.0		0.0	CONT	CONT
TOTAL PROCUREMENT COST		0.0		0.0		0.8		2.1		0.0		0.0		0.0		0.0		0.0		0.0		0.0	CONT	CONT

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: VARIOUS PRODUCTION LEADTIME: VARIOUS

CONTRACT DATES: FY 1999: FY 2000: FY 2001

DELIVERY DATES: FY 1999: FY 2000: FY 2001

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

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

Notes/Comments

Feb-00

MODIFICATION TITLE: LMD REPLACEMENTS (SHORE)
COST CODE DA003/DA776 - DAXXX/DA777
MODELS OF SYSTEMS AFFECTED: NONE
DESCRIPTION/JUSTIFICATION: TIER 2 LMD REPLACEMENTS. PROVIDES HARDWARE PLATFORMS FOR TIER 2. (KEY MGMT AREA)

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

	PY		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																								
PROCUREMENT:																								
Kit Quantity																								
Installation Kits																								
Installation Kits Nonrecurring																								
Equipment					2000	2.0				0.0	365	1.0	183	0.4									2548	3.4
Equipment Nonrecurring																								
Engineering Change Orders																								
Data																								
Training Equipment																								
Support Equipment																								
Other																								
Interm Contractor Support																								
Installation of Hardware*	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	217	0.2	253	0.2	78	0.1	0	0.0	0	0.0	548	0.5
PRIOR YR EQUIP																							0	0.0
FY 97 EQUIP																							0	0.0
FY 98 EQUIP																							0	0.0
FY 99 EQUIP																							0	0.0
FY 00 EQUIP																							0	0.0
FY 01 EQUIP													217	0.2	148	0.1							365	0.3
FY 02 EQUIP															105	0.1	78	0.1					183	0.2
FY 03 EQUIP																							0	0.0
FY 04 EQUIP																							0	0.0
FY 05 EQUIP																							0	0.0
FY TC EQUIP																							0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.0		0.0		0.0		0.2		0.2		0.1		0.0		0.0		0.5
TOTAL PROCUREMENT COST		0.0		0.0		2.0		0.0		0.0		1.0		0.6		0.2		0.1		0.0		CONT		3.9

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 5 MOS PRODUCTION LEADTIME: 12 MOS

CONTRACT DATES: FY 1999: FY 2000: FY 2001: Mar-01

DELIVERY DATES: FY 1999: FY 2000: FY 2001: Mar-02

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

INSTALLATION SCHEDULE:	FY 02 1	2	3	4	FY 03 1	2	3	4	FY 04 1	2	3	4	FY 05 1	2	3	4	TC	TOTAL
INPUT	0	31	93	93	93	70	45	45	45	33	0	0	0	0	0	0		548
OUTPUT	0	31	93	93	93	70	45	45	45	33	0	0	0	0	0	0		548

Notes/Comments
FY-98 PROCUREMENT UPGRADES WERE PERFORMED TURN-KEY WITH NSA/VENDOR.
INVENTORY OBJECTIVE FOR LMD REPLACEMENTS IS 2548 UNITS

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February 2000

APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: 341500-ISSP (INFO SYS SECURITY PRGM)

SUBHEAD NO.: 52DA

COST CODE	ITEM/MANUFACTURER	FY	SERV	PROC QTY	ACCEP PRIOR TO 1-Oct	BAL DUE AS OF 1-Oct	FISCAL YEAR 98 / PY97 / CALENDAR YEAR 98																FISCAL YEAR 99 / CALENDAR YEAR 99												FISCAL YEAR 00 / CALENDAR YEAR 00											
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
DA013	STE	98		290		290						A																290													
DA013	STE	99		503		503																		A																503	
DA013	STE	00		3,066		3,066																														A					
DA013	STE	01		1,102		1,102																																			
DP013	STE	97		240		240																								24											
DA041	ANDVT UPGRADE/AIRTERM	98		44		44									A												8	8	8	8	8	4								
DA041	ANDVT UPGRADE/AIRTERM	99		260		260															A											22	22	22	22	22	22	22	22	22	22
DA041	ANDVT UPGRADE/AIRTERM	00		529		529																														A					
DA021	COMSEC EQUIPMENT	98		45		45												A											3	3	3	4	4	4	4	4	4	4	4	4	
DA009	DTD (DATA TRANSFER DEVICE)	00		1,500		1,500																														A					
DA009	DTD (DATA TRANSFER DEVICE)	01		190		190																																			
1X013	KPE (KOK-22'S)	96		1,530		843	26	26	26	26	26	26	26	26	26	26	26	34	21	21	21	10	10	12	34	34	36	28	28	30	19	19	18	29	29	29	20	20	19	12	12	12
DA023	KPE UPGRADES	01		487		487																																			
DA003	LMD REPLACEMENT	98		2,000		2,000																		A												167	167	167	167	167	167	167
DA003	LMD REPLACEMENT	01		365		365																																			
DA004	EKMS UPGRADES	99		909		909																		A												76	76	76	76	76	76	76
DA004	EKMS UPGRADES	00		1,195		1,195																														A					
DA004	EKMS UPGRADES	01		1,258		1,258																																			
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP

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

NAVMAT FORM 7110/4 (REVISED 11/77)

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE February 2000

APPROPRIATION/BUDGET ACTIVITY
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE
341500-ISSP (INFO SYS SECURITY PRGM)

SUBHEAD NO. 52DA

COST CODE	ITEM/MANUFACTURER/ PROCUREMENTY YEAR	FISCAL YEAR	CARRY OVER	FISCAL YEAR 01												FISCAL YEAR 02												FISCAL YEAR 03												LATER
				CY00			CALENDAR YEAR 01											CALENDAR YEAR 02												CALENDAR YEAR 03											
				OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
DA013	STE	99	0																																				
DA013	STE	00	3,066											3066																										
DA013	STE	01	1,102						A																	1102														
DP013	STE	97	216	14	14	14	14	14	14	14	14	14	14	14	14	12	12	12	12																				
DA041	ANDVT UPGRADE/AIRTERM	99	40	20	20																																		
DA041	ANDVT UPGRADE/AIRTERM	00	529						44	44	44	44	44	44	44	44	44	44	44	45																			
DA009	DTD (DATA TRANSFER DEVICE)	00	1,500						125	125	125	125	125	125	125	125	125	125	125	125																			
DA009	DTD (DATA TRANSFER DEVICE)	01	190						A												16	16	16	16	16	16	16	16	16	16	16	14							
1X013	KPE (KOK-22'S)	96	0																																				
DA023	KPE UPGRADES	01	487						A												41	41	41	41	41	41	41	41	41	41	41	36							
DA003	LMD REPLACEMENT	98	831	167	167	167	165	165																															
DA003	LMD REPLACEMENT	01	365						A												31	31	31	31	31	31	31	31	31	31	31	24							
DA004	EKMS UPGRADES	99	377	76	76	76	76	73																															
DA004	EKMS UPGRADES	00	1,195						100	100	100	100	100	100	100	100	100	100	100	95																			
DA004	EKMS UPGRADES	01	1,258						A												104	104	104	104	104	104	104	104	104	104	104	114							
				OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

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

NAVMAT FORM 7110/4 (REVISED 11/77)

BUDGET ITEM JUSTIFICATION SHEET

DATE February 2000

APPROPRIATION/BUDGET ACTIVITY	**P-1 ITEM NOMENCLATURE**	**SUBHEAD**
OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	CRYPTOLOGIC EQUIPMENT 3501	521V

		PY	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TO COMP	TOTAL
QUANTITY											
COST (in millions)			**$20.8**	**$21.0**	**$17.2**	**$21.8**	**$23.8**	**$24.5**	**$25.1**	**Continuing**	**Continuing**

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.

CRYPTOLOGIC CARRY-ON EQUIPMENT: This program procures state-of-the-art, Commercial Off-The-Shelf (COTS) signal acquisition equipment (hardware and software) in response to the Fleet Commander's In Chief (CINC) requirements for a quick-reaction surface, subsurface and airborne cryptologic carry-on capability. Due to a continually changing threat environment, requirements are dynamic and equipment procured varies by quantity and type. Hardware procurement includes: receivers, recorders, Transportable-Radio Direction Finding (T-RDF) systems, tactical computers and related peripherals, antennas, Electronic-Warfare Support Measures (ESM) systems, and advanced signal and search equipment including spectrum analyzers, VXI chassis/cards and associated portable Special Intelligence communications equipment. CCOP equipment is installed either in AN/SSQ-99 vans for deployment or augments cryptologic capabilities on ships with permanent facilities. The temporary installation of equipment is done by Fleet Electronic Support (FES) personnel. A primary product of this line, is the Advanced Cryptologic Carry-on Exploitation System (ACCES). The outdated SSQ-80A(V) analog systems were converted to ACCES, by modernizing them with VXI-based digital Signal Processing (DSP) capabilities and an open, modular architecture that provides flexibility and vastly increased capabilities. T-RDF (AN/SSQ-120 (V)) has adeptly satisfied Fleet CINC requirements for organic direction finding capabilities; the system covers an extremely wide frequency spectrum, is low cost and highly accurate. T-RDF is temporarily installed on ACCES equipped ships. FY99-FY01 funds continue to procure ACCES core architecture system upgrades (24 Fleet CINC's surface, subsurface and airborne deployable upgrade systems; 22 shore-based training system upgrades for Cryptologic Shore Support Activities (CSSAs) and Cryptologic Readiness Groups (CRGs) worldwide) such as digital wideband recorders and independently developed items to provide affordable additional functionality to the Fleet CINCs. FY99 - FY01 funds will also procure T-RDF systems/upgrades with associated antennas and pregroom installations (pregroom installations are required on CG-47, DD-963 and DDG-51 class ships in order to utilize the T-RDF systems as carry-on hardware during critical missions). A total of 12 T-RDF systems with 38 associated antennas will be procured.

CRYPTOLOGIC TRAINING EQUIPMENT (CTE): This program provides Technical Training Laboratories and Computer Based Classroom Training systems interconnected by a system of Local Area Networks (LAN) and procures other Technical Training Equipment (TTE) (e.g. maintenance diagnostic equipment, analytic workstations, network file servers, signal analyzers, etc). This hardware is provided to the Naval Technical Training Center in Pensacola, FL, and its detachments as well as NAVSECGRU Field Activities worldwide and Intelligence schoolhouses at NMITC, Dam Neck, VA and FITC, San Diego, CA, to support both core cryptologic and Intelligence skills training and systems familiarization training. FY99 - FY01 funds will continue to modernize the Cryptologic and Intelligence Training Department infrastructure, "A" School laboratories, classrooms and courseware equipment with state-of-the-art multimedia CBT hardware capable of supporting both national and Navy unique Cryptologic and Intelligence training worldwide. Total number of Cryptologic and Intelligence classrooms/laboratories is 147.

BUDGET ITEM JUSTIFICATION SHEET		DATE: February 2000
APPROPRIATION/BUDGET ACTIVITY OPN - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT	**P-1 ITEM NOMENCLATURE** CRYPTOLOGIC EQUIPMENT 3501	**SUBHEAD** **521V**

TRAINING MODERNIZATION PROGRAM (TMP): This program supports the Reinvestment Strategy For Cryptologic and Intelligence Training (RSCIT). This program improves the effectiveness and efficiency of cryptologic and general intelligence training at NAVTECHTRACEN (NTTC) Corry Station, Fleet Intelligence Training Center Pacific (FITCPAC) San Diego and Navy Marine Corps Intelligence Training Center (NMITC) Dam Neck. With investment in technology-enhanced training systems and methods, courseware will be produced and exported to fleet users through the purchase of state-of-the-art interactive multimedia courseware production suites, predeployment suites, and the use of advanced modeling and simulation techniques. Distribution via the Automated Electronic Classroom, and mobile training teams will necessitate infrastructure improvements at the schoolhouses. Program funding in FY99 - FY01 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.

SIGNAL ANALYSIS LABORATORY (SAL): This program directly supports tactical commanders with tailored and responsive feedback from theater Information Warfare (IW) exploitation operations. Navy Signal Analysis Laboratories (SALs) are forward based signal analysis and processing centers for complex communications and electronic emissions. SALs require advanced signal processing equipment to keep pace with information technology and continually changing target sets. Funds are required to procure signal analysis equipment and information transfer backbone to perform shore-based IW exploitation of data resulting from mobile collection missions, and to aid real-time exploitation efforts. Signal analysis is performed at the labs using various advanced exploitation analog and digital processing devices. Signal information is passed back to the labs via electronic means and hardcopy tape. The lab requires a high capacity Local Area Network (LAN) infrastructure tied in with the Global Command and Control System Maritime (GCCS-M) to properly conduct information and data exchange. Labs exist at NIWA, NSGA Rota, NSGA Yokosuka, and NSGA Whidbey. A lab will be opened at NSGA Norfolk, and a perspective lab may be opened at NSGA Naples.

INSTALLATION NON-FMP: Installation of Cryptologic Training Equipment is done by SPAWARSYSCOM engineering field Activities or by system integration contractors. Installation of SAL cryptologic equipment will be performed by NIWA; SSC, Charleston, SC or by system integration contractors on behalf of SSC, Charleston. Installation of ACCES Training systems and upgrades is done by SSC, Charleston, SC, the SPAWARSYSCOM Field Activity responsible for the Cryptologic Carry-On Program (CCOP).

INSTALLATION FMP: Installation of Transportable-Radio Direction Finding (T-RDF) pregrooms are done by SPAWARSYSCOM Engineering Field Activities or by system integration contractors. Fleet Electronic Support (FES) Personnel install the T-RDF systems.

COST ANALYSIS													**DATE** February 2000
APPROPRIATION ACTIVITY OP,N - BA-2 COMMUNICATIONS AND ELECTRONIC EQUIPMENT							**P-1 ITEM NOMENCLATURE** CRYPTOLOGIC EQUIPMENT 3501						**SUBHEAD** 521V
			TOTAL COST IN THOUSANDS OF DOLLARS										
				PY	**FY 1999**			**FY 2000**			**FY 2001**		
COST CODE	**ELEMENT OF COST**	**ID CODE**	**QTY**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**
	MAJOR CLAIMANCY -- SPAWAR												
1V005	PRODUCTION SUPPORT	A					252						
1V555	PRODUCTION SUPPORT	A								407			727
1V040	CRYPTOLOGIC TRAINING EQUIPMENT (CTE)	A			VAR		4,229	VAR		2,729	VAR		1,968
1V041	TMP EQUIPMENT	A			VAR		2,841	VAR		5,655	VAR		2,204
1V042	SIGNALS ANALYSIS LAB	A			8	85.5	684						
1V043	T-RDF EQUIPMENT	A			3	494	1,482	2	471	942	1	486	486
1V044	T-RDF ANTENNAS	A			11	48.27	531	6	155	930	7	170	1,190
1V045	ACCES SYSTEMS	A			VAR		9,777	VAR		8,822	VAR		9,233
1V777	**INSTALLATION**	A					**985**			**725**			**844**
1V777	INSTALLATION FMP						655			600			701
1V777	DSA						20			45			47
1V776	INSTALLATION NON-FMP	A					310			80			96
	TOTAL SPAWAR CONTROL						**20,781**			**20,210**			**16,652**
	MAJOR CLAIMANCY -- CNSG												
	SIGNAL ANALYSIS LAB (SAL)							5	153.6	768	5	101.2	506
	SAL INSTALLATION NON-FMP									37			30
	TOTAL CNSG CONTROL									**805**			**536**
	GRAND TOTAL						**20,781**			**21,015**			**17,188**

DD FORM 2446, JUN 86

PROCUREMENT HISTORY AND PLANNING

A. DATE: February 2000

B. APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

C. P-1 ITEM NOMENCLATURE: CRYPTOLOGIC EQUIPMENT 3501

SUBHEAD: 521V

COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
1V042	SIGNALS ANALYSIS LAB (SAL)	99	VARIOUS	VARIOUS	SSC, CH	N/A	Mar-99	Aug-99	8	85.5	YES	N/A
		00	VARIOUS	VARIOUS	NSMA	N/A	Jan-00	Jun-00	5	153.6	YES	N/A
		01	VARIOUS	VARIOUS	NSMA	N/A	Jan-01	Jun-01	5	101.2	YES	N/A
1V043	T-RDF EQUIPMENT	99	SWRI, TX	OPT	OSP	N/A	Jan-99	Jun-99	3	494	YES	N/A
		00	SWRI, TX	FFP	SSC,CH	N/A	Jan-00	Jun-00	2	471	YES	N/A
		01	SWRI, TX	OPT	SSC,CH	N/A	Jan-01	Jun-01	1	486	YES	N/A
1V044	T-RDF ANTENNAS	99	SWRI, TX	OPT	OSP	N/A	Jan-99	Jun-99	11	48.27	YES	N/A
		00	SWRI, TX	FFP	SSC,CH	N/A	Jan-00	Jun-00	6	155	YES	N/A
		01	SWRI, TX	OPT	SSC,CH	N/A	Jan-01	Jun-01	7	170	YES	N/A

D. REMARKS

SAL: Various commercial-off-the-shelf procurements.

T-RDF Antenna / ACCES Systems: Unit cost variance results from the mix of hardware procured for various ship classes.

DD FORM 2446, JUN 87

Feb-00

MODIFICATION TITLE: CRYPTOLOGIC TRAINING EQUIPMENT (SHORE)
COST CODE 1V040 / 1V776/1V777
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: This program provides Computer Based Training (CBT) systems and other technical equipment (TTE) (e.g. maintenance diagnostic equipment, analylic workstations, network file servers, signal analyzers) at Naval Technical Training Center in Pensacola, FL, its detachments as well as NAVSECGRU Cryptologic Readiness Groups worldwide.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment			VAR	4.0	VAR	0.5	VAR	4.2	VAR	2.7	VAR	2.0	VAR	3.8	VAR	4.4	VAR	4.7	VAR	4.9	CONT.		CONT.	
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*			VAR	0.90	0	0.07	0	0.115	0	0.024	0	0.005	0	0.005	0	0.025	0	0.024	0	0.028	CONT.		CONT.	0.000
PRIOR YR EQUIP																						
FY 97 EQUIP			VAR	0.90																	0	0.020
FY 98 EQUIP					0	0.07															0	0.070
FY 99 EQUIP							0	0.115													0	0.115
FY 00 EQUIP									0	0.024											0	0.024
FY 01 EQUIP											0	0.005									0	0.005
FY 02 EQUIP													0	0.005							0	0.005
FY 03 EQUIP															0	0.025					0	0.025
FY 04 EQUIP																	0	0.024			0	0.024
FY 05 EQUIP																			0	0.028	0	0.028
FY TC EQUIP																			CONT.		0	0.000
TOTAL INSTALLATION COST		0.0		0.9		0.1		0.1		0.0		0.0		0.0		0.0		0.0		0.0	CONT.	0.0
TOTAL PROCUREMENT COST		0.0		4.9		0.6		4.3		2.7		2.0		3.8		4.4		4.7		4.9	0.0	CONT.	0.0	

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 MONTHS PRODUCTION LEADTIME: 2 MONTHS

CONTRACT DATES: FY 1999: Mar-99 FY 2000: Mar-00 FY 2001: Mar-01

DELIVERY DATES: FY 1999: May-99 FY 2000: May-00 FY 2001: May-01

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

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

Notes/Comments:
Total of 147 Cryptologic and Intelligence classrooms/laboratories are updated

Feb-00

MODIFICATION TITLE: TMP EQUIPMENT (SHORE)
COST CODE 1V041 / 1V776/V777
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: This program improves the effectiveness and efficiency of cryptologic and general intelligence training at NAVTECTRACEN (NTTC) Corry Station, Fleet Intelligence Training Center (FITC) San Diego and Navy and marine Corps Intelligence Center (NMITC) Dam Neck. State-of-the-art interactive multimedia classrooms and courseware will be developed for schoolhouse use.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment					VAR	2.1	VAR	2.8	VAR	5.7	VAR	2.2	VAR	1.4	VAR	1.5	VAR	1.5	VAR	1.5	CONT.		CONT.	
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.0	0	0.0	0	0.2	0	0.02	0	0.006	0	0.00	0	0.00	0	0.005	0	0.006	0	0.007	CONT.		CONT.	0.244
PRIOR YR EQUIP																							0	0.000
FY 97 EQUIP																							0	0.000
FY 98 EQUIP					0	0.2																	0	0.200
FY 99 EQUIP							0	0.02															0	0.020
FY 00 EQUIP									0	0.006													0	0.006
FY 01 EQUIP											0	0.00											0	0.000
FY 02 EQUIP													0	0.00									0	0.000
FY 03 EQUIP															0	0.005							0	0.005
FY 04 EQUIP																	0	0.006					0	0.006
FY 05 EQUIP																			0	0.007			0	0.007
FY TC EQUIP																					CONT.		0	0.000
TOTAL INSTALLATION COST		0.0		0.0		0.2		0.0		0.0		0.0		0.0		0.0		0.0		0.0	CONT.	0.0	CONT.	0.0
TOTAL PROCUREMENT COST		0.0		0.0		2.3		2.8		5.7		2.2		1.4		1.5		1.5		1.5	CONT.	0.0	CONT.	0.0

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 MONTHS PRODUCTION LEADTIME: 2 MONTHS

CONTRACT DATES: FY 1999: Mar-99 FY 2000: Mar-00 FY 2001: Mar-00

DELIVERY DATES: FY 1999: May-99 FY 2000: May-00 FY 2001: May-01

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

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

Notes/Comments
Total of 147 Cryptologic and Intelligence classrooms/laboratories are updated

Feb-00

MODIFICATION TITLE: SIGNALS ANALYSIS LABORATORY (SHORE)
COST CODE
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: This program directly supports tactical commanders with tailored and responsive feedback from theater Information Warfare (IW) exploitation operations. Navy signals analysis Laboratories (SALs) are forward based signals analysis and processing centers for complex communications and electronic emissions. SALs require advanced signals processing equipment to keep pace with information technology and continually changing target sets. Funds are required to procure signals analysis equipment to perform shore-based IW exploitation of data resulting from mobile collection missions, and to deploy advanced signals analysis systems afloat to aid near real-time exploitation efforts.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment					8	0.7	5	0.8	5	0.5	6	0.4	5	0.4	2	0.5	2	0.5	0	0.0	33	3.8
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.0	0	0.0	0	0.0	8	0.1	5	0.04	5	0.03	6	0.05	5	0.04	0	0.00	0	0.00	0	0.0	29	0.26
PRIOR YR EQUIP																					0	0.00
FY 97 EQUIP																					0	0.00
FY 98 EQUIP																					0	0.00
FY 99 EQUIP					8	0.1															8	0.10
FY 00 EQUIP							5	0.04													5	0.04
FY 01 EQUIP									5	0.03											5	0.03
FY 02 EQUIP											6	0.05									6	0.05
FY 03 EQUIP													5	0.04							5	0.04
FY 04 EQUIP															0	0.00					0	0.00
FY 05 EQUIP																	0	0.00			0	0.00
FY TC EQUIP																			0	0.0	0	0.00
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.1		0.0		0.1		0.0		0.0		0.0		0.0		0.3
TOTAL PROCUREMENT COST		0.0		0.0		0.0		0.8		0.8		0.5		0.5		0.4		0.5		0.5		4.1

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 2 MONTHS PRODUCTION LEADTIME: 5 MONTHS

CONTRACT DATES: FY 1999: Mar-99 FY 2000: Jan-00 FY 2001: Jan-01

DELIVERY DATES: FY 1999: Aug-99 FY 2000: Jun-00 FY 2001: Jun-01

INSTALLATION SCHEDULE:	PY	FY 99 1	2	3	4	FY 00 1	2	3	4	FY 01 1	2	3	4
INPUT					8				5				5
OUTPUT					8				5				5

INSTALLATION SCHEDULE:	FY 02 1	2	3	4	FY 03 1	2	3	4	FY 04 1	2	3	4	FY 05 1	2	3	4	TC	TOTAL
INPUT				6				5										29
OUTPUT				6				5										29

Notes/Comments
FY 04 and out begins the procurement of SAL upgrades - no installation funds are required.

Feb-00

MODIFICATION TITLE: T-RDF ANTENNA (SHIP)
COST CODE IV044 / 1V777
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: This program provides Transportable-Radio Direction Finding (T-RDF) Systems to Fleet Electronic Support (FES) Activities worldwide for permanent installation and use with the Advanced Cryptologic Carry-on Exploitation system (ACCES).

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment			4	0.9	11	0.5	6	0.9	7	1.2	6	1.1	4	0.8	15	0.8	18	1.1	CONT.		CONT *	0.0
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*			3	0.4	6	0.7	4	0.6	5	0.7	8	0.9	6	0.9	15	0.5	18	0.5	CONT.		CONT **	
PRIOR YR EQUIP																					0	0.0
FY 97 EQUIP																					0	0.0
FY 98 EQUIP			3	0.4																	3	0.4
FY 99 EQUIP					6	0.7															6	0.7
FY 00 EQUIP							4	0.6	2	0.3											6	0.9
FY 01 EQUIP									3	0.4	4	0.45									7	0.9
FY 02 EQUIP											4	0.45	2	0.3							6	0.8
FY 03 EQUIP													4	0.6							4	0.6
FY 04 EQUIP															15	0.5					15	0.5
FY 05 EQUIP																	18	0.5			18	0.5
FY TC EQUIP																			CONT.		0	0.0
TOTAL INSTALLATION COST		0.0		0.0		0.4		0.7		0.6		0.7		0.9		0.9		0.5		0.0	CONT.	0.0
TOTAL PROCUREMENT COST		0.0		0.0		1.3		1.2		1.5		1.9		2.0		1.7		1.3		0.0	CONT.	0.0

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 MONTHS PRODUCTION LEADTIME: 5 MONTHS

CONTRACT DATES: FY 1999: Jan-99 FY 2000: Jan-00 FY 2001: Jan-01

DELIVERY DATES: FY 1999: Jun-99 FY 2000: Jun-00 FY 2001: Jun-01

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

INSTALLATION SCHEDULE:	FY 02 1	FY 02 2	FY 02 3	FY 02 4	FY 03 1	FY 03 2	FY 03 3	FY 03 4	FY 04 1	FY 04 2	FY 04 3	FY 04 4	FY 05 1	FY 05 2	FY 05 3	FY 05 4	TC	TOTAL
INPUT	3	1	1	3	2		1	3			4	11			5	13	CONT.	CONT.
	3	1		4	2		1	3				15				18	CONT.	CONT.

Notes/Comments:
FY 04 and out begins the procurement of T-RDF upgrades.
I/O is 38 antennas.
FY 98 and FY 99 reflects the procurement of individual antennas vice a suite of antennas which is what is reflected in the procurement quantities FY 00 - FY 03.
These installs are required to utilize T-RDF systems as carry-on hardware during critical missions.

Feb-00

MODIFICATION TITLE: ACCES SYSTEMS (SHORE)
COST CODE 1V045 / 1V776/1V777
MODELS OF SYSTEMS AFFECTED:
DESCRIPTION/JUSTIFICATION: This program upgrades ACCES training systems installed at Cryptologic shore support Activities (CSSAs) and Cryptologic Readiness Groups (CRGs) worldwide. These upgrades provide ACCES with improved hardware/software capabilities/functionalities for operator/maintenance training of Direct Support (DIRSUP) personnel who temporarily deploy aboard surface, subsurface and airborne plataforms in support of fleet CINC's cryptologic mission requirements.

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

	PY		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		FY 04		FY 05		TC		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																						
PROCUREMENT:																						
Kit Quantity																						
Installation Kits																						
Installation Kits Nonrecurring																						
Equipment					VAR	0.6	VAR	1.9	VAR	2.7	VAR	2.7	VAR	1.3	VAR	2.0	0	0.0			CONT	11.2
Equipment Nonrecurring																						
Engineering Change Orders																						
Data																						
Training Equipment																						
Support Equipment																						
Other																						
Interm Contractor Support																						
Installation of Hardware*	0	0.0	0	0.0	0	0.0	VAR	0.08	VAR	0.05	VAR	0.1	VAR	0.2	VAR	0.1	VAR	0.2	0	0.0		CONT	0.7
PRIOR YR EQUIP																						0.0
FY 97 EQUIP																						0.0
FY 98 EQUIP																						0.0
FY 99 EQUIP					VAR	0.08																0.1
FY 00 EQUIP							VAR	0.05														0.1
FY 01 EQUIP									VAR	0.1												0.1
FY 02 EQUIP											VAR	0.2										0.2
FY 03 EQUIP													VAR	0.1								0.1
FY 04 EQUIP															VAR	0.2						0.2
FY 05 EQUIP																	0	0.0				0.0
FY TC EQUIP																						0.0
TOTAL INSTALLATION COST		0.0		0.0		0.0		0.1		0.1		0.2		0.1		0.2		0.0		0.0	CONT	0.7
TOTAL PROCUREMENT COST		0.0		0.0		0.0		0.7		2.0		2.8		2.9		1.4		2.2		0.0	CONT	11.9

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 MONTHS PRODUCTION LEADTIME: 5 MONTHS

CONTRACT DATES: FY 1999: Feb-99 FY 2000: Jan-00 FY 2001: Jan-99

DELIVERY DATES: FY 1999: Jun-99 FY 2000: May-00 FY 2001: May-99

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

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

Notes/Comments

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February 2000

APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: CRYPTOLOGIC EQUIPMENT 3501

SUBHEAD NO.: 521V

COST CODE	ITEM/MANUFACTURER	FY	SERV	PROC QTY	ACCEP PRIOR TO 1-Oct	BAL DUE AS OF 1-Oct	FISCAL YEAR 99												FISCAL YEAR 00												FISCAL YEAR 01											
							PY98			CALENDAR YEAR 99									CALENDAR YEAR 99												CALENDAR YEAR 00											
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1V042	SIGNAL ANALYSIS LAB	99		8		8						A					4	4																							
		00		5		5																A					5														
		01		5		5																											A						5			
1V043	T-RDF EQUIPMENT	99		3		3				A					3													2													
		00		2		2																A																			
		01		1		1																											A						1			
1V044	T-RDF ANTENNAS	99		11		11				A					4	3	2	2																							
		00		6		6																A					1	1	1	1	1	1									
		01		7		7																											A						1	1	1	1
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP

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

NAVMAT FORM 7110/4 (REVISED 11/77)

UNCLASSIFIED

CLASSIFICATION

PRODUCTION SCHEDULE

(DOD EXHIBIT P-21A)

DATE: February 2000

APPROPRIATION/BUDGET ACTIVITY: OP,N - BA2 COMMUNICATIONS & ELECTRONIC EQUIPMENT

P-1 ITEM NOMENCLATURE: CRYPTOLOGIC EQUIPMENT 3501

SUBHEAD NO.: 521V

COST CODE	ITEM/MANUFACTURER	FY	SERV	PROC QTY	ACCEP PRIOR TO 1-Oct	BAL DUE AS OF 1-Oct	FISCAL YEAR 02												FISCAL YEAR 03												FISCAL YEAR 04											
							PY01			CALENDAR YEAR 02															CALENDAR YEAR 03												CALENDAR YEAR 04										
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1V043	T-RDF EQUIPMENT	99		3	3	0																																		
		00		2	2	0																																			
		01		1	1	0																																			
1V044	T-RDF ANTENNAS	99		11	11	0																																		
		00		6	6	0																																			
		01		7	4	3	1	1	1																																

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

NAVMAT FORM 7110/4 (REVISED 11/77)