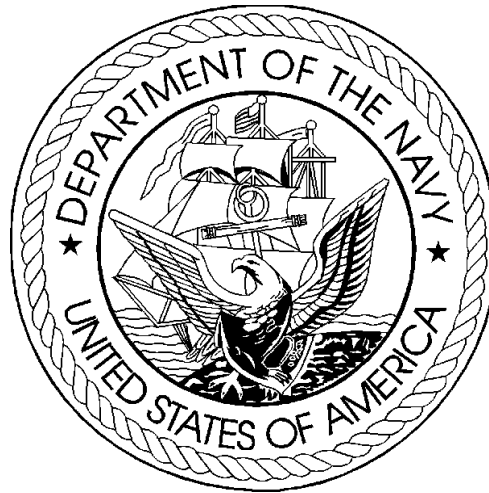


DEPARTMENT OF THE NAVY
FY 1999 AMENDED BUDGET ESTIMATES



JUSTIFICATION OF ESTIMATES
FEBRUARY 1998

WEAPONS PROCUREMENT, NAVY

Department of the Navy
 FY 1999 Procurement Program

Exhibit P-1

APPROPRIATION: 1507N Weapons Procurement, Navy

DATE: 01/23/98

LINE NO	ITEM NOMENCLATURE	IDENT CODE	(DOLLARS) FY 1999 UNIT COST	TOA, \$ IN MILLIONS						S E C
				FY 1997		FY 1998		FY 1999		
				QUANTITY	COST	QUANTITY	COST	QUANTITY	COST	
BUDGET ACTIVITY 01: Ballistic Missiles										

Ballistic Missiles										
1	1150 Trident II	A	55,487,200	7	284.5	5	226.5	5	277.4	U
	Less: Advance Procurement (PY)				-29.4		-14.9		-16.8	
					-----		-----		-----	
					255.1		211.6		260.7	
2	1150 Trident II	A								U
	(FY 1997 for 1998) (MEMO)				10.7		-		-	
	(FY 1997 for 1999) (MEMO)				1.7		-		-	
	(FY 1997 for 2000) (MEMO)				2.9		-		-	
	(FY 1997 for 2001) (MEMO)				1.2		-		-	
	(FY 1997 for 2004) (MEMO)				41.4		-		-	
	(FY 1998 for 1999) (MEMO)				-		10.9		-	
	(FY 1998 for 2001) (MEMO)				-		1.9		-	
	(FY 1998 for 2002) (MEMO)				-		2.9		-	
	(FY 1998 for 2003) (MEMO)				-		2.9		-	
	(FY 1998 for 2004) (MEMO)				-		37.5		-	
	(FY 1999 for 2000) (MEMO)				-		-		17.2	
	(FY 1999 for 2001) (MEMO)				-		-		1.8	
	(FY 1999 for 2002) (MEMO)				-		-		4.1	
	(FY 1999 for 2003) (MEMO)				-		-		4.1	
	(FY 1999 for 2004) (MEMO)				-		-		35.7	
Support Equipment And Facilities										
3	1350 Missile Industrial Facilities	A			1.8		2.1		.2	U
					-----		-----		-----	
TOTAL	Ballistic Missiles				314.8		269.8		323.7	

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

Identification code	17-1507-0-1-051	Budget Plan (amounts for PROCUREMENT actions programed)			Obligations		
		1997 actual	1998 est.	1999 est.	1997 actual	1998 est.	1999 est.
Program by activities:							
Direct program:							
00.0101	Ballistic missiles	314,815	269,834	323,650	366,815	286,465	292,984
00.0201	Other missiles	830,648	618,864	832,908	926,354	600,517	740,014
00.0301	Torpedoes and related equipment	108,108	92,621	97,837	100,236	111,289	105,517
00.0401	Other weapons	36,636	85,022	27,232	34,966	73,804	39,515
00.0601	Spares and repair parts	41,809	21,422	45,918	47,140	31,335	46,165
00.9101	Total direct program	1,332,016	1,087,763	1,327,545	1,475,511	1,103,410	1,224,195
01.0101	Reimbursable program	21,000	74,800	74,800	243	95,800	74,800
10.0001	Total	1,353,016	1,162,563	1,402,345	1,475,754	1,199,210	1,298,995
Financing:							
Offsetting collections from:							
11.0001	Federal funds(-)	-21,000	-74,800	-74,800	-15,784	-74,800	-74,800
17.0001	Recovery of prior year obligations				-12,077		
Unobligated balance available, start of year:							
21.4002	For completion of prior year budget plans				-448,823	-311,568	-274,920
21.4003	Available to finance new budget plans	-16,000	-6,726		-16,000	-6,726	
21.4009	Reprogramming from/to prior year budget plan	-21,378					
22.1001	Unobligated balance transferred to other acco		6,726			6,726	
Unobligated balance available, end of year:							
24.4002	For completion of prior year budget plans				311,568	274,920	378,270
24.4003	Available to finance subsequent year budget	6,726			6,726		
25.0001	Unobligated balance expiring	21,378			21,378		
39.0001	Budget authority	1,322,742	1,087,763	1,327,545	1,322,742	1,087,763	1,327,545
Budget authority:							
40.0001	Appropriation	1,364,231	1,102,193	1,327,545	1,364,231	1,102,193	1,327,545
40.7601	Reduction pursuant to P.L. 105-56 (-), 8041		-21,230			-21,230	
41.0001	Transferred to other accounts (-)	-41,489			-41,489		
42.0001	Transferred from other accounts		6,800			6,800	
43.0001	Appropriation (adjusted)	1,322,742	1,087,763	1,327,545	1,322,742	1,087,763	1,327,545

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

Identification code	17-1507-0-1-051	Budget Plan (amounts for PROCUREMENT actions programed)			Obligations		
		1997 actual	1998 est.	1999 est.	1997 actual	1998 est.	1999 est.
Relation of obligations to outlays:							
71.0001	Obligations incurred				1,459,970	1,124,410	1,224,195
72.1001	Orders on hand, SOY				-37,434	-34,608	-34,608
72.4001	Obligated balance, start of year				3,286,784	2,765,572	2,270,295
74.1001	Orders on hand, EOY				34,608	34,608	34,608
74.4001	Obligated balance, end of year				-2,765,572	-2,270,295	-2,109,757
77.0001	Adjustments in expired accounts (net)				15,891		
78.0001	Adjustments in unexpired accounts				-12,077		
90.0001	Outlays (net)				1,982,170	1,619,687	1,384,733

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

Identification code	17-1507-0-1-051	1997 actual	1998 est.	1999 est.

Direct obligations:				
122.001	Transportation of things	2,566	2,008	2,028
125.101	Advisory and assistance services	23,256	24,591	24,701
	Purchases goods/services (inter/intra) Fed accounts			
125.303	Purchases from revolving funds	200,392	203,192	179,946
126.001	Supplies and materials	78,820	70,461	82,862
131.001	Equipment	1,170,477	803,158	934,658
		-----	-----	-----
199.001	Total Direct obligations	1,475,511	1,103,410	1,224,195
Reimbursable obligations:				
226.001	Supplies and materials	243	95,800	21,900
231.001	Equipment			52,900
		-----	-----	-----
299.001	Total Reimbursable obligations	243	95,800	74,800
		-----	-----	-----
999.901	Total obligations	1,475,754	1,199,210	1,298,995

Comparison of FY 1998 Program Requirements as Reflected
in the FY 1998 Budget with FY 1998 Program Requirements as
Shown in FY 1999 Budget (In Thousands of Dollars)

	FY 1998 Total Program Requirements <u>Per FY 1998 Budget</u>	FY 1998 Program Requirements <u>Per FY 1999 Budget</u>	Increase (+) or Decrease (-)
Ballistic Missiles	341,412	269,834	-71,578
Other Missiles	612,993	618,864	+5,871
Torpedoes and Related Equipment	95,715	92,621	-3,094
Other Weapons	59,230	85,022	+25,792
Spares and Repair Parts	26,943	21,422	-5,521
Subtotal Direct Program	1,136,293	1,087,763	-48,530
Reimbursable	74,800	74,800	-
Total Fiscal Year	1,211,093	1,162,563	-48,530

Explanation of Changes in FY 1998 Program Requirements

1. Ballistic Missiles (-\$71.6 million)
Decrease reflects Congressional undistributed and inflation reductions (-\$6.6 million) and a program reduction of 2 Trident II missiles (-\$65.0 million) to slow the production rate of Trident II missiles specifically earmarked for the D5 Backfit submarines.
2. Other Missiles (+\$5.9 million)
Changes include Congressional adjustments to JSOW (+\$5.0 million), Standard Missile (-\$15.4 million), Hellfire (+\$20.0 million), Penguin (+\$7.5 million), Aerial Targets (-\$7.0 million), ESSM (-\$5.0 million), Standard Missile Modifications (+\$15.3 million), and Weapons Industrial Facility (-\$4.5 million). Reprogrammings requiring Congressional approval include the SLAM-ER program (+\$9.0 million) and RAM (-\$2.0 million) are also part of the change. Adjustments also include Congressional undistributed general and inflation reductions (-\$17.0 million).
3. Torpedoes and Related Equipment (-\$3.1 million)
Changes include Congressional undistributed general and inflation reductions (-\$2.9 million) and a reprogramming requiring Congressional approval to the First Destination Transportation program (-\$0.2 million).
4. Other Weapons (+\$25.8 million)
Changes include Congressional adjustments for the Close-In-Weapons-System (+\$15.0 million), 5/54 Gun Mount Modifications (+\$10.0 million), and Pioneer (+\$3.0 million) and Congressional undistributed reductions (-\$2.2 million).
6. Spares & Repair Parts (\$-5.5 million)
Changes include adjustments for Congressional reductions (-\$5.0 million) and undistributed Congressional reductions (-\$.5 million).

Comparison of FY 1998 Financing as Reflected in the FY 1998 Budget
with FY 1998 Financing as Shown in FY 1998 Budget
(In Thousands of Dollars)

	FY 1998 Financing Per <u>FY 1998 Budget</u>	FY 1998 Financing Per <u>FY 1999 Budget</u>	Increase (+) Decrease (-)
Program Requirements (Total)			
Program Requirements (Direct)	(1,136,293)	(1,087,763)	(-48,530)
Program Requirements (Reimb)	(74,800)	(74,800)	
Less:			
Anticipated Reimbursements	74,800	74,800	-
Add:			
Unob bal avail, start of year to finance new budget plans		-6,726	-6,726
Unob bal transferred to other accts		6,726	6,726
Appropriation Adjusted	1,136,293	1,087,763	-48,530
Budget Authority:			
FY 1998 DoD Appropriations Act	1,136,293	1,102,193	-34,100
Reduct Pursuant to P. L. 105-56		-21,230	-21,230
Transferred from other accounts		6,800	+6,800
Appropriation (Adjusted)	1,136,293	1,087,763	-48,530

Explanation of Changes in Financing

The \$48.5 million change in program financing is the net result of Congressional specific (-\$34.1 million) and undistributed general reductions (-\$21.2 million); and Prior Approval Congressional reprogrammings associated with a more cost efficient procurement profile for the SLAM-ER program (+\$9.0 million), and funding from RAM (-\$2.0 million) and First Destination Transportation (-\$0.2 million) funding to fund emergent DOD requirements.

Comparison of FY 1997 Program Requirements as Reflected
in the FY 1998 Budget with FY 1997 Program
Requirements as Shown in FY 1999 Budget (In Thousands of Dollars)

	FY 1997 Total Program Requirements <u>Per FY 1998 Budget</u>	FY 1997 Total Program Requirements <u>Per FY 1999 Budget</u>	Increase (+) or Decrease (-)
Ballistic Missiles	316,332	314,815	-1,517
Other Missiles	844,202	830,648	-13,554
Torpedoes and Related Equipment	120,594	108,108	-12,486
Other Weapons	30,815	36,636	+5,821
Spares and Repair Parts	46,490	41,809	-4,681
Subtotal Direct Program	1,358,433	1,332,016	-26,417
Reimbursable	74,800	21,000	-53,800
Total Fiscal Year	1,433,233	1,353,016	-80,217

Explanation of Changes in FY 1997 Program Requirements

1. Ballistic Missiles (-\$1.5 million)

Change is a result of revised economic assumption reflected in the FY 1997 Supplemental Appropriation (-\$1.3 million) and minor below threshold reprogramming actions (-\$0.2 million).

2. Other Missiles (-\$13.6 million)

Change reflects a reduction to AMRAAM (-\$4.2 million) to fund the AEGIS Baseline Consolidation effort; and a net increase to fund additional MA-31 Aerial Target procurement (\$1.5 million). Adjustments were also associated with revised economic assumptions reflected in the FY 1997 Supplemental Appropriation (-\$3.6 million), and minor below threshold reprogramming actions.

3. Torpedoes and Related Equipment (-\$12.5 million)

Change reflects minor below threshold reprogrammings (-\$9.4 million), and reductions associated with the revised economic assumptions reflected in the FY 1997 Supplemental appropriation (-\$0.5 million). Reduction also include funding reprogrammed to support the AEGIS Baseline Consolidation effort (-\$2.5 million).

4. Other Weapons (+\$5.8 million)

Change reflects minor below threshold reprogrammings (+\$6.0 million) and revised economic assumption reflected in the FY 1997 Supplemental Appropriation (-\$0.1 million).

6. Spares & Repair Parts (-\$4.7 million)

Change reflects minor below threshold reprogrammings (-\$4.5 million) and revised economic assumptions reflected in the FY 1997 Supplemental Appropriation (-\$0.2 million).

Comparison of FY 1997 Financing as Reflected in the FY 1998 Budget
with FY 1997 Financing as Shown in FY 1999 Budget
(In Thousands of Dollars)

	FY 1997 Financing Per FY 1998 Budget	FY 1997 Financing Per FY 1999 Budget	Increase (+) Decrease (-)
Program Requirements (Total)	1,433,233	1,353,016	-80,217
Program Requirements (Direct)	(1,358,433)	(1,332,016)	(-26,417)
Program Requirements (Reimb)	(74,800)	(21,000)	(-53,800)
Less:			
Anticipated Reimbursements	-74,800	-21,000	-53,800
Add:			
Federal Funds (-):	-	-21,000	-21,000
Available to finance new budget plans	-	-16,000	-16,000
Reprogrammed from/to prior year budget plan:	-	-21,378	-21,378
Available to finance subsequent year budget:	-	6,726	+6,726
Unobligated balance expiring	-	21,378	+21,378
Appropriation Adjusted	1,358,433	1,322,742	-35,691
Budget Authority:			
FY 1997 DoD Appropriations Act	1,389,913	1,364,231	-25,682
Reduction pursuant to P.L. 104-208, 8037 (h)	-3,682	-	+3,682
Transferred from other accts	-	-	-
Transferred to other accounts	-27,798	-41,489	-13,691
Appropriation (Adjusted)	1,358,433	1,322,742	-35,691

Explanation of Changes in Financing

Primary changes in program financing are a result of reductions associated with revised economic assumptions reflected in the FY 1997 Supplemental Appropriation (-\$5.7 million), transfers to other accounts (-\$13.7 million), and funding reprogrammed for AEGIS Baseline Consolidation efforts (-\$6.7 million).

BUDGET ITEM JUSTIFICATION SHEET	DATE FEBRUARY 1998
--	-----------------------

APPROPRIATION/BUDGET ACTIVITY WEAPONS PROCUREMENT, NAVY / BUDGET ACTIVITY 1 BALLISTIC MISSILES	P-1 ITEM NOMENCLATURE TRIDENT II MISSILE UGM-133A (D-5)
--	---

\$ in Millions	Prior Years	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	To Complete	Total Program
QUANTITY	337	6	7	5	5	12	12	12	12	26	434
End Cost	\$12,016.8	\$337.8	\$291.3	\$237.7	\$281.3	\$498.8	\$496.5	\$582.9	\$664.5	\$1,947.2	\$17,354.8
Less: Prior Year Adv. Proc. 1/	(\$1,460.3)	(\$16.0)	(\$36.2)	(\$19.5)	(\$20.6)	(\$36.3)	(\$35.2)	(\$98.2)	(\$153.2)	(\$666.4)	(\$2,541.9)
Current Year Full Funding 1/	\$10,556.5	\$321.8	\$255.1	\$218.2	\$260.7	\$462.5	\$461.3	\$484.7	\$511.3	\$1,280.8	\$14,812.9
Plus: Current Year Adv. Proc.	\$2,065.6	\$185.4	\$57.9	\$49.5	\$62.8	\$37.5	\$36.6	\$16.2	\$15.0	\$15.4	\$2,541.9
Plus: Initial Spares	\$20.7	\$3.5	\$3.4	\$1.7	\$5.5	\$13.6	\$6.0	\$4.2	\$4.6	\$191.8	\$255.0
Total New Obligational Authority	\$12,642.8	\$510.7	\$316.4	\$269.4	\$329.0	\$513.6	\$503.9	\$505.1	\$530.9	\$1,488.0	\$17,609.8
Missile Flyaway Unit Cost 2/	\$29.0	\$20.6	\$20.9	\$21.8	\$22.7	\$23.1	\$23.6	\$23.9	\$24.4	\$25.3	\$27.8

The TRIDENT II missile is carried on OHIO CLASS Fleet Ballistic Missile Submarines, ensuring that the United States continues to maintain a highly survivable strategic deterrent for the 1990's and beyond. Deployment of the TRIDENT II missile (1) enhances Fleet Ballistic Missile Submarine survivability by increasing Sea Launched Ballistic Missile range at full payload to exploit the total patrol area available to the TRIDENT submarine, (2) minimizes total weapon system costs by increasing Sea Launched Ballistic Missile payload to the level permitted by the size of the TRIDENT submarine launch tube, thereby allowing mission capability to be achieved with fewer submarines, and (3) balances the Triad by adding efficient hard target kill capability to the Sea Launched Ballistic Missile.

Funding in this line is required to support the procurement of an all new TRIDENT II missile, initial production of which commenced in FY 1987 and supported a TRIDENT II missile Initial Operational Capability (IOC) in March 1990.

The FY 1999 full funding request of \$260.7 million will support the production of 5 TRIDENT II missiles with associated guidance systems, additional reentry systems hardware, continued support required to maintain SWFLANT's TRIDENT II missile processing capability, and initial equipment procurements associated with establishing a limited TRIDENT II capability at the Strategic Weapons Facility, Pacific (SWFPAC) at Bangor WA. Funding provides for a 14 SSBN TRIDENT II program, which assumes the backfit of 4 C-4 boats to the D-5 configuration.

Compared to FY 1998, the FY 1999 program cost has increased as a consequence of production restarts and the requalification costs occasioned by the \$65 million Congressional mark in the FY 1998 DoD Appropriations Act. The FY 1998 appropriation forced numerous production line breaks in D-5 missile component manufacture, including post boost control systems, nose fairing jettison motors, MK-6 guidance system electronic assemblies, and HMX (rocket motor propellant).

The Navy's budget estimates for D-5 missile procurement assume U.K. participation in FY 1997 - FY 1999.

1/ The FY 1998 column reflects a below-threshold reprogramming correcting the full funding and advance procurement lines.

2/ Unit cost shown is flyaway airframe and motor unit cost of which \$3.1M for FY 1998 and \$2.6M for FY 1999 were funded in prior years' Advance Procurement. Costs shown in the Total New Obligational Authority line include guidance systems, warhead components, flight test instrumentation, arms control and recurring production support costs.

UNCLASSIFIED

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)			A. WEAPONS PROCUREMENT, NAVY BUDGET ACTIVITY 1			B. UGM-133A TRIDENT II (D-5) MISSILE (3IDL)			C. LOCKHEED MARTIN MISSILES AND SPACE CO. SUNNYVALE, CA			D. FEBRUARY 1998		
WEAPON SYSTEM COST ELEMENTS	Ident. Code	FY 96 Unit cost	Qty	TOTAL COST	FY 97 Unit cost	Qty	TOTAL COST	FY 98 Unit cost	Qty	TOTAL COST	FY 99 Unit cost	Qty	TOTAL COST	
<u>MISSILE H/W - RECURRING</u>														
1	AIRFRAME & MOTOR FLYAWAY COST	20,600	6	123,600	20,935	7	146,548	21,820	5	109,100	22,720	5	113,600	
2	GUIDANCE FLYAWAY COST	9,655	4	38,620	9,822	4	39,286			24,000	10,250	4	41,000	
3	SUBTOTAL MISSILE AND GUIDANCE FLYAWAY COST			162,220			185,834			133,100			154,600	
	LESS: PRIOR YEAR ADVANCE PROCUREMENT			(15,960)			(36,190)			(19,482)			(20,645)	
4	SUBTOTAL MISSILE AND GUIDANCE NEW OBLIGATIONAL AUTHORITY (NOA)			146,260			149,644			113,618			133,955	
	<u>SUPPORT COSTS</u>													
5	WARHEAD COMPONENTS			24,180			23,394			19,000			20,300	
6	SPECIAL PURPOSE INSTRUMENTATION			11,035			10,423			10,100			12,150	
7	SPECIAL PURPOSE TOOLING & TEST EQUIPMENT			28,970			22,369			13,800			14,450	
8	INF TREATY SUPPORT			6,984			7,140			7,200			7,500	
9	ARMS CONTROL			7,687			7,700			12,800			6,700	
10	CONTAINERS			40			40			40			40	
11	SYSTEM INTEGRATION & PLANNING			12,140			11,349			11,450			11,500	
12	SWFLANT PRODUCTION SUPPORT			22,964			15,788			14,800			14,150	
13	GUIDANCE SUPPORTABILITY MODS			2,390			7,246			15,397			15,700	
14	ANNUALIZED PRODUCTION COSTS			59,181			0			0			0	
15	GUIDANCE PARTS PROCUREMENT			0			0			0			6,082	
16	SWFPAC PRODUCTION SUPPORT			0			0			0			3,975	
17	PRODUCTION REQUALIFICATION			0			0			0			14,150	
18	SUBTOTAL SUPPORT COST NOA			175,571			105,449			104,587			126,696	
	CURRENT YEAR FULL FUNDING			321,831			255,093			218,205			260,652	
	PLUS: CURRENT YEAR ADVANCE PROCUREMENT			185,379			57,934			49,533			62,800	
	NET TRIDENT II COST			507,210			313,027			267,738			323,452	
	PLUS: INITIAL SPARES			3,498			3,351			1,693			5,466	
	TOTAL NEW OBLIGATIONAL AUTHORITY			510,708			316,378			269,431			328,918	

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)								DATE: FEBRUARY 1998		
B. WEAPONS PROCUREMENT NAVY BUDGET ACTIVITY 1						P-1 ITEM NOMENCLATURE: TRIDENT II MISSILE UGM-133A (D-5)				
COST ELEMENT/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES, WHEN AVAILABLE
1. TRIDENT II MSL. FY 1996	LOCKHEED MARTIN MISSILES AND SPACE CO. (LMMS) SUNNYVALE, CA	SS/CPIF	STRATEGIC SYSTEMS PROGRAMS (SSP)	10/95	10/97	6	20,600	YES	NO	
FY 1997	LMMS	SS/CPIF	SSP	10/96	10/98	7	20,935	YES	NO	
FY 1998	LMMS	SS/CPIF	SSP	10/97	10/99	5	21,820	YES	NO	
FY 1999	LMMS	SS/CPIF	SSP	10/98	10/00	5	22,720	YES	NO	
D. REMARKS The UK is buying 7 missiles each year during FY 1997 - FY 1999.										

UNCLASSIFIED

FY 98/99 BUDGET PRODUCTION SCHEDULE												P-1 ITEM NOMENCLATURE: TRIDENT II MISSILE UGM - 133A (D-5)												DATE: FEBRUARY 1998																
ITEM/MANUFACTURER PROCUREMENT YEAR	FISCAL YEAR 1998												FISCAL YEAR 1999												FISCAL YEAR 2000												L A T E R			
	CALENDAR YEAR 1998												CALENDAR YEAR 1999												CALENDAR YEAR 2000															
	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P				
TRIDENT II MISSILE FY 1996	1	1	1	1	1	1																																		0
FY 1997 1/													1	1	1	1	1	1	1																					0
FY 1998 1/																									1	1	1		1		1									0
FY 1999 1/																																								5
FY 2000																																								12
FY 2001																																								12
FY 2002																																								12
FY 2003																																								12
TOTAL	1	1	1	1	1	1	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	1	1	1	1	0	1	0	1	0	0	0	0	0	53		
REMARKS 1/ The Navy's budget estimates for D-5 missile procurement and deliveries assume U.K. participation in FY 1997 - FY 1999.	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P				

UNCLASSIFIED

FY 98/99 BUDGET PRODUCTION SCHEDULE										P-1 ITEM NOMENCLATURE: TRIDENT II MISSILE UGM - 133A (D-5)										DATE: FEBRUARY 1998																				
ITEM/MANUFACTURER PROCUREMENT YEAR	FISCAL YEAR 2001										FISCAL YEAR 2002										FISCAL YEAR 2003										L A T E R									
	CALENDAR YEAR 2001										CALENDAR YEAR 2002										CALENDAR YEAR 2003																			
	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R		A P R	M A Y	J U N	J U L	A U G	S E P			
TRIDENT II MISSILE FY 1999 1/	1	1	1		1		1																																0	
FY 2000													1	1	1	1	1	1	1	1	1	1	1	1														0		
FY 2001																										1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
FY 2002																																							12	
FY 2003																																							12	
TOTAL	1	1	1	0	1	0	1	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	24		
REMARKS 1/ The Navy's budget estimates for D-5 missile procurement and deliveries assume U.K. participation in FY 1997 - FY 1999.																																								

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET										DATE FEBRUARY 1998	
APPROPRIATION/BUDGET ACTIVITY WEAPONS PROCUREMENT, NAVY / BUDGET ACTIVITY 1 BALLISTIC MISSILES					P-1 ITEM NOMENCLATURE TRIDENT II ADVANCE PROCUREMENT						
	Prior Years	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	To Complete	Total Program
QUANTITY	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cost (in millions)	\$2,065.6	\$185.4	\$57.9	\$49.5	\$62.8	\$37.5	\$36.6	\$16.2	\$15.0	\$15.4	\$2,541.9
Initial Spares	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total (in Millions) 1/	\$2,065.6	\$185.4	\$57.9	\$49.5	\$62.8	\$37.5	\$36.6	\$16.2	\$15.0	\$15.4	\$2,541.9
Unit Cost (in Millions)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Funding in this line item provides for the advance procurement of various components, subassemblies and raw materials which are required to support the future production and processing of TRIDENT II (D-5) missiles, MK-6 guidance systems and D-5 special purpose flight test instrumentation. Total advance procurement requirements comprise two major subsets of commodity acquisition: traditional, or long lead advance procurement, which includes those items having longer manufacturing leadtimes than the using D 5 items; and production continuity advance procurement, which entails the purchase of certain critical components earlier than leadtimes alone would dictate to ensure their continuous production. These latter production continuity procurements encompass a broad range of components and materials which must be produced at minimum, uninterrupted rates on dedicated production lines as well as life-of-type or one-time quantity buys of items required to support the total planned program. The quality and homogeneity obtained by these means are essential to assure the consistent performance reliability of the missiles to be procured for the TRIDENT II program.

The FY 1999 request of \$62.8 million will provide \$16.0 million for the advance procurement of long lead items required to support the FY 2000 full funded manufacture of D-5 missiles and \$46.8 million for advance procurement of life of type and critical components required to maintain D-5 missile component production lines at the lowest sustaining rate consistent with quality, reliability, safety and cost.

1/ The FY 1998 column reflects a below-threshold reprogramming correcting the full funding and advance procurement lines.

UNCLASSIFIED

WEAPON SYSTEM ADVANCE PROCUREMENT EXHIBIT (P-10) (PROCUREMENT OF ADVANCE DESIGN AND MATERIAL) (TOA, Dollars in tenths of Millions)					FY 1996 FOR FY 1997	
					DATE: FEBRUARY 1998	
Weapon System Type - UGM 133A TRIDENT II Missile		First System Award Date		First System Completion Date		Interval Between System Completions
UGM 133A TRIDENT II MISSILE		FY 1987		FY 1989		
Advance Procurement/Advance Funding Items	Quantity	End Item			Unit Cost	Total Cost
		Date Contract Award Planned/Required	Delivery Date of First Equipment Required	Production Lead Time in Months (Adm/Prod)-Total		
1. CFE AIRFRAME AND MOTOR LONG LEAD	1 (see below)	10/96 *	10/98 *	9/24	1.5	1.5
AIRFRAME AND MOTOR PRODUCTION CONTINUITY						183.9
TOTAL						185.4
<p>Narrative Description</p> <p>Long Lead funding will allow for the delivery of TRIDENT II missiles in 2 versus 3 years. Long Lead items for six of the seven missiles authorized for the October 1996 contract were procured in FY 1995.</p> <p>Production continuity funds are required to maintain continuous production for missile motors and critical components at the lowest sustaining rate consistent with quality, reliability, safety and cost.</p> <p>* Long Lead procurements are awarded in the preceding year. The dates shown pertain to the full funded D-5 missiles to which the Long Lead will be applied.</p>						

UNCLASSIFIED

WEAPON SYSTEM ADVANCE PROCUREMENT EXHIBIT (P-10) (PROCUREMENT OF ADVANCE DESIGN AND MATERIAL)					FY 1997 FOR FY 1998	
(TOA, Dollars in tenths of Millions)					DATE: FEBRUARY 1998	
Weapon System Type - UGM 133A TRIDENT II Missile		First System Award Date		First System Completion Date		Interval Between System Completions
UGM 133A TRIDENT II MISSILE		FY 1987		FY 1989		
Advance Procurement/Advance Funding Items	Quantity	End Item			Unit Cost	Total Cost
		Date Contract Award Planned/Required	Delivery Date of First Equipment Required	Production Lead Time in Months (Adm/Prod)-Total		
1. CFE AIRFRAME AND MOTOR LONG LEAD	7 (see below)	10/97 *	10/99 *	9/24	1.5	10.7
AIRFRAME AND MOTOR PRODUCTION CONTINUITY						47.2
TOTAL						57.9
<p>Narrative Description</p> <p>Long Lead funding will allow for the delivery of TRIDENT II missiles in 2 versus 3 years. Subsequent to obligation of FY 1997 Long Lead funding for seven missiles budgeted for the October 1997 contract, Congress reduced the authorized quantity to five missiles. As a consequence, FY 1997 Advance Procurement funds will procure Long Lead items for two of the five missiles requested for the October 1998 contract.</p> <p>Production continuity funds are required to maintain continuous production for missile motors and critical components at the lowest sustaining rate consistent with quality, reliability, safety and cost.</p> <p>* Long Lead procurements are awarded in the preceding year. The dates shown pertain to the full funded D-5 missiles to which the Long Lead will be applied.</p>						

UNCLASSIFIED

WEAPON SYSTEM ADVANCE PROCUREMENT EXHIBIT (P-10) (PROCUREMENT OF ADVANCE DESIGN AND MATERIAL)					FY 1998 FOR FY 1999	
(TOA, Dollars in tenths of Millions)					DATE: FEBRUARY 1998	
Weapon System Type -		First System Award Date		First System Completion Date		Interval Between System Completions
UGM 133A TRIDENT II MISSILE		FY 1987		FY 1989		
Advance Procurement/Advance Funding Items	Quantity	End Item			Unit Cost	Total Cost
		Date Contract Award Planned/Required	Delivery Date of First Equipment Required	Production Lead Time in Months (Adm/Prod)-Total		
1. CFE AIRFRAME AND MOTOR LONG LEAD	5 (see below)	10/98 *	10/00 *	9/24	1.6	8.0
AIRFRAME AND MOTOR PRODUCTION CONTINUITY						41.5
TOTAL						49.5
<p>Narrative Description</p> <p>Long Lead funding will allow for the delivery of TRIDENT II missiles in 2 versus 3 years. Long Lead items for two of the five missiles requested for the October 1998 contract were funded in FY 1997. The Department of Defense has reduced the number of missiles proposed for the October 1998 contract from seven to five. As a consequence, FY 1998 Advance Procurement will fund Long Lead items for two of the seven missiles requested for the October 1999 contract.</p> <p>Production continuity funds are required to maintain continuous production for missile motors and critical components at the lowest sustaining rate consistent with quality, reliability, safety and cost.</p> <p>* Long Lead procurements are awarded in the preceding year. The dates shown pertain to the full funded D-5 missiles to which the Long Lead will be applied.</p>						

UNCLASSIFIED

WEAPON SYSTEM ADVANCE PROCUREMENT EXHIBIT (P-10) (PROCUREMENT OF ADVANCE DESIGN AND MATERIAL)					FY 1999 FOR FY 2000	
(TOA, Dollars in tenths of Millions)					DATE: FEBRUARY 1998	
Weapon System Type - UGM 133A TRIDENT II Missile		First System Award Date		First System Completion Date		Interval Between System Completions
UGM 133A TRIDENT II MISSILE		FY 1987		FY 1989		
Advance Procurement/Advance Funding Items	Quantity	End Item			Unit Cost	Total Cost
		Date Contract Award Planned/Required	Delivery Date of First Equipment Required	Production Lead Time in Months (Adm/Prod)-Total		
1. CFE AIRFRAME AND MOTOR LONG LEAD	10 (see below)	10/99 *	10/01 *	9/24	1.6	16.0
AIRFRAME PRODUCTION CONTINUITY						46.8
TOTAL						62.8
<p>Narrative Description</p> <p>Long Lead funding will allow for the delivery of TRIDENT II missiles in 2 versus 3 years. Long Lead items for two of the twelve missiles requested for the October 1999 contract were funded in FY 1998.</p> <p>Production continuity funds are required to maintain continuous production for critical components at the lowest sustaining rate consistent with quality, reliability, safety and cost.</p> <p>* Long Lead procurements are awarded in the preceding year. The dates shown pertain to the full funded D-5 missiles to which the Long Lead will be applied.</p>						

BUDGET ITEM JUSTIFICATION SHEET	DATE FEBRUARY 1998
--	-----------------------

APPROPRIATION/BUDGET ACTIVITY WEAPONS PROCUREMENT, NAVY / BUDGET ACTIVITY 1 BALLISTIC MISSILES	P-1 ITEM NOMENCLATURE MISSILE INDUSTRIAL FACILITIES
--	---

	Prior Years	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	To Complete	Total Program
QUANTITY	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cost (in millions)	N/A	\$2.1	\$1.8	\$2.1	\$0.2	\$1.2	\$1.3	\$1.3	\$1.4	N/A	N/A
Initial Spares	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total (in Millions)	N/A	\$2.1	\$1.8	\$2.1	\$0.2	\$1.2	\$1.3	\$1.3	\$1.4	N/A	N/A
Unit Cost (in Millions)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Funding for Missile Industrial Facilities provides for capital maintenance projects at Navy-owned Naval Industrial Reserve Ordnance Plants (NIROPS) at Sunnyvale and Santa Cruz, California, and Bacchus, Utah in support of the Fleet Ballistic Missile program.

Projects planned in FY 1996 through FY 1999 include additions and modifications to, and rehabilitation of, civil works, non-severable equipment, and real property. Among those projects are upgrades and improvements such as upgrading building electrical systems, replacing conductive floors, replacing insulation, replacing water and steam piping, paving roads and parking areas and painting buildings.

UNCLASSIFIED

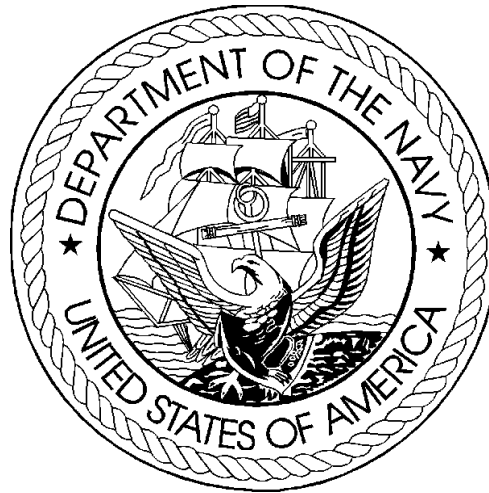
WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)			A. WEAPONS PROCUREMENT, NAVY BUDGET ACTIVITY 1		B. MISSILE INDUSTRIAL FACILITIES (31DG)		C. LOCKHEED MARTIN MISSILES AND SPACE CO. SUNNYVALE, CA		FEBRUARY 1998				
WEAPON SYSTEM COST ELEMENTS	Ident. Code	FY 96 Unit cost	Qty	TOTAL COST	FY 97 Unit cost	Qty	TOTAL COST	FY 98 Unit cost	Qty	TOTAL COST	FY 99 Unit cost	Qty	TOTAL COST
CAPITAL MAINTENANCE				2,138			1,788			2,096			198
TOTAL MISSILE INDUSTRIAL FACILITIES				2,138			1,788			2,096			198

P-1 Shopping List
Item No.
3

Page No.
2

UNCLASSIFIED

DEPARTMENT OF THE NAVY
FY 1999 AMENDED BUDGET ESTIMATES



JUSTIFICATION OF ESTIMATES
FEBRUARY 1998

WEAPONS PROCUREMENT, NAVY
BUDGET ACTIVITY 2

UNCLASSIFIED
 Department of the Navy
 FY 1999 Procurement Program

Exhibit P-1

APPROPRIATION: 1507N Weapons Procurement, Navy

DATE: 01/23/98

LINE NO	ITEM NOMENCLATURE	IDENT CODE	(DOLLARS) FY 1999 UNIT COST	TOA, \$ IN MILLIONS						
				FY 1997		FY 1998		FY 1999		
				QUANTITY	COST	QUANTITY	COST	QUANTITY	COST	
BUDGET ACTIVITY 02: Other Missiles										
Strategic Missiles										
4	2101 Tomahawk	A		155	102.2	65	50.0		129.8	U
5	2307 ESSM	B	1,274,000		-		10.3	28	35.7	U
Tactical Missiles										
6	2206 AMRAAM	A	544,704	100	50.3	120	55.3	115	62.6	U
7	2230 JSOW	B	381,729	100	81.0	135	62.0	328	125.2	U
8	2234 Standard Missile	A	1,880,850	127	209.4	114	176.4	120	225.7	U
9	2242 RAM	A	447,660	135	46.9	100	41.0	100	44.8	U
10	2254 Hellfire	A			-		19.5		-	U
11	2260 Penguin	A			6.9		7.3		-	U
12	2280 Aerial Targets	A			73.9		64.0		75.5	U
13	2285 Drones and Decoys	A			17.1		.3		.3	U
14	2290 Other Missile Support	A			15.5		17.8		15.2	U
Modification Of Missiles										
15	2301 Tomahawk Mods	A			8.1		-		-	U
16	2304 Sparrow Mods	A			2.5		-		-	U
17	2315 Sidewinder Mods	A			2.1		.3		-	U
18	2326 Harpoon Mods	A			40.3		30.0		39.5	U
19	2356 Standard Missiles Mods	A			16.9		49.7		45.3	U
Support Equipment And Facilities										
20	2420 Weapons Industrial Facilities	A			33.4		29.8		27.1	U

UNCLASSIFIED

Department of the Navy

FY 1999 Procurement Program

Exhibit P-1

APPROPRIATION: 1507N Weapons Procurement, Navy

DATE: 01/23/98

LINE NO	ITEM NOMENCLATURE	IDENT CODE	(DOLLARS) FY 1999 UNIT COST	TOA, \$ IN MILLIONS						S E C
				-----FY 1997-----		-----FY 1998-----		-----FY 1999-----		
				QUANTITY	COST	QUANTITY	COST	QUANTITY	COST	
21	2430 Fleet Satellite Comm (MYP) (Space) Ordnance Support Equipment	A			110.1		-			- U
22	2500 Ordnance Support Equipment	A			14.1		5.1		6.2	U
	TOTAL Other Missiles				830.6		618.9		832.9	

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

Identification code	17-1507-0-1-051	Budget Plan (amounts for PROCUREMENT actions programed)			Obligations		
		1997 actual	1998 est.	1999 est.	1997 actual	1998 est.	1999 est.
Program by activities:							
Direct program:							
00.0101	Ballistic missiles	314,815	269,834	323,650	366,815	286,465	292,984
00.0201	Other missiles	830,648	618,864	832,908	926,354	600,517	740,014
00.0301	Torpedoes and related equipment	108,108	92,621	97,837	100,236	111,289	105,517
00.0401	Other weapons	36,636	85,022	27,232	34,966	73,804	39,515
00.0601	Spares and repair parts	41,809	21,422	45,918	47,140	31,335	46,165
00.9101	Total direct program	1,332,016	1,087,763	1,327,545	1,475,511	1,103,410	1,224,195
01.0101	Reimbursable program	21,000	74,800	74,800	243	95,800	74,800
10.0001	Total	1,353,016	1,162,563	1,402,345	1,475,754	1,199,210	1,298,995
Financing:							
Offsetting collections from:							
11.0001	Federal funds(-)	-21,000	-74,800	-74,800	-15,784	-74,800	-74,800
17.0001	Recovery of prior year obligations				-12,077		
Unobligated balance available, start of year:							
21.4002	For completion of prior year budget plans				-448,823	-311,568	-274,920
21.4003	Available to finance new budget plans	-16,000	-6,726		-16,000	-6,726	
21.4009	Reprogramming from/to prior year budget plan	-21,378					
22.1001	Unobligated balance transferred to other acco		6,726			6,726	
Unobligated balance available, end of year:							
24.4002	For completion of prior year budget plans				311,568	274,920	378,270
24.4003	Available to finance subsequent year budget	6,726			6,726		
25.0001	Unobligated balance expiring	21,378			21,378		
39.0001	Budget authority	1,322,742	1,087,763	1,327,545	1,322,742	1,087,763	1,327,545
Budget authority:							
40.0001	Appropriation	1,364,231	1,102,193	1,327,545	1,364,231	1,102,193	1,327,545
40.7601	Reduction pursuant to P.L. 105-56 (-), 8041		-21,230			-21,230	
41.0001	Transferred to other accounts (-)	-41,489			-41,489		
42.0001	Transferred from other accounts		6,800			6,800	
43.0001	Appropriation (adjusted)	1,322,742	1,087,763	1,327,545	1,322,742	1,087,763	1,327,545

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

Identification code	17-1507-0-1-051	Budget Plan (amounts for PROCUREMENT actions programed)			Obligations		
		1997 actual	1998 est.	1999 est.	1997 actual	1998 est.	1999 est.
Relation of obligations to outlays:							
71.0001	Obligations incurred				1,459,970	1,124,410	1,224,195
72.1001	Orders on hand, SOY				-37,434	-34,608	-34,608
72.4001	Obligated balance, start of year				3,286,784	2,765,572	2,270,295
74.1001	Orders on hand, EOY				34,608	34,608	34,608
74.4001	Obligated balance, end of year				-2,765,572	-2,270,295	-2,109,757
77.0001	Adjustments in expired accounts (net)				15,891		
78.0001	Adjustments in unexpired accounts				-12,077		
90.0001	Outlays (net)				1,982,170	1,619,687	1,384,733

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

Identification code	17-1507-0-1-051	1997 actual	1998 est.	1999 est.

	Direct obligations:			
122.001	Transportation of things	2,566	2,008	2,028
125.101	Advisory and assistance services	23,256	24,591	24,701
	Purchases goods/services (inter/intra) Fed accounts			
125.303	Purchases from revolving funds	200,392	203,192	179,946
126.001	Supplies and materials	78,820	70,461	82,862
131.001	Equipment	1,170,477	803,158	934,658
		-----	-----	-----
199.001	Total Direct obligations	1,475,511	1,103,410	1,224,195
	Reimbursable obligations:			
226.001	Supplies and materials	243	95,800	21,900
231.001	Equipment			52,900
		-----	-----	-----
299.001	Total Reimbursable obligations	243	95,800	74,800
		-----	-----	-----
999.901	Total obligations	1,475,754	1,199,210	1,298,995

Comparison of FY 1998 Program Requirements as Reflected
in the FY 1998 Budget with FY 1998 Program Requirements as
Shown in FY 1999 Budget (In Thousands of Dollars)

	FY 1998 Total Program Requirements <u>Per FY 1998 Budget</u>	FY 1998 Program Requirements <u>Per FY 1999 Budget</u>	Increase (+) or Decrease (-)
Ballistic Missiles	341,412	269,834	-71,578
Other Missiles	612,993	618,864	+5,871
Torpedoes and Related Equipment	95,715	92,621	-3,094
Other Weapons	59,230	85,022	+25,792
Spares and Repair Parts	26,943	21,422	-5,521
Subtotal Direct Program	1,136,293	1,087,763	-48,530
Reimbursable	74,800	74,800	-
Total Fiscal Year	1,211,093	1,162,563	-48,530

Explanation of Changes in FY 1998 Program Requirements

1. Ballistic Missiles (-\$71.6 million)
Decrease reflects Congressional undistributed and inflation reductions (-\$6.6 million) and a program reduction of 2 Trident II missiles (-\$65.0 million) to slow the production rate of Trident II missiles specifically earmarked for the D5 Backfit submarines.
2. Other Missiles (+\$5.9 million)
Changes include Congressional adjustments to JSOW (+\$5.0 million), Standard Missile (-\$15.4 million), Hellfire (+\$20.0 million), Penguin (+\$7.5 million), Aerial Targets (-\$7.0 million), ESSM (-\$5.0 million), Standard Missile Modifications (+\$15.3 million), and Weapons Industrial Facility (-\$4.5 million). Reprogrammings requiring Congressional approval include the SLAM-ER program (+\$9.0 million) and RAM (-\$2.0 million) are also part of the change. Adjustments also include Congressional undistributed general and inflation reductions (-\$17.0 million).
3. Torpedoes and Related Equipment (-\$3.1 million)
Changes include Congressional undistributed general and inflation reductions (-\$2.9 million) and a reprogramming requiring Congressional approval to the First Destination Transportation program (-\$0.2 million).
4. Other Weapons (+\$25.8 million)
Changes include Congressional adjustments for the Close-In-Weapons-System (+\$15.0 million), 5/54 Gun Mount Modifications (+\$10.0 million), and Pioneer (+\$3.0 million) and Congressional undistributed reductions (-\$2.2 million).
6. Spares & Repair Parts (\$-5.5 million)
Changes include adjustments for Congressional reductions (-\$5.0 million) and undistributed Congressional reductions (-\$.5 million).

Comparison of FY 1998 Financing as Reflected in the FY 1998 Budget
with FY 1998 Financing as Shown in FY 1998 Budget
(In Thousands of Dollars)

	FY 1998 Financing Per <u>FY 1998 Budget</u>	FY 1998 Financing Per <u>FY 1999 Budget</u>	Increase (+) Decrease (-)
Program Requirements (Total)			
Program Requirements (Direct)	(1,136,293)	(1,087,763)	(-48,530)
Program Requirements (Reimb)	(74,800)	(74,800)	
Less:			
Anticipated Reimbursements	74,800	74,800	-
Add:			
Unob bal avail, start of year to finance new budget plans		-6,726	-6,726
Unob bal transferred to other accts		6,726	6,726
Appropriation Adjusted	1,136,293	1,087,763	-48,530
Budget Authority:			
FY 1998 DoD Appropriations Act	1,136,293	1,102,193	-34,100
Reduct Pursuant to P. L. 105-56		-21,230	-21,230
Transferred from other accounts		6,800	+6,800
Appropriation (Adjusted)	1,136,293	1,087,763	-48,530

Explanation of Changes in Financing

The \$48.5 million change in program financing is the net result of Congressional specific (-\$34.1 million) and undistributed general reductions (-\$21.2 million); and Prior Approval Congressional reprogrammings associated with a more cost efficient procurement profile for the SLAM-ER program (+\$9.0 million), and funding from RAM (-\$2.0 million) and First Destination Transportation (-\$0.2 million) funding to fund emergent DOD requirements.

Comparison of FY 1997 Program Requirements as Reflected
in the FY 1998 Budget with FY 1997 Program
Requirements as Shown in FY 1999 Budget (In Thousands of Dollars)

	FY 1997 Total Program Requirements <u>Per FY 1998 Budget</u>	FY 1997 Total Program Requirements <u>Per FY 1999 Budget</u>	Increase (+) or Decrease (-)
Ballistic Missiles	316,332	314,815	-1,517
Other Missiles	844,202	830,648	-13,554
Torpedoes and Related Equipment	120,594	108,108	-12,486
Other Weapons	30,815	36,636	+5,821
Spares and Repair Parts	46,490	41,809	-4,681
Subtotal Direct Program	1,358,433	1,332,016	-26,417
Reimbursable	74,800	21,000	-53,800
Total Fiscal Year	1,433,233	1,353,016	-80,217

Explanation of Changes in FY 1997 Program Requirements

1. Ballistic Missiles (-\$1.5 million)

Change is a result of revised economic assumption reflected in the FY 1997 Supplemental Appropriation (-\$1.3 million) and minor below threshold reprogramming actions (-\$0.2 million).

2. Other Missiles (-\$13.6 million)

Change reflects a reduction to AMRAAM (-\$4.2 million) to fund the AEGIS Baseline Consolidation effort; and a net increase to fund additional MA-31 Aerial Target procurement (\$1.5 million). Adjustments were also associated with revised economic assumptions reflected in the FY 1997 Supplemental Appropriation (-\$3.6 million), and minor below threshold reprogramming actions.

3. Torpedoes and Related Equipment (-\$12.5 million)

Change reflects minor below threshold reprogrammings (-\$9.4 million), and reductions associated with the revised economic assumptions reflected in the FY 1997 Supplemental appropriation (-\$0.5 million). Reduction also include funding reprogrammed to support the AEGIS Baseline Consolidation effort (-\$2.5 million).

4. Other Weapons (+\$5.8 million)

Change reflects minor below threshold reprogrammings (+\$6.0 million) and revised economic assumption reflected in the FY 1997 Supplemental Appropriation (-\$0.1 million).

6. Spares & Repair Parts (-\$4.7 million)

Change reflects minor below threshold reprogrammings (-\$4.5 million) and revised economic assumptions reflected in the FY 1997 Supplemental Appropriation (-\$0.2 million).

Comparison of FY 1997 Financing as Reflected in the FY 1998 Budget
with FY 1997 Financing as Shown in FY 1999 Budget
(In Thousands of Dollars)

	FY 1997 Financing Per FY 1998 Budget	FY 1997 Financing Per FY 1999 Budget	Increase (+) Decrease (-)
Program Requirements (Total)	1,433,233	1,353,016	-80,217
Program Requirements (Direct)	(1,358,433)	(1,332,016)	(-26,417)
Program Requirements (Reimb)	(74,800)	(21,000)	(-53,800)
Less:			
Anticipated Reimbursements	-74,800	-21,000	-53,800
Add:			
Federal Funds (-):	-	-21,000	-21,000
Available to finance new budget plans	-	-16,000	-16,000
Reprogrammed from/to prior year budget plan:	-	-21,378	-21,378
Available to finance subsequent year budget:	-	6,726	+6,726
Unobligated balance expiring	-	21,378	+21,378
Appropriation Adjusted	1,358,433	1,322,742	-35,691
Budget Authority:			
FY 1997 DoD Appropriations Act	1,389,913	1,364,231	-25,682
Reduction pursuant to P.L. 104-208, 8037 (h)	-3,682	-	+3,682
Transferred from other accts	-	-	-
Transferred to other accounts	-27,798	-41,489	-13,691
Appropriation (Adjusted)	1,358,433	1,322,742	-35,691

Explanation of Changes in Financing

Primary changes in program financing are a result of reductions associated with revised economic assumptions reflected in the FY 1997 Supplemental Appropriation (-\$5.7 million), transfers to other accounts (-\$13.7 million), and funding reprogrammed for AEGIS Baseline Consolidation efforts (-\$6.7 million).

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET											DATE:	
P-40											Feb-98	
APPROPRIATION/BUDGET ACTIVITY							P-1 ITEM NOMENCLATURE					
Weapons Procurement, Navy							TOMAHAWK (J2EL)(PEO(CU))(BLI: 210100)					
Program Element for Code B Items:							Other Related Program Elements					
BA2/OTHER MISSILES												
	Prior Years	ID Code	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total Program
QUANTITY	3,974		107	155	65	114	141	132	113	223	N/A	5,024
COST (\$M)	\$7,276.5		\$113.2	\$102.2	\$50.0	\$129.8	\$127.4	\$120.5	\$106.1	\$164.5	N/A	\$8,190.0
Initial Spares (\$M)	\$297.1		\$6.6	\$4.8	\$1.4	\$3.2	\$0.6	\$0.5	\$0.4	\$0.6	N/A	\$315.1
Total (\$M)	\$7,573.6		\$119.8	\$107.0	\$51.4	\$133.0	\$128.0	\$121.0	\$106.5	\$165.1	N/A	\$8,505.4
Unit Cost (\$M)	1.906		1.119	0.690	0.791	N/A	N/A	N/A	N/A	N/A	N/A	1.693

Tomahawk provides an attack capability against targets at sea (Antiship Tomahawk) and on land (Land Attack Tomahawk), and can be launched from both surface ships (RGM) and submarines (UGM). The Land attack version can be fitted with either conventional high explosives, nuclear warheads or submunition dispenser.

Tomahawk consists of four variants: (1) RGM/UGM-109A, Land Attack Nuclear; (2) RGM/UGM-109B, Antiship; (3) RGM/UGM-109C, Land Attack Conventional; (4) RGM/UGM-109D, Land Attack Submunition Dispenser.

The antiship version has a modified HARPOON missile guidance system. This system permits firing in the general direction of any enemy warship at low altitude to avoid detection by radar. At a programmed distance, the missile commences a search to seek out and acquire the target ship with active radar.

The land-attack version has inertial guidance updated by a Terrain Contour Matching (TERCOM) system. The inertial equipment is provided with the known location of the launch platform and target prior to launch. The system then controls the missile on a preprogrammed flight-path to the target. While the missile is flying over land, the TERCOM equipment compares taped digital map actual terrain references to the missile's position and corrects its course to the target. In the conventional land-attack missile, a Digital Scene Matching Area Correlator (DSMAC) compares stored photographic scenes with those observed through an optical lens, to achieve improved terminal accuracy.

The FY99 program will procure a total of 114 remanufactured missiles; 15 in the Block III configuration and 99 in the Block IV/1 configuration.

Characterstics and dimensions (approximate)

Contractor: Hughes Missiles Systems Company

Weight (with booster and capsule) (UGM-109): 4,300 pounds

Weight (with booster and canister) (RGM-109): 4,000 pounds

Length (with booster): 20.5 feet

Wing Span: 8.6 feet

Cruise Speed: High Subsonic

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

**WEAPONS PROCUREMENT, NAVY
 FY 1998/99 OSD/OMB BUDGET
 MISSILE COST ANALYSIS
 EXHIBIT P-5
 (Dollars in Millions)**

Missile Nomenclature & Popular Name: TOMAHAWK (J2EL)(PEO(CU)) (BLI: 210100)

Date: Feb-98

Cost Elements	Prior Years	FY 1996	Quantity	Total Cost	FY 1997	Quantity	Total Cost	FY 1998	Quantity	Total Cost	FY 1999	Quantity	Total Cost
	Total Cost	Quantity	Unit Cost		Quantity	Unit Cost		Quantity	Unit Cost		Quantity	Unit Cost	
Missile Hardware													
All-Up-Round	5,481,783	107	667	71,333	155	553	85,769	65	506	32,900	0	0	0
Total Hardware	5,481,783	107	667	71,333	155	553	85,769	65	506	32,900	0	0	0
Procurement Support													
Product Improvement	355,366			12,976			4,143			4,865			10,272
Systems Engineering Integration	264,271			3,982			3,154			3,725			4,319
Production Engineering	527,878			20,817			5,594			14,227			18,552
Total Procurement Support	1,147,515			37,775			12,891			22,817			33,143
Total Flyaway Cost	6,629,298			109,108			98,660			55,717			33,143
Remanufacture (Block III)	185,117	0	0	0	0	0	0	0	0	0	15	327	4,900
Remanufacture (Block IV/1)	0	0	0	0	0	0	0	0	0	0	99	862	85,900
Fleet Support													
Theater Mission Planning Center	243,598			2,750			2,745			2,800			3,501
Support Equipment	112,307			974			287			805			1,808
Training Equipment	78,019			0			0			0			0
Documentation	28,158			376			500			454			506
Total Fleet Support	462,082			4,100			3,532			4,059			5,815
Gross Weapons System	7,276,497			113,208			102,192			59,776			129,758
Less GFE Credit	0			(0)			(0)			(9,800)			(0)
Total Procurement Cost	7,276,497			113,208			102,192			49,976			129,758
Modifications	157,524			45,585			8,096			0			0
Initial Spares	297,089			6,565			4,814			1,408			3,171
Total Program Cost	7,731,110			165,358			115,102			51,384			132,929

**WEAPONS PROCUREMENT, NAVY
FY 1998/99 OSD/OMB BUDGET
MISSILE COST ANALYSIS
EXHIBIT P-5
(Dollars in Millions)**

Date: Feb-98

Missile Nomenclature & Popular Name TOMAHAWK (J2EL)(PEO(CU)) (BLI: 210100)

Cost Elements	FY 2000			FY 2001			FY 2002			FY 2003			To Complete	
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Costs	Total Cost
Missile Hardware														
All-Up-Round	0	0	0	0	0	0	0	0	0	0	0	0	0	5,671,785
Total Hardware	0	0	0	0	0	0	0	0	0	0	0	0	0	5,671,785
Procurement Support														
Product Improvement			9,335			8,178			6,917			6,670		418,722
Systems Engineering Integration			3,309			3,256			2,977			3,123		292,116
Production Engineering			15,888			12,752			12,327			11,703		639,738
Total Procurement Support			28,532			24,186			22,221			21,496		1,350,576
Total Flyaway Cost			28,532			24,186			22,221			21,496		7,022,361
Remanufacture (Block III)	32	338	10,800	32	344	11,000	32	350	11,200	27	359	9,700		232,717
Remanufacture (Block IV/1)	109	745	81,600	100	734	73,720	81	740	60,500	196	603	118,281		420,001
Fleet Support														
Theater Mission Planning Center			3,433			6,069			6,325			7,798		279,019
Support Equipment			2,316			4,297			4,545			5,607		132,946
Training Equipment			0			0			0			0		78,019
Documentation			692			1,223			1,274			1,571		34,754
Total Fleet Support			6,441			11,589			12,144			14,976		524,738
Gross Weapons System			127,373			120,495			106,065			164,453		8,199,817
Less GFE Credit			(0)			(0)			(0)			(0)		9,800
Total Procurement Cost			127,373			120,495			106,065			164,453		8,190,017
Modifications			0			0			0			0		211,205
Initial Spares			634			502			357			557		315,097
Total Program Cost			128,007			120,997			106,422			165,010		8,716,319

CLASSIFICATION:

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System TOMAHAWK		A. DATE Feb-98			
B. APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy BA2/Other Missiles					C. P-1 ITEM NOMENCLATURE Tomahawk (PEO(CU)) (BLI: 210100)				SUBHEAD J2EL	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
<u>All-Up-Round</u>										
01000/FY97	120	569	NAVAIR	N/A	SS/OPTION	Hughes Missiles	Jan 97	Oct 98	YES	N/A
01000/FY97	35	506	NAVAIR	N/A	SS/OPTION	Systems Co.	Apr 98	Oct 99	YES	N/A
01000/FY98	65	506	NAVAIR	N/A	SS/OPTION	Tucson, AZ	Apr 98	Oct 99	YES	N/A
D. REMARKS										
155 missiles will be procured with FY97 dollars: 120 have been procured with the FY97 contract option and 35 will be procured with FY98 contract option.										

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET												February 1998	
P-40													
APPROPRIATION/BUDGET ACTIVITY								P-1 ITEM NOMENCLATURE					
Weapons Procurement, Navy/BA-(2) Other Missiles								EVOLVED SEASPARROW MISSILE #230700					
Program Element for Code B Items:								Other Related Program Elements					
0604755N								N/A					
	Prior Years	ID Code	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total Program
QUANTITY		B			1]		35	74	86	110	107		412
COST (\$M)					\$2.5	\$10.3	\$35.7	\$55.7	\$59.2	\$69.4	\$69.8		\$302.6
Initial Spares (\$M)													\$0.0
Total (\$M)					\$2.5	\$10.3	\$35.7	\$55.7	\$59.2	\$69.4	\$69.8		\$302.6
Unit Cost (\$M)					N/A	N/A	1.0	0.8	0.7	0.6	0.7		0.7
<u>ITEM DESCRIPTION/JUSTIFICATION:</u>													
<p>The Evolved Seasparrow Missile (ESSM) Program is an international cooperative effort to design, develop, test, and produce a new and improved version of the NATO Seasparrow missile (RIM-7P) with the kinematic performance to defeat current and projected threats that possess low altitude, high velocity and maneuver characteristics beyond the engagement capabilities of the RIM-7P. The ESSM will provide an evolved kinematically improved aft-end missile section for mating, as an all up round, with the modified RIM-7P forebody guidance and warhead section. The ESSM improvement will provide the capability to counter maneuvering anti-ship missiles, expand battle space, and increase system firepower. The ESSM is designed for "quad pack" in the MK41 Vertical Launching System and to be compatible with MK29 trainable launchers for employment in AEGIS, NSSMS, and SSDS configured ships.</p> <p>The FY98 request will provide for production tooling and test equipment, support equipment, and production support. The FY99 funds will support a Low-Rate Initial Production buy of 35 missiles and additional production start-up costs.</p> <p>ESSM is a cooperative effort among ten NATO Seasparrow nations (Australia, Canada, Denmark, Germany, Greece, Netherlands, Norway, Spain, Turkiye, and the U.S.). An addendum to the NATO Seapsarrow Surface Missile System Memorandum of Understanding (MOU), covering the Engineering and Manufacturing Development (EMD) phase of the ESSM was signed in June 1995. Signature of the MOU for the cooperative production of ESSM was completed in January 1998.</p> <p>ESSM is a Code "B" Item. Planned date of approval for service use is September 1999</p> <p>ESSM RDT&E funding is included in program element 0604755N, Project U0173.</p> <p>1] \$2.5M for ESSM Transistion to Production is included in the SPARROW Modification line P1-14.</p>													

P-1 SHOPPING LIST

CLASSIFICATION:

**WEAPONS PROCUREMENT, NAVY
 FY 1998/99 DEPARTMENT OF THE NAVY BUDGET
 MISSILE COST ANALYSIS
 EXHIBIT P-5
 (Dollars in Millions)**

Missile Nomenclature & Popular Name: EVOLVED SEASPARROW MISSILE (ESSM)

Date: February 1998

Cost Elements	Prior Years	FY 1995	Quantity		FY 1996	Quantity		FY 1997	Quantity		FY 1998	Quantity		FY 1999	Quantity		Total Cost
	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	
<u>Missile Hardware</u>																	
All Up Round														35	613		21,455
Warhead Compatible Telemeter														3	108		324
Total Hardware																	21,779
<u>Procurement Support</u>																	
Tooling and Test Equipment													6,565				6,542
Shipping Containers														35	4		140
Launch Adapter Kit - MK 29/48														35	11		385
Production Support								2,478					2,349				4,712
Total Procurement Support								2,478					8,914				11,779
Total Flyaway Cost								2,478					8,914				33,558
<u>Fleet Support</u>																	
Support Equipment													1,363				785
Integrated Logistics Support																	1,329
Total Fleet Support													1,363				2,114
Weapon System Cost								2,478					10,277				35,672
Modifications																	
Initial Spares																	
Total Program Cost								2,478					10,277				35,672

1/ Assumes a 7P front end is provided as GFE

UNCLASSIFIED

CLASSIFICATION:

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System			A. DATE February 1998		
B. APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA-(2) Other Missiles					C. P-1 ITEM NOMENCLATURE EVOLVED SEASPARROW MISSILE #230700				SUBHEAD 12ES	
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	IF NO WHEN AVAILABLE
FISCAL YEAR (99)										
All Up Round	35	613	NAVSEA	Mar-98	SS/FP	HMSC, Tucson, AZ	Jan-99	Jan-01	Yes	
WCT	3	108	NAVSEA	Mar-98	SS/FP	HMSC, Tucson, AZ	Jan-99	Jan-01	Yes	
Shipping Container	35	4	NAVSEA	Mar-98	SS/FP	HMSC, Tucson, AZ	Jan-99	Jan-01	Yes	
LAK - MK29/MK48	35	11	NAVSEA	Mar-98	SS/FP	HMSC, Tucson, AZ	Jan-99	Jan-01	Yes	
D. REMARKS										

Exhibit P-20, Requirements Study			Approp Code/BA Weapons Procurement, Navy/BA-(2)		Subhead 12ES		Date: February 1998			
P-1 Line Item Nomenclature EVOLVED SEASPARROW MISSILE #230700			Admin Leadtime (after Oct 1): 03 months			Prod Leadtime: 20 months				
Project Unit/Item EVOLVED SEASPARROW MISSILE			FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Buy Summary QTY						35	74	86	110	107
Unit Cost						1.0	0.8	0.7	0.6	0.7
Total Cost			0	2.5	10.3	35.7	55.7	59.2	69.4	69.8
Asset Dynamics										
Beginning Asset Position								0	38	103
Deliveries from all prior year funding										
Deliveries from FY 1997 funding										
Deliveries from FY 1998 funding										
Deliveries from FY 1999 funding								35		
Deliveries from subsequent years' funding								6	75	88
Other Gains										
Combat Losses/Usage										
Training Losses/Usage									-4	-20
Test Losses/Usage								-3	-6	-9
Other Losses/Usage										
Disposals/Retirements/Attritions/etc.										-9
End of Year Asset Position								38	103	153
Inventory Objective/Current Authorized Allowance								119	278	422
Inventory Objective										
Actual Training Expenditures										
Other than Training Usage										
Disposals (Vehicles/Other)										
FY-96 thru 4/96:										
FY-95: 0										
FY-94: 0										
FY-93: 0										
TOTAL:			0	0		0				
REMARKS:										

P-1 Shopping List Item No. 5

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET											DATE:	
P-40											February 1998	
APPROPRIATION/BUDGET ACTIVITY							P-1 ITEM NOMENCLATURE					
Weapons Procurement, Navy							AMRAAM					
Program Element for Code B Items:							Other Related Program Elements					
BA 2 - Other Missiles												
	Prior Years	ID Code	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total Program
QUANTITY	948		115	100	120	115	115	100	150	125	531	2,419
COST (\$M)	\$788.8		\$72.6	\$50.3	\$55.3	\$62.6	\$61.3	\$55.9	\$80.3	\$69.3	\$317.5	\$1,614.0
Initial Spares (\$M)	\$20.7		\$1.1	\$2.3	\$0.4	\$0.9	\$0.9	\$0.4	\$0.4	\$0.7	\$12.4	\$40.3
Total (\$M)	\$809.5		\$73.7	\$52.6	\$55.7	\$63.5	\$62.2	\$56.3	\$80.7	\$70.0	\$329.9	\$1,654.1
Unit Cost (\$M)	\$0.854		\$0.641	\$0.526	\$0.464	\$0.552	\$0.541	\$0.563	\$0.538	\$0.560	\$0.621	\$0.684

MISSION AND DESCRIPTION:

The Advanced Medium Range Air-to Air Missile (AMRAAM) is the next generation all-weather, all-environment radar guided missile developed by the Air Force and Navy to augment the AIM-7 Sparrow. AMRAAM is smaller, faster lighter, and has improved capabilities against very low-altitude and high-altitude targets in an electronic countermeasure environment. AMRAAM incorporates an active radar in conjunction with an inertial reference unit and microcomputer system which makes the missile less dependent upon the aircraft fire control system. This advanced capability enables the pilot to aim and fire several missiles at multiple targets.

FY1999 PROGRAM JUSTIFICATION:

115 missiles will be procured in FY 1999 along with non-recurring support costs such as; government field activity technical, test, and logistics support, procurement of test articles, containers, handling equipment, special tooling and test equipment to support the AIM-120C configuration, and procurement of peculiar support equipment in support of the all-up-round and component depot. The contractor for AMRAAM is Raytheon Corporation, which acquired Hughes Defense Systems in December, 1997.

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

**WEAPONS PROCUREMENT, NAVY
 FY 1999 PRESIDENT'S BUDGET
 MISSILE COST ANALYSIS
 EXHIBIT P-5
 (Dollars in Millions)**

Missile Nomenclature & Popular Name AMRAAM

Date: February 1998

<u>Cost Elements</u>	<u>Prior Years Total Cost</u>	<u>FY 1996 Quantity</u>	<u>Quantity Unit Cost</u>	<u>115 Total Cost</u>	<u>FY 1997 Quantity</u>	<u>Quantity Unit Cost</u>	<u>100 Total Cost</u>	<u>FY 1998 Quantity</u>	<u>Quantity Unit Cost</u>	<u>120 Total Cost</u>	<u>FY 1999 Quantity</u>	<u>Quantity Unit Cost</u>	<u>115 Total Cost</u>
Missile Hardware													
Guidance & Control	458.054	115	0.256	29.456	100	0.272	27.161	120	0.257	30.851	115	0.265	30.423
Propulsion	40.716	115	0.023	2.618	100	0.024	2.414	120	0.023	2.742	115	0.024	2.704
Warhead	10.179	115	0.006	0.655	100	0.006	0.604	120	0.006	0.686	115	0.006	0.676
ECO	23.542			2.293			1.501			1.714			1.690
Procurement Support													
Production Tech Support	98.745			21.108			12.629			7.998			13.948
ST&TE	41.109			0.000			0.000			0.700			0.600
Containers	2.130			0.000			0.116			0.000			0.000
Production Test	35.691			7.634			2.201			2.100			4.900
Total Procurement Support	177.675			28.742			14.946			10.798			19.448
Total Flyaway Cost	710.165	115	0.554	63.763	100	0.466	46.626	120	0.390	46.790	115	0.478	54.941
Fleet Support													
Test Equipment	50.016			3.914			0.328			2.810			2.180
Handling Equipment	0.225			0.160			0.190			0.100			0.120
Training Equipment	3.647			0.000			0.155			1.300			1.200
ILS	23.322			4.592			2.774			4.100			4.000
Data & Pubs	1.461			0.146			0.180			0.150			0.200
Total Fleet Support	78.671			8.813			3.626			8.460			7.700
Weapon System Cost	788.836	115	0.631	72.576	100	0.503	50.252	120	0.460	55.250	115	0.545	62.641
Modifications													
Initial Spares	20.707			1.133			2.272			0.368			0.929
Total Program Cost	809.543	115	0.641	73.709	100	0.525	52.524	120	0.463	55.618	115	0.553	63.570

**WEAPONS PROCUREMENT, NAVY
 FY 1999 PRESIDENT'S BUDGET
 MISSILE COST ANALYSIS
 EXHIBIT P-5
 (Dollars in Millions)**

Missile Nomenclature & Popular Name: AMRAAM

Date: February 1998

Cost Elements	FY 2000	Quantity	115	FY 2001	Quantity	100	FY 2002	Quantity	150	FY 2003	Quantity	125	To Complete	
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Costs	Total Cost
Missile Hardware														
Guidance & Control	115	0.263	30.279	100	0.265	26.454	150	0.298	44.737	125	0.301	37.626	164.667	879.707
Propulsion	115	0.023	2.691	100	0.024	2.351	150	0.027	3.977	125	0.027	3.345	14.637	78.196
Warhead	115	0.006	0.673	100	0.006	0.588	150	0.007	0.994	125	0.007	0.836	3.659	19.549
ECO			1.682			1.470			2.485			2.090	9.148	47.615
Procurement Support														
Production Tech Support			14.103			14.658			16.046			15.276	49.722	264.232
ST&TE			0.100			0.200			3.200			0.600	0.436	46.945
Containers			0.300			0.000			0.000			0.000	1.548	4.094
Production Test			4.300			3.400			2.800			2.800	12.215	78.041
Total Procurement Support			18.803			18.258			22.046			18.676	63.921	393.313
Total Flyaway Cost	115	0.471	54.128	100	0.491	49.121	150	0.495	74.239	125	0.501	62.573	256.032	1,418.380
Fleet Support														
Test Equipment			1.500			1.400			0.900			0.899	48.146	112.093
Handling Equipment			0.100			0.100			0.100			0.101	0.434	1.630
Training Equipment			1.200			1.400			1.400			1.600	0.000	11.902
ILS			4.200			3.700			3.600			3.800	11.610	65.698
Data & Pubs			0.200			0.200			0.100			0.300	1.311	4.248
Total Fleet Support			7.200			6.800			6.100			6.700	61.501	195.571
Weapon System Cost	115	0.533	61.328	100	0.559	55.921	150	0.536	80.339	125	0.554	69.273	317.533	1,613.951
Modifications														
Initial Spares			0.892			0.438			0.373			0.722	12.422	40.256
Total Program Cost	115	0.541	62.220	100	0.564	56.359	150	0.538	80.712	125	0.560	69.995	329.955	1,654.207

CLASSIFICATION:

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System AMRAAM		A. DATE February 1998			
B. APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy					C. P-1 ITEM NOMENCLATURE AMRAAM				SUBHEAD Y2GB	
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	IF NO WHEN AVAILABLE
FY 1996	60	268	Eglin AFB, FI	9-21-95	C/FP	Lot X Hughes, Tucson AZ Raytheon, Lowell MA	1/29/96	12/97	YES	
	55	275			C/FP		1/29/96	12/97	YES	
FY 1997	53	286	Eglin AFB, FI	10-4-96	C/FP	Lot XI Hughes, Tucson AZ Raytheon, Lowell MA	1/28/97	12/98	YES	
	47	297			C/FP		1/28/97	12/98		
FY 1998	120	300	Eglin AFB, FI	10-1-97	SS/FP	Lot XII Raytheon	3/31/98	10/99	YES	
FY 1999	115	309	Eglin AFB, FI	10-1-98	SS/FP	Lot XIII Raytheon	1/31/99	8/00	YES	
D. REMARKS										

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET												DATE:	
P-40												February 1998	
APPROPRIATION/BUDGET ACTIVITY								P-1 ITEM NOMENCLATURE					
Weapons Procurement, Navy								Joint Standoff Weapon (JSOW)					
Program Element for Code B Items:								Other Related Program Elements					
BA-2 Other Missiles								0604727N, 0604727F, 27324F					
	Prior Years	ID Code		FY 1996	FY 1997	FY 1998*	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total Program
QUANTITY	0	B		0	100	135	328	752	870	1,026	1,075	13,514	17,800
COST (\$M)	\$0.0			\$25.2	\$81.0	\$62.0	\$125.2	\$218.6	\$314.2	\$355.2	\$365.0	\$4,775.5	\$6,322.0
Initial Spares (\$M)	\$0.0			\$0.0	\$0.0	\$0.0	\$0.0	\$0.5	\$0.7	\$0.3	\$0.0	\$128.7	\$130.1
Total (\$M)	\$0.0			\$25.2	\$81.0	\$62.0	\$125.2	\$219.1	\$314.9	\$355.5	\$365.0	\$4,904.2	\$6,451.8
Unit Cost (\$M)	N/A			N/A	0.810	0.459	0.382	0.291	0.362	0.346	0.340	0.363	0.362

Joint Standoff Weapons (JSOW) is a joint USN/USAF program with the USN as the lead service. The JSOW program provides an air-to-ground glide weapon (AGM-154) capable of attacking a variety of targets during day, night and adverse weather conditions for use against fixed area targets. The JSOW will enhance aircraft survivability as compared to current interdiction weapon systems by providing the capability for launch aircraft to standoff outside the range of most target area surface-to-air threat systems. The JSOW Global Positioning System (GPS)/Inertial Navigation System (INS) capability will allow several target kills per aircraft sortie. The JSOW Baseline variant (AGM-154A) will be integrated on USN and USAF aircraft, with a planned inventory of 11,800 units. USN will procure an inventory of 8,800 All-Up-Rounds (AURs) for integration on F/A-18 and AV-8B aircraft, and the USAF will procure an inventory of 3,000 AURs for integration on F-16C/D, F-15E, B-1B and B-2 aircraft. JSOW Baseline completed EMD testing, including initial Operational Test, with an exceptional test success rate of 96% (41 of 43). JSOW Baseline full Operational Testing (OPEVAL) commenced in February 1997. JSOW BLU-108 Developmental Testing is ongoing and JSOW Unitary is currently in its initial Developmental Testing phase. JSOW Baseline (AGM 154A) Limited Rate Initial Procurement (LRIP) commenced with the USN FY 97 program. The BLU-108 variant and the Unitary variant commence production in FY 00 and FY 01, respectively. The FY98 budget request provided for the procurement of 135 Baseline variants for the Navy. The FY99 budget request provides for Full Rate Production of 328 Baseline variants and special tooling/special test equipment to support BLU-108 production in FY-00. *FY 97 Congressional plus-up of \$15.6M was executed with the FY 98 procurement.

**WEAPONS PROCUREMENT, NAVY
 FY 1998/99 DEPARTMENT OF THE NAVY BUDGET
 MISSILE COST ANALYSIS
 EXHIBIT P-5
 (Dollars in Millions)**

Missile Nomenclature
 & Popular Name: Joint Standoff Weapons (JSOW)

Date: February 1998

Cost Elements	Prior Years	FY 1996	Quantity		FY 1997	Quantity		FY 1998	Quantity		FY 1999	Quantity	
	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
<u>Missile Hardware</u>													
All Up Round (AUR)		00		0.000	100		42.221	135 *		50.997	328		84.602
Contractor (Warranty/ECO/Data)				0.000			0.713			1.725			5.076
Total Hardware		00	0.000	0.000	100	0.429	42.934	135	0.391	52.722	328	0.273	89.678
<u>Procurement Support</u>													
LC GEU/Control				0.000			7.386			3.847			0.000
Gov't In-house/Prod Supt				0.000			4.464			6.090			3.313
Special Tools and Test Equip				25.198			3.100			8.203			24.604
Containers				0.000			2.137			2.228			3.651
Telemetry				0.000			2.784			0.000			1.936
Command & Launch/ ST&E/Mission/SW				0.000			0.760			0.907			0.000
Total Procurement Support				25.198			20.631			21.275			33.504
Total Flyaway Cost				25.198	100	0.636	63.565	135	0.548	73.997	328	0.376	123.182
<u>Fleet Support</u>													
ILS/Support				0.000			1.879			3.604			2.025
Total Fleet Support				0.000			1.879			3.604			2.025
Weapons System Cost				25.198	100	0.654	65.444	135	0.575	77.601	328	0.382	125.207
FY 97 Congressional Add Adjustment							15.574			-15.574			
Net P-1 Cost							81.018			62.027			
Modifications				0			0			0			0
Initial Spares				0			0			0			0.469
Total Program Cost				25.198	100	0.810	81.018	135	0.459	62.027	328	0.383	125.676

*FY 97 Congressional plus-up of \$15.6M will be executed with the FY 98 procurement

**WEAPONS PROCUREMENT, NAVY
 FY 1998/99 DEPARTMENT OF THE NAVY BUDGET
 MISSILE COST ANALYSIS
 EXHIBIT P-5
 (Dollars in Millions)**

Missile Nomenclature & Popular Name: Joint Standoff Weapons (JSOW)

Date: February 1998

<u>Cost Elements</u>	FY 2000	Quantity		FY 2001	Quantity		FY 2002	Quantity		FY 2003	Quantity		To	
	<u>Quantity</u>	<u>Unit Cost</u>	<u>Total Cost</u>	<u>Quantity</u>	<u>Unit Cost</u>	<u>Total Cost</u>	<u>Quantity</u>	<u>Unit Cost</u>	<u>Total Cost</u>	<u>Quantity</u>	<u>Unit Cost</u>	<u>Total Cost</u>	<u>Complete Costs</u>	<u>Total Cost</u>
<u>Missile Hardware</u>														
All Up Round (AUR)	752		179.556	870		269.306	1,026		306.113	1,075		291.799	4,299.671	5,524.266
Contractor (Warranty/ECO/Data)			10.773			14.817			16.949			17.508	258.573	326.134
Total Hardware	752	0.239	190.329	870	0.310	284.123	1,026	0.298	323.062	1,075	0.271	309.307	4,558.244	5,850.400
<u>Procurement Support</u>														
LC GEU/Control			0.000			0.000			0.000			0.000	-0.093	11.140
Gov't In-house/Prod Supt			2.924			5.647			6.500			6.030	28.468	63.433
Special Tools and Test Equip			12.183			7.473			4.432			24.087	3.482	112.762
Containers			7.491			8.181			9.446			9.773	122.267	165.174
Telemetry			3.713			5.380			5.210			5.314	38.226	62.563
Command & Launch/ST&E/Mission/SW			0.000			0.320			0.000			0.000	0.000	1.018
Total Procurement Support			26.311			27.001			25.588			45.204	192.350	416.090
Total Flyaway Cost	752	0.288	216.640	870	0.358	311.124	1,026	0.340	348.650	1,075	0.330	354.511	4,750.594	6,266.490
<u>Fleet Support</u>														
ILS/Support			1.971			3.088			6.459			10.488	25.717	55.231
Total Fleet Support			1.971			3.088			6.459			10.488	25.717	55.231
Weapon System Cost	752	0.291	218.611	870	0.361	314.212	1,026	0.346	355.109	1,075	0.340	364.999	4,776.311	6,321.721
Modifications			0.000			0.000			0.000			0.000	0.000	0.000
Initial Spares			0.590			0.666			0.287			0.000	128.118	130.130
Total Program Cost	752	0.291	219.201	870	0.362	314.878	1,026	0.346	355.396	1,075	0.340	364.999	4,904.429	6,451.851

UNCLASSIFIED

CLASSIFICATION:

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System			A. DATE February 1998			
B. APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy B.A. 2-Other Missiles					C. P-1 ITEM NOMENCLATURE Joint Standoff Weapon					SUBHEAD Y2JS	
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	
Special Tools/ <u>Test Equipment</u> FY-96	Lot	N/A	NAVAIR	N/A	SS/CPIF (option on E&MD)	TEXAS INSTRUMENTS (Lewisville, TX)	Mar 96	Dec 96	N/A	N/A	
FY-99	Lot	N/A	NAVAIR	May 98	SS/FPIF	RAYTHEON SYSTEMS (Lewisville, TX)	Nov 98	Aug 99	N/A	N/A	
<u>LRIP</u> FY-97	100	429	NAVAIR	N/A	SS/CPIF (option on E&MD)	RAYTHEON SYSTEMS (Lewisville, TX)	Feb 97	May 98	N/A	N/A	
FY-98	135*	391	NAVAIR	May 97	SS/FPIF	RAYTHEON SYSTEMS (Lewisville, TX)	Dec 97	Jan 99	N/A	N/A	
FY-99	328	273**	NAVAIR	May 98	SS/FPIF	RAYTHEON SYSTEMS (Lewisville, TX)	Dec 98	Jan 00	N/A	N/A	
D. REMARKS *FY 97 Congressional plus-up of \$15.6M was executed with the FY 98 procurement. **Reduced unit cost reflects the introduction of USAF quantities as well as an increase in USN quantities.											

CLASSIFICATION:

UNCLASSIFIED

P-40												DATE: FEBRUARY 1998	
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/ BA 2								P-1 ITEM NOMENCLATURE STANDARD MISSILE(SM-2 MR/ER) 12FE BLI:223400					
Program Element for Code B Items:								35582 Other Related Program Elements					
	Prior Years	ID Code	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total Program
QUANTITY	9,845	A	188	22	127	100	115	95	110	126	159	1,639	12,526
COST (\$M)	\$5,869.2	A	\$240.4	\$125.6	\$209.4	\$176.4	\$225.7	\$194.9	\$184.7	\$209.2	\$238.2	2,082	\$9,755.5
Initial Spares (\$M)	\$132.1	A	\$4.0	\$7.6	\$5.4	\$1.2	\$8.2	\$9.6	\$12.4	\$14.1	\$13.6	122	\$330.5
Total (\$M)	\$6,001.3	A	\$244.4	\$133.2	\$214.8	\$177.6	\$233.9	\$204.5	\$197.1	\$223.3	\$251.8	2,204	\$10,086.0
Unit Cost (\$M)	0.6	A	1.3	6.1	1.7	1.8	2.0	2.2	1.8	1.8	1.6		

(U)PROGRAM OVERVIEW:
The STANDARD Missile SM-2 Medium Range (MR) and Extended Range (ER) are solid-propellant, tail-controlled surface-to-air missiles which are the main air defense battery for AEGIS/NTU guided missile cruisers and destroyers. The SM-2 Block IIIA and earlier variants are currently deployed.

(U) Continually being upgraded to preserve battle group effectiveness against evolving cruise missile and Tactical Ballistic Missile (TBM) threats, SM-2 has three improvements which will be procured for AEGIS cruisers and destroyers equipped with the MK41 Vertical Launch System (VLS). The SM-2 Block IIIB configuration improves the Block IIIA baseline through the Missile Homing Improvement Program(MHIP) to address a specific type of deployed threat. SM-2 Block IV, with a new separable booster, evolves the Block IIIA baseline missile to provide greater kinematic capability and dramatic increases in performance of Block IIIA. The SM-2 Block IVA is a product improvement to the Block IV missile to provide a near term capability against TBMs with an objective of maintaining the current Block IV AAW capability.

(U) In the event that the SM-2 Blk IVA EMD exit criteria are met on schedule, FY99 production will be SM-2 Blk IVA vice Blk IV.
(U) The mix of SM-2 Blk IVs and IVA's in FY99 may change as a result of the IVA EMD schedule.

**WEAPONS PROCUREMENT, NAVY
1999 DEPARTMENT OF THE NAVY BUDGET
MISSILE COST ANALYSIS
EXHIBIT P-5
(Dollars in Millions)**

Date: **FEBRUARY 1998**

STANDARD MISSILE (SM-2 MR/ER)

Cost Elements	FY 1997			FY 1998			FY 1999		
	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
<u>Missile Hardware</u>									
G,C&A/MK72 BOOSTER(FE001)									
AEGIS BLK IIIA									
AEGIS BLK IIIB	80	527.5	42,197	72	669.0	48,166	70	622.6	43,582
AEGIS BLK IV	47	1,627.3	76,482	28	1,821.7	51,007	45	1,683.9	75,777
AEGIS BLK IVA									
SM AEGIS IMPROV									
REQUEST FOR EQUITABLE ADJ (REA)									
MK104 DTRM(FE009)	127	53.3	6,764	100	52.4	5,237	115	54.9	6,309
REQUEST FOR EQUITABLE ADJ (REA)									
MK54 S&A DEVICE(FE003)	127	9.1	1,158	100	8.4	840	115	7.8	902
MK45 TDD MOD 9/10(FE005)	127	48.3	6,134	100	44.9	4,494	115	48.8	5,607
MK125 WARHEAD(FE006)	127	20.8	2,647	100	19.2	1,921	115	17.9	2,063
Total Hardware	127	1,066.0	135,382	100	1,116.7	111,665	115	1,167.3	134,240
<u>Procurement Support</u>									
CONTRACTOR ENGINEERING (FE830)			11,040			11,010			16,378
GOVERNMENT IN-HOUSE ENG(FE830)			4,748			4,783			8,264
QUALITY ASSURANCE (FE840)			2,459			2,383			2,509
DOCUMENTATION(FE954)			1,078			1,028			1,628
PRODUCTION PROOF (FE955)			5,588			5,095			6,890
EVAL SERV& MAT'L(FE860)			18,366			17,498			18,593
CONTAINERS(FE957)			1,106			992			2,024
TOOLS AND TEST EQUIP(FE950)			8,826			4,425			6,144
COMPONENT IMPROVEMENTS(FE850)			5,198			3,898			9,423
INSTAL &CHECKOUT EQUIP(FE970)			6,732			6,483			7,471
SPEC HANDL EQUIP(FE971)			502			502			1,550
TRNG MTL EXP & NON-EXP(FE972)			5,878			4,082			7,993
FLEET DOCUMENTATION(FE973)			1,368			1,468			1,468
ILS(FE980)			1,177			1,127			1,127
Total Procurement Support			74,066			64,774			91,462
Total Flyaway Cost			193,791			162,777			206,093
<u>Fleet Support</u>			15,657			13,662			19,609
Total Fleet Support									
Weapon System Cost			209,448			176,439			225,702
Modifications			16,864			35,601			46,433
Initial Spares			5,393			1,162			8,203
Total Program Cost			231,705			213,202			280,338

CLASSIFICATION:

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)						Weapon System		A. DATE FEBRUARY 1998		
B. APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA-2				C. P-1 ITEM NOMENCLATURE STANDARD MISSILE (SM2 MR/ER)				SUBHEAD 12FE		
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	IF YES WHEN AVAILABLE
UNIQUE SM2 MR/ER HARDWARE FE001 GC&A/MK72 BOOSTER										
FY97 BLK IIIB AEGIS	80	527.5	NAVSEA		FFP/AF	SMCO - McClean,VA	04/97	04/99	YES	NO
FY97 BLK IV AEGIS	47	1627.3	NAVSEA		FPI/AF	SMCO - McClean,VA	04/97	04/99	YES	NO
FY98 BLK IIIB AEGIS	72	669	NAVSEA		FFP/AF	SMCO - McClean,VA	02/98	01/00	YES	NO
FY98 BLK IV AEGIS	28	1821.7	NAVSEA		FFP/AF	SMCO - McClean,VA	02/98	01/00	YES	NO
FY99 BLK IIIB AEGIS	65	670.5	NAVSEA		FFP/AF	SMCO - McClean,VA	01/99	01/01	YES	NO
FY99 BLK IV AEGIS	43	1762.3	NAVSEA		FFP/AF	SMCO - McClean,VA	01/99	01/01	YES	NO
COMMON HARDWARE FE009 DTRM MK104										
FY97 MOD 2/3	127	53.3	NAVSEA		SS/FFP/PI	ARC-Camden,AR	05/97	12/98	YES	NO
FY98 MOD 2/3	100	52.4	NAVSEA		SS/FFP/PI	ARC-Camden,AR	03/98	10/99	YES	NO
FY99 MOD 2/3	108	58.4	NAVSEA		SS/FFP/PI	ARC-Camden,AR	03/99	10/00	YES	NO
FE003 SAFETY & ARMING DEVICE										
FY97 MK 54	127	9.1	NAVSEA		SS/FFP	KAMAN - Middletown,CT	05/97	12/98	YES	NO
FY98 MK 54	100	8.4	NAVSEA		SS/FFP	KAMAN - Middletown,CT	03/98	10/99	YES	NO
FY99 MK54	108	8.4	NAVSEA		SS/FFP	KAMAN - Middletown,CT	03/99	10/00	YES	NO
D. REMARKS										

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System		A. DATE FEBRUARY 1998				
B. APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA-2					C. P-1 ITEM NOMENCLATURE STANDARD MISSILE (SM2 MR/ER)					SUBHEAD 12FE	
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	IF YES WHEN AVAILABLE	
COMMON HARDWARE(cont)											
FE005 ORDNANCE											
MK45 TDD											
FY97 MOD 9/10	127	48.3	NAVSEA		SS/FFP/PI	MOTOROLA,Scottsdale,AZ	06/97	10/98	YES	NO	
FY98 MOD 9/10	100	44.9	NAVSEA		SS/FFP/PI	MOTOROLA,Scottsdale,AZ	06/98	10/99	YES	NO	
FY99 MOD 9/10	108	51.9	NAVSEA		SS/FFP/PI	MOTOROLA,Scottsdale,AZ	06/99	10/00	YES	NO	
FE006 WARHEAD											
FY97 MK125	127	20.8	NAVSEA		SS/FFP	HERCULES - Magna,UT	04/97	10/98	YES	NO	
FY98 MK 125	100	19.2	NAVSEA		SS/FFP	HERCULES - Magna,UT	04/98	10/99	YES	NO	
FY99 MK 125	108	19.1	NAVSEA		SS/FFP	HERCULES - Magna,UT	04/99	10/00	YES	NO	
D. REMARKS											

FY 1998/99 BUDGET PRODUCTION SCHEDULE, P-21						DATE January 1998																										
APPROPRIATION/BUDGET ACTIVITY						Weapon System						P-1 ITEM NOMENCLATURE																				
Weapons Procurement, Navy						STANDARD MISSILE																										
						Production Rate (NOTE 1)			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																		
NOTE 2.	HMSC/TUCSON, AZ					9	100	200			24	24																				
NOTE 2.	RAYTHEON/BRISTOL, TN					9	40	80			24	24																				
	SMCo/McLEAN, VA					10	100	180			24	24																				
ITEM / MANUFACTURER		F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 1997												FISCAL YEAR 1998												B A L	
							1996			CALENDAR YEAR 1997									CALENDAR YEAR 1998													
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P		
HMSC	1994			101	74	27	9	9	9																							
HMSC (FMS)	1994			43	0	43				5	5	5	5	5	5	6	7															
HMSC (SM-1 FMS)	1994			20	0	20				4	4	4	4	4																		
RAYCO	1994			101	81	20	9	9	2																							
RAYCO (FMS)	1994			44	0	44				4	4	4	4	4	4	3	3	3	3	4	4											
SMCo	1995			188	0	188										13	13		16	16	17	17	17	17	16	16	15	15				
SMCo (FMS)	1995			108	0	108																		3	3	4	4	3	3	2		80
SMCo	1996			22	0	22																										
SMCo	1997			127	0	127																										127
SMCo	1998			100	0	100																										100
ITEM / MANUFACTURER		F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 1999												FISCAL YEAR 2000												B A L	
							1998			CALENDAR YEAR 1999									CALENDAR YEAR 2000													
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P		
SMCo(FMS)	1995			108	28	80	14	14	14	13	10	8	7																			
SMCo	1996			22	22																											
SMCo	1997			127	0	127							14	14	14	14	14	14	14	14	15											
SMCo(FMS)	1997			38	0	38									6	6	6	5	5	5	5											
SMCo	1998			100	0	100																										
SMCo(FMS)	1998			5	0	5																	8	8	8	8	8	8	8	9		27
SMCo	1999			108	0	108				A	BLK IIIB	A	BLK IV									1	1	1	1	1						108

Remarks:

Notes: (1) MIN RATES ESTABLISHED AT COMPONENT LEVEL (MK 104 DTRM) - MIN RATE MET WITH ADDITION OF INITIAL SPARES
 (2) Pre FY95 Production Only

CLASSIFICATION: UNCLASSIFIED

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40												DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA-2								P-1 ITEM NOMENCLATURE 2242 RIM 116A - ROLLING AIRFRAME MISSILE (RAM)					
Program Element for Code B Items: 0604755N								Other Related Program Elements					
	Prior Years	ID Code			FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total Program
QUANTITY	N/A	B			135	100	100	90	90	145	125		
COST (\$M)	N/A				\$46.9	\$41.0	\$44.8	\$46.4	\$45.3	\$78.4	\$74.1		
Initial Spares (\$M)	N/A				\$1.2	\$1.3	\$2.3	\$1.7	\$2.0	\$3.2	\$3.4		
Total (\$M)	N/A				\$48.1	\$42.3	\$47.1	\$48.1	\$47.3	\$81.6	\$77.5		
Unit Cost (\$M)	N/A				\$0.4	\$0.4	\$0.5	\$0.5	\$0.5	\$0.6	\$0.6		

ITEM DESCRIPTION/JUSTIFICATION:
 Rolling Airframe Missile (RAM) is a high fire-power, low cost, lightweight complementary self-defense system to engage anti-ship missiles. It has dual-mode passive Radio Frequency/Infrared (RF/IR) guidance and will be fired from a RAM Guided Missile Launching System (MK-49) which holds 21 RAM rounds. Approval for full rate production, Milestone III was granted on 6 May 1993.

FY97 funds will procure 135 Block 0 Missiles.
 FY98 funds will procure 60 Block 0 and 40 Block 1 Missiles.
 FY99 funds will procure 100 Block 1 Missiles.

COOPERATIVE AGREEMENTS:
 RAM is a NATO cooperative project with the Federal Republic of Germany. The RAM production MOU, approved and signed by the US and Germany (GE) on 3 August 1987, specifies production procedures for the Guided Missile Round Pack and coproduction of the Guided Missile Launching System. Missile limited production contracts were awarded to US (General Dynamics/Air Defense Systems Division) and German (RAM System GmbH) sources in 1989. As a result of the reduced US missile quantities and a desire to maintain production capabilities in both countries, an arrangement between the US and German producers, for single source coproduction of the German full-rate production quantities, was approved by both governments in November 1992 and this arrangement continues for U.S. rate production. In August 1992, the acquisition of General Dynamics by Hughes Aircraft Company was approved, making Hughes Missile Systems Co. the US prime contractor. In January 1998, Raytheon acquired Hughes Missile Systems Co., making Raytheon the US prime contractor.

WEAPONS PROCUREMENT, NAVY
FY 1998/99 DEPARTMENT OF THE NAVY BUDGET
MISSILE COST ANALYSIS
EXHIBIT P-5
(Dollars in Thousands)

Missile Nomenclature & Popular Name: ROLLING AIRFRAME MISSILE (RAM)

February 1998

Cost Elements	Prior Years Total Cost	FY 1997 Quantity	Quantity		FY 1998		Quantity		FY 1999		Quantity	
			Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost
224200												
<u>Missile Hardware</u>												
G&CA(INCLUDING I&A) EF001		135	266.7	36,000	60	292.1	17,526					
BLOCK 1 EF001					40	350.0	14,000	100	357.8	35,780		
COMPONENT IMPROV EF850				743			597					508
PROPULSION EF002		135	7.4	1,001	100	8.1	810.0	100	8.3	830		
ORDNANCE PACK (TD) EF005		135	22.3	3,010	100	33.5	3,350	100	33.5	3,350		
WARHEAD EF006					100	2.6	255	100	2.8	280		
SAFE & ARM DEVICE EF004		82	1.8	150	100	2.5	250	100	2.9	290		
TELEMETER for BLK 0 EF010												
TELEMETER for BLK 1 EF010												
Total Hardware				40,904			36,788					41,038
<u>Procurement Support</u>												
CONTRACTOR ENGIN EF830				336			926					639
GOVT IN-HOUSE ENGIN EF830				3,201			2,500					2,553
PRODUCTION ACCEPT EF860				703			785					536
Total Procurement Support				4,240			4,211					3,728
<u>Non-recurring Proc Supt</u>												
TOOLS & TEST EQUIP EF950				1,714			0					0
Total Flyaway Cost		135	347.1	46,858	100	410.0	40,999	100	447.7	44,766		
<u>Fleet Support</u>												
ILS EF974							0					0
CONTAINER EF957												
Total Fleet Support												0
Weapon System Cost				46,858			40,999					44,766
<u>Modifications</u>												
Initial Spares				1,155			2,181					2,250
Total Program Cost				48,013			43,180					47,016

CLASSIFICATION:

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System			A. DATE			
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE					SUBHEAD 12EF	
Weapons Procurement, Navy/BA-2					RAM MISSILE						
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	IF NO WHEN AVAILABLE	
EF001 GUIDANCE & CONTROL ASSEMBLY FY1997											
BLOCK 0 MISSILES	135	266.7	NAVSEA		SS/FP	HMSC, TUCSON, AZ	10/96*	10/98	YES		
FY 1998											
BLOCK 0 MISSILES	60	292.1	NAVSEA	5/97	SS/FP	HMSC, TUCSON, AZ	1/98	10/99	YES		
BLOCK 1 MISSILES	40	350.0	NAVSEA	6/97	SS/CPIF	HMSC, TUCSON, AZ	1/98	10/99	YES		
FY 1999											
BLOCK 1 MISSILES	100	357.8	NAVSEA	5/98	SS/FP	RAYTHEON, TUCSON, AZ	1/99	10/00	YES		
EF002 PROPULSION ROCKET MOTOR MK112/1 W/ARMING & FIRING DEVICE MK 298/1											
FY 1997	135	7.4	NAVAIR	SS/FP	C/FP	ATLANTIC RESEARCH	11/97**	5/99	YES		
FY 1998	100	8.1	NAVAIR	7/97	C/FP	ATLANTIC RESEARCH	11/97	7/99	YES		
FY 1999	100	8.3	NAVAIR	7/98	OPTION	COMPETITIVE	2/99	8/00	YES		
EF005 ORDANCE PACKAGE TARGET DETECTOR/MK20 MOD 2											
FY 1997	135	22.3	NAVSEA		SS/CPIF	HMSC, TUCSON, AZ	12/96	2/98	YES		
FY 1998	100	33.5	NAVSEA	6/97	SS/FPI	HMSC, TUCSON, AZ	11/97	1/99	YES		
FY 1999	100	33.5	NAVSEA	6/98	SS/FP	RAYTHEON, TUCSON	11/98	1/00	YES		
D. REMARKS											
*FY97 contract awarded late due to vendor requalification. **FY98 Rocket Motors will deliver immediately after FY97 Rocket Motors.											

UNCLASSIFIED

CLASSIFICATION:

B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE				SUBHEAD 12EF	
Budget Procurement History and Planning Exhibit (P-5A)					Weapon System				A. DATE	
Weapons Procurement, Navy/BA-2					RAM MISSILE				February 1998	
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	IF NO WHEN AVAILABLE
EF004 SAFE & ARM MK 13/2										
FY 1997	82	1.8	NAVAIR		C/FP	RAYMOND ENGIN	7/97	7/97*	YES	
FY 1998	100	2.5	NAVAIR	7/97	C/FP	COMPETITIVE	5/98	5/99	YES	
FY 1999	100	2.9	NAVAIR	7/98	C/FP	OPTION	11/98	11/99	YES	
EF006 WARHEAD WDU 17/8										
FY 1998	100	2.6	NAVAIR	7/97	C/FP	COMPETITIVE	5/98	5/99	YES	
FY 1999	100	2.8	NAVAIR	7/98	C/FP	OPTION	11/99	11/00	YES	
FY 1999										
D. REMARKS										
* FY97 Safe and Arm Devices delivered at time of contract award from contractor's inventory.										

FY 1998/99 BUDGET PRODUCTION SCHEDULE, P-21						DATE February 1998																									
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy						Weapon System RAM						P-1 ITEM NOMENCLATURE ROLLING AIRFRAME MISSILE -RIM 116A																			
		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																	
5" Rolling Airframe Missile	Hughes Missile Systems, Co., Tucson, AZ					8	75		0	3	21	21	21																		
ITEM / MANUFACTURER						FISCAL YEAR 1997												FISCAL YEAR 1998												BAL	
						1996			CALENDAR YEAR 1997									CALENDAR YEAR 1998													
						O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	BAL	
						C	O	E	A	E	A	P	A	A	U	U	C	O	E	A	E	A	P	A	A	U	J	U	A	S	
						T	V	C	N	B	R	R	Y	N	L	G	P	T	V	C	N	B	R	R	Y	N	L	G	P		
5" Rolling Airframe Missile/HMSC	95		240	0	240	20	20	20	20	20	20	20	20	20	20	20	20													0	
5" Rolling Airframe Missile/HMSC	96		210	0	210													20	20	20	20	20	20	15	15	15	15	15	15	0	
5" Rolling Airframe Missile/HMSC	97		135	0	135	A																							135		
5" Rolling Airframe Missile/HMSC	98		100	0	100																A								100		
5" Rolling Airframe Missile/HMSC	99		100	0	100																								100		
ITEM / MANUFACTURER						FISCAL YEAR 1999												FISCAL YEAR 2000												BAL	
						1998			CALENDAR YEAR 1999									CALENDAR YEAR 2000													
						O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	BAL	
						C	O	E	A	E	A	P	A	A	U	U	C	O	E	A	E	A	P	A	A	U	J	U	A	S	
						T	V	C	N	B	R	R	Y	N	L	G	P	T	V	C	N	B	R	R	Y	N	L	G	P		
5" Rolling Airframe Missile/HMSC	97		135		135	11	11	11	11	11	11	11	11	11	12	12	12														
5" Rolling Airframe Missile/HMSC	98		100		100													8	8	9	8	8	9	8	8	9	8	8	9		
5" Rolling Airframe Missile/HMSC	99		100		100																								100		
Remarks:																															

FY 1998/99 BUDGET PRODUCTION SCHEDULE, P-21						DATE February 1998																								
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy						Weapon System RAM					P-1 ITEM NOMENCLATURE ROLLING AIRFRAME MISSILE - RIM 116A																			
		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																
5" Rolling Airframe Missile	Hughes Missile Systems, Co., Tucson, AZ					8	75		0	3	21	21	21																	
ITEM / MANUFACTURER						FISCAL YEAR 2001										FISCAL YEAR 2002														
						2000			CALENDAR YEAR 2001							CALENDAR YEAR 2002														
						O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	B
						C	O	E	A	E	A	P	A	U	U	U	E	C	O	E	A	E	A	P	A	U	J	A	S	A
						T	V	C	N	B	R	R	Y	N	L	G	P	T	V	C	N	B	R	R	Y	N	L	G	P	L
5" Rolling Airframe Missile/HMSC	99	N	100	0	100	8	8	9	8	8	9	8	8	9	8	8	9													
ITEM / MANUFACTURER						FISCAL YEAR 2003										FISCAL YEAR 2004														
						2002			CALENDAR YEAR 2003							CALENDAR YEAR 2004														
						O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	B
						C	O	E	A	E	A	P	A	U	U	U	E	C	O	E	A	E	A	P	A	U	J	A	S	A
						T	V	C	N	B	R	R	Y	N	L	G	P	T	V	C	N	B	R	R	Y	N	L	G	P	L
Remarks:																														

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET

P-40

DATE:

February 1998

APPROPRIATION/BUDGET ACTIVITY

Weapons Procurement, Navy/2 - Other Missiles

P-1 ITEM NOMENCLATURE

HELLFIRE AGM-114K PEO(T)

	Prior Years	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total Program
QUANTITY	9,581										
COST (\$M)	\$391.0	\$0.0	\$0.0	\$19.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$410.5
Initial Spares (\$M)	\$4.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$4.4
Total (\$M)	\$395.4	\$0.0	\$0.0	\$19.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$414.9
Unit Cost (\$M)	0.041	0	0		0	0	0	0	0	0	

The Hellfire II (AGM-114K) is a laser guided missile that can be employed from land or carrier based helicopters. The AGM-114 was developed by the Army as executive service to be used as it's primary anti-armor missile for the advanced attack helicopter (AAH-64). The AGM-114K gives the USMC AH-1W helicopter the ability to penetrate modern armor with minimum exposure of the launching platform to enemy counterfire. Approval for Full Rate Production was granted in March 1986. The Hellfire II contains an electro-optical countermeasure (EOCM) seeker to defend against optical countermeasures. The missile contains a new digital autopilot and an electronic fuze for the robust warhead.

<u>Quantities Summary</u>	<u>FY97</u>	<u>FY98</u>	<u>FY99</u>
Army	1800	368	0
Navy	0	232	0
TOTAL (USN/USA)	0	600	0

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

**WEAPONS PROCUREMENT, NAVY
 FY 1999 PRESIDENT'S BUDGET
 MISSILE COST ANALYSIS
 EXHIBIT P-5
 (Dollars in Millions)**

Missile Nomenclature & Popular Name AGM-114K (HELLFIRE II)

Date: February 1998

<u>Cost Elements</u>	<u>FY 1996</u>	<u>Quantity</u>	<u>Total Cost</u>	<u>FY 1997</u>	<u>Quantity</u>	<u>Total Cost</u>	<u>FY 1998</u>	<u>Quantity</u>	<u>Total Cost</u>	<u>FY 1999</u>	<u>Quantity</u>	<u>Total Cost</u>
	<u>Quantity</u>	<u>Unit Cost</u>		<u>Quantity</u>	<u>Unit Cost</u>		<u>Quantity</u>	<u>Unit Cost</u>		<u>Quantity</u>	<u>Unit Cost</u>	
<u>Missile Hardware</u>												
GC&A/Motor							232	0.040	9.280			0.000
Warhead							132	0.015	1.980			0.000
SAD							132	0.003	0.396			0.000
Total Hardware	0.000		0.000	0.000		0.000		0.058	11.656	0.000		0.000
<u>Recurring Production Support</u>												
Govt In-House									3.000			0.000
Govt Test Program									2.625			0.000
Contractor SE/PM									0.040			0.000
Total Recurring Prod Support	0.000		0.000			0.000			5.665	0.000		0.000
RECURRING FLYAWAY	0.000	0.000	0.000	0.000	0.000	0.000	232	0.075	17.321	0.000	0.000	0.000
<u>Non-Recurring Costs</u>												
Acceptance Test Equipmen						0.000	0	0.000	0.000	0.000	0.000	0.000
Containers						0.000	0	0.000	0.600	0.000	0.000	0.000
Second Source						0.000	0	0.000	0.000	0.000	0.000	0.000
Product Improvement						0.000	0	0.000	0.000	0.000	0.000	0.000
Total Non-Recurring Costs	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	0.600	0.000	0.000	0.000
TOTAL MISSILE FLYAWAY	0.000	0.000	0.000	0.000	0.000	0.000	232	0.077	17.921	0.000	0.000	0.000
<u>Fleet Support</u>												
Test Equipment					0.000	0.000	0	0.000	0.000	0.000	0.000	0.000
Handling Equipment					0.000	0.000	0	0.000	0.000	0.000	0.000	0.000
Training Equipment					0.000	0.000	0	0.000	0.000	0.000	0.000	0.000
Data & Pubs					0.000	0.000	0	0.000	0.000	0.000	0.000	0.000
Integrated Logistics Support	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	1.600	0.000	0.000	0.000
Total Fleet Support	0.000	0.000	0.000	0.000	0.000	0.000	0	0.000	1.600	0.000	0.000	0.000
Weapon System Cost	0.000	0.000	0.000	0.000	0.000	0.000	232	0.084	19.521	0.000	0.000	0.000
Modifications			0.000			0.000	0	0.000	0.000	0.000	0.000	0.000
Initial Spares			0.000			0.000	0	0.000	0.000	0.000	0.000	0.000
Total Program Cost	0.000	0.000	0.000	0.000	0.000	0.000	232	0.084	19.521	0.000	0.000	0.000

CLASSIFICATION:

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)								A. DATE February 1998		
B. APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/2 - Other Missiles				C. P-1 ITEM NOMENCLATURE HELLFIRE II AGM-114K				SUBHEAD Y2F6		
Cost Element/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
<u>HELLFIRE II</u>										
FY 1994	MARTIN MARIETTA Orlando, FL	MIPR/OPTION	U.S. Army	1/94	1/96	1,931	34.5	YES	NO	
FY 1998	LOCKHEED MARTIN, Hellfire Systems Limited Liability Company (HSLLC)	MIPR/FFP	U.S. Army	6/98	5/00	232	58.0	YES	NO	
D. REMARKS										

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: February 1998	
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy BA2 - Other Missiles							P-1 ITEM NOMENCLATURE PENGUIN (J2GS) PEO(CU)					
	1994 & Prior Years	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total Program
QUANTITY	101	0	0	0	0	0	0	0	0	0	0	101
	\$158.2	\$0.0	\$0.0	\$6.9	\$7.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$172.4
Initial Spares (\$M)	\$6.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$6.4
Total (\$M)	\$164.6	\$0.0	\$0.0	\$6.9	\$7.3	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$178.8
Unit Cost (\$M)	\$1.630	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$1.770

The Penguin missile system is an Anti-Ship Missile, manufactured in Norway by Kongsberg Aerospace. The missile, designated the AGM-119B, is launched from the SH-60B LAMPS MK III helicopter operating from U.S. Navy ships. The Penguin missile is a short-to-medium range, rolling airframe, inertially guided missile with passive infrared terminal homing. The Naval Air Systems Command, PMA-258, provides total life cycle support for the Penguin missile to meet customer requirements and to support fleet operations. The planned number of Penguin capable helos and ships is 188 and 64, respectively. The last Penguin AUR missile buy for the Navy was FY 1992.

Funding provided in FY 1997 allowed for the procurement of six Penguin training missiles through Kongsberg Aerospace, with a contract award date of June 1997. These units will be delivered in APR 99 and will allow pilots to maintain proficiency in the use of this weapon.

FY98 funding will be used to buy components for the Missile Launch Assembly(MLA), the interface between the SH-60B Helo and the Penguin Missile. MLA Components are the prime missions degraders and are essential to maintain the viability of the Penguin program. 45 missile simulators used in Weapons Loading evolutions and tactical missile components will also be procured.

No Navy procurement is planned in FY 1999 and out.

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

**WEAPONS PROCUREMENT, NAVY
 FY 1998/99 DEPARTMENT OF THE NAVY BUDGET
 MISSILE COST ANALYSIS
 EXHIBIT P-5
 (Dollars in Millions)**

Missile Nomenclature & Popular Name:

PENGUIN

Date: Feb 1998

Cost Elements	Prior Years	FY 1995	Quantity		FY 1996	Quantity		FY 1997	Quantity		FY 1998	Quantity		FY 1999	Quantity		
	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	
<u>Missile Hardware</u>																	
HMB/SYS ENGR/DATA																	
ECO																	
SLAM UNIQUE																	
ENGINE																	
WARHEAD																	
WINGS & FINS																	
Total Hardware																	
<u>Procurement Support</u>																	
GOVT IN-HOUSE																	
Total Procurement Support																	
Total Flyaway Cost																	
<u>Fleet Support</u>																	
TRAINING EQUIPMENT											6.060					4.955	
FIELD ACTIVITY SUPPORT											0.792					2.367	
ILS SERVICES																	
Total Fleet Support											6.852					7.322	
Weapon System Cost											6.852					7.322	
<u>Modifications</u>																	
Advanced Procurement	8.977																
Various 1/	149.235																
Initial Spares	6.388			0.000			0.000				0.000			0.000			0.000
Total Program Cost	164.600			0.000			0.000				6.852			7.322			0.000

1/ The amount identified against this cost element reflects total prior year funding associated with cost elements no longer financed in FY95 and beyond.

CLASSIFICATION:

UNCLASSIFIED

**BUDGET ITEM JUSTIFICATION SHEET
P-40**

DATE:

FEBRUARY 1998

APPROPRIATION/BUDGET ACTIVITY

Weapons Procurement, Navy/BA-2; OTHER MISSILES

P-1 ITEM NOMENCLATURE

AERIAL TARGETS (J2EM)

Program Element for Code B Items:

0604258N, 0605130D, 0604366N

Other Related Program Elements

N/A

	Prior Years	ID Code	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY												
COST (In Millions)	\$2390.0	A	\$74.5	\$73.9	\$64.0	\$75.5	\$80.4	\$90.1	\$91.3	\$102.8	Cont.	Cont.

PROGRAM COVERAGE:

The Aerial Targets Program provides powered targets, towed targets and necessary Target Auxiliary and Augmentation Systems (TA/AS) equipment for fleet training, and weapons systems test and evaluation. This program is comprised of a series of continuing target production programs.

JUSTIFICATION OF BUDGET YEAR REQUIREMENTS:

In Fiscal Year 1999, major efforts include the procurement of the AQM-37C/D high altitude supersonic subscale targets, the BQM-74E subsonic subscale targets, the MA-31 supersonic sea skimming targets, the MQM-8G(EER) Vandal targets (converted TALOS missiles), and Foreign Non-Developmental Item (NDI) supersonic and subsonic targets. TA/AS procurements include target command/control equipment, scoring equipment, location and identification equipment, navigation equipment, electronic countermeasures equipment, and active emitter augmentation equipment. The aerial targets and necessary TA/AS equipment provided from this program supports Navy air-to-air and surface-to-air training and weapons systems DT/OT testing.

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS										B. DATE	
P-5										FEBRUARY 1998	
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE/SUBHEAD						
WEAPONS PROCUREMENT, NAVY/BA-2 OTHER MISSILES					AERIAL TARGETS/J2EM						
COST CODE	ELEMENT OF COST	IDENT CODE	Prior Years Total Cost	FY 1996		FY 1997		FY 1998		FY 1999	
				QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
EM010	BQM-34S	A	\$217,140	0	\$3,409	0	\$2,386	0	\$0	0	\$0
EM020	AQM-37C/D	A	\$119,818	70	\$15,226	110	\$20,802	50	\$10,839	35	\$10,024
EM030	BQM SUBSONIC SUBSCALE	A	\$240,241	149	\$36,663	64	\$30,282	119	\$35,915	135	\$36,461
EM100	TOW TARGETS	A	\$19,837	0	\$0	0	\$0	0	\$0	0	\$0
EM200	OTHER TARGETS	B (1)	\$94,281	6	\$4,266	9	\$7,797	7	\$5,118	11	\$10,841
EM300	TA/AS	A	\$124,674		\$14,949		\$12,595		\$12,121		\$18,148
	VARIOUS (2)		\$1,573,998		\$0		\$0		\$0		\$0
TOTAL			\$2,389,989	225	\$74,513	183	\$73,862	176	\$63,993	181	\$75,474
SPARES (3)											
	BQM-34S		\$570		\$2,478		\$568		\$0		\$0
	AQM-37C/D		\$0		\$0		\$0		\$0		\$0
	BQM SUBSONIC SUBSCALE		\$125		\$0		\$0		\$0		\$210
	TOW TARGETS		\$0		\$0		\$0		\$0		\$0
	OTHER TARGETS		\$405		\$0		\$0		\$0		\$0
	TA/AS		\$156		\$0		\$0		\$298		\$212
	VARIOUS (2)		\$50,331		\$0		\$0		\$0		\$0
TOTAL SPARES			\$51,587		\$2,478		\$568		\$298		\$422
TOTAL PROGRAM			\$2,441,576	225	\$76,991	183	\$74,430	176	\$64,291	181	\$75,896

P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO. 12

PAGE NO. 2

UNCLASSIFIED

(1) See "Other Targets" P-5 for RDT&E and FCT program elements.

(2) The amount identified against this cost element reflects total prior year funding associated with cost elements no longer financed in FY 1995 and beyond.

(3) Initial spares requirements are displayed for information purposes only and are budgeted in Budget Activity 6, Spare and Repair Parts.

UNCLASSIFIED

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)

FEBRUARY 1998

TARGET SYSTEM: BQM-34S MANUFACTURER: TELEDYNE RYAN, SAN DIEGO, CA COST CODE: EM010 FLYAWAY COST (\$000)	Prior Yrs Total Costs	FISCAL YEAR 1996			FISCAL YEAR 1997			FISCAL YEAR 1998			FISCAL YEAR 1999		
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
HARDWARE:													
TARGET	\$178,604	0		\$0	0		\$0	0		\$0	0		\$0
GFM (1)	\$5,699			\$0			\$363			\$0			\$0
TECHNICAL DATA PACKAGE	\$0			\$0			\$0			\$0			\$0
INSTALL/MISSION KITS (2)	\$19,834			\$1,208			\$363			\$0			\$0
TOTAL HARDWARE	\$204,137	0		\$1,208	0		\$726	0		\$0	0		\$0
PROCUREMENT SUPPORT (RECURRING):													
CONTRACTOR ENGINEERING	\$0			\$0			\$0			\$0			\$0
GOVERNMENT IN-HOUSE	\$5,535			\$1,050			\$572			\$0			\$0
DOCUMENTATION	\$1,634			\$198			\$36			\$0			\$0
GOVERNMENT TEST	\$982			\$125			\$443			\$0			\$0
OTHER	\$0			\$0			\$0			\$0			\$0
TOTAL RECURRING	\$8,151			\$1,373			\$1,051			\$0			\$0
PROCUREMENT SUPPORT (NONRECURRING):													
PRODUCT IMPROVEMENT	\$0			\$0			\$0			\$0			\$0
SPECIAL TOOLING AND TEST EQUIPMENT	\$0			\$0			\$0			\$0			\$0
TOTAL NONRECURRING	\$0			\$0			\$0			\$0			\$0
TOTAL FLYAWAY	\$212,288	0	\$0	\$2,581	0	\$0	\$1,777	0	\$0	\$0	0	\$0	\$0
GROUND EQUIPMENT/FLEET SUPPORT COST:													
GROUND EQUIPMENT	\$1,260			\$225			\$275			\$0			\$0
INSTALL & CHECKOUT	\$0			\$0			\$0			\$0			\$0
SPECIAL HANDLING EQUIPMENT	\$0			\$0			\$0			\$0			\$0
FLEET TEST EQUIPMENT	\$0			\$0			\$0			\$0			\$0
TRAINING DEVICES	\$150			\$75			\$114			\$0			\$0
DOCUMENTATION	\$0			\$0			\$0			\$0			\$0
ILS	\$3,442			\$528			\$220			\$0			\$0
TOTAL GRD EQUIP/FLEET SUP COST	\$4,852			\$828			\$609			\$0			\$0
WEAPONS SYSTEM COST	\$217,140	0	\$0	\$3,409	0	\$0	\$2,386	0	\$0	\$0	0	\$0	\$0
TARGETS INITIAL SPARES	\$570			\$2,478			\$568			\$0			\$0
TOTAL PROGRAM COST	\$217,710	0	\$0	\$5,887	0	\$0	\$2,954	0	\$0	\$0	0	\$0	\$0

P-1 SHOPPING LIST

- (1) HERO safe cartridge activating devices.
- (2) Kits for SQUIB's.

ITEM NO.

12 PAGE NO.

3

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)

FEBRUARY 1998

TARGET SYSTEM: AQM-37C/D MANUFACTURER: RAYTHEON AIRCRAFT, WICHITA, KS COST CODE: EM020 FLYAWAY COST (\$000)	Prior Yrs Total Cost	FISCAL YEAR 1996			FISCAL YEAR 1997			FISCAL YEAR 1998			FISCAL YEAR 1999		
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
HARDWARE: (1)													
TARGET	\$78,227	70	\$125	\$8,753	110	\$125	\$13,698	50	\$144	\$7,183	35	\$156	\$5,453
GFM-BATTERIES	\$1,366			\$182			\$295			\$145			\$94
GFM-IRFNA (2)	\$2,822			\$273			\$375			\$221			\$146
INSTALL/MISSION KITS	\$11,164			\$715			\$1,212			\$309			\$685
EXTENDED PERFORMANCE KITS (3)	\$4,252			\$0			\$0			\$374			\$800
TOTAL HARDWARE	\$97,831	70	\$142	\$9,923	110	\$142	\$15,580	50	\$165	\$8,232	35	\$205	\$7,178
PROCUREMENT SUPPORT (RECURRING):													
GOVERNMENT IN-HOUSE	\$5,114			\$2,021			\$2,528			\$1,583			\$1,632
DOCUMENTATION	\$1,680			\$424			\$389			\$182			\$281
GOVERNMENT TEST	\$631			\$206			\$1,157			\$109			\$131
TOTAL RECURRING	\$7,425			\$2,651			\$4,074			\$1,874			\$2,044
PROCUREMENT SUPPORT (NONRECURRING):													
PRODUCT IMPROVEMENT (4), (5)	\$10,836		(4)	\$2,318		(5)	\$497			\$545			\$0
SPECIAL TOOLING AND TEST EQUIPMENT	\$0			\$0			\$0			\$0			\$0
TOTAL NONRECURRING	\$10,836			\$2,318			\$497			\$545			\$0
TOTAL FLYAWAY	\$116,092	70	\$213	\$14,892	110	\$183	\$20,151	50	\$213	\$10,651	35	\$263	\$9,222
GROUND EQUIPMENT/FLEET SUPPORT COST:													
GROUND EQUIPMENT	\$0			\$0			\$0			\$0			\$0
INSTALL & CHECKOUT	\$0			\$0			\$0			\$0			\$0
SPECIAL HANDLING EQUIPMENT	\$0			\$0			\$0			\$0			\$0
FLEET TEST EQUIPMENT	\$469			\$0			\$0			\$0			\$0
TRAINING DEVICES	\$110			\$29			\$96			\$20			\$31
DOCUMENTATION	\$242			\$0			\$0			\$0			\$395
ILS	\$2,905			\$305			\$555			\$168			\$376
TOTAL GRD EQUIP/FLEET SUP COST	\$3,726			\$334			\$651			\$188			\$802
WEAPONS SYSTEM COST (6)	\$119,818	70	\$218	\$15,226	110	\$189	\$20,802	50	\$217	\$10,839	35	\$286	\$10,024
TARGETS INITIAL SPARES	\$0			\$0			\$0			\$0			\$0
TOTAL PROGRAM COST	\$119,818	70	\$218	\$15,226	110	\$189	\$20,802	50	\$217	\$10,839	35	\$286	\$10,024

P-1 SHOPPING LIST

(1) Price increase due to Power Supply ECP.

ITEM NO.

12 PAGE NO. 4

(2) Inhibited Red Fuming Nitric Acid.

(3) Extended performance kits are required to perform missions at altitudes from 70,000 to 100,000 feet at velocities from Mach 3 to Mach 4. Approximately 20 kits will be procured each year.

(4) FY 96 - non-recurring engineering associated with an avionics upgrade (obsolete components no longer commercially available).

(5) FY 97 - software changes/power supply/valve.

(6) Target buy increased at direction of sponsor.

UNCLASSIFIED

UNCLASSIFIED

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)

FEBRUARY 1998

TARGET SYSTEM: BQM SUBSONIC SUBSCALE MANUF: NORTHROP-GRUMMAN COST CODE: EM030 FLYAWAY COST (\$000)	Prior Yrs Total Cost	FISCAL YEAR 1996			FISCAL YEAR 1997			FISCAL YEAR 1998			FISCAL YEAR 1999		
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
HARDWARE:													
TARGET (1)	\$201,630	149	\$223	\$33,222	64	\$242	\$15,620	119	\$238	\$28,317	135	\$222	\$29,905
INSTALL/MISSION KITS (2)	\$19,569			\$1,087			\$12,393			\$5,451			\$4,319
TOTAL HARDWARE	\$221,199	149	\$240	\$34,309	64	\$438	\$28,013	119	\$284	\$33,768	135	\$254	\$34,224
PROCUREMENT SUPPORT (RECURRING):													
GOVERNMENT IN-HOUSE	\$9,213			\$1,445			\$1,396			\$1,216			\$1,558
DOCUMENTATION	\$1,301			\$114			\$120			\$128			\$171
GOVERNMENT TEST	\$843			\$0			\$360			\$232			\$55
TOTAL RECURRING	\$11,357			\$1,559			\$1,876			\$1,576			\$1,784
PROCUREMENT SUPPORT (NONRECURRING):													
PRODUCT IMPROVEMENT (3)	\$0			\$0			\$0			\$0			\$0
SPECIAL TOOLING AND TEST EQUIPMENT	\$0			\$0			\$0			\$0			\$0
TOTAL NONRECURRING				\$0			\$0			\$0			\$0
TOTAL FLYAWAY	\$232,556	149	\$241	\$35,868	64	\$467	\$29,889	119	\$297	\$35,344	135	\$267	\$36,008
GROUND EQUIPMENT/FLEET SUPPORT COST:													
GROUND EQUIPMENT	\$2,975			\$125			\$154			\$280			\$0
INSTALL & CHECKOUT	\$0			\$0			\$0			\$0			\$0
SPECIAL HANDLING EQUIPMENT	\$0			\$0			\$0			\$0			\$0
FLEET TEST EQUIPMENT	\$0			\$0			\$0			\$0			\$0
TRAINING DEVICES	\$154			\$33			\$35			\$40			\$36
DOCUMENTATION	\$715			\$283			\$0			\$0			\$0
ILS	\$3,841			\$354			\$204			\$251			\$417
TOTAL GRD EQUIP/FLEET SUP COST	\$7,685			\$795			\$393			\$571			\$453
WEAPONS SYSTEM COST	\$240,241	149	\$246	\$36,663	64	\$473	\$30,282	119	\$302	\$35,915	135	\$270	\$36,461
TARGETS INITIAL SPARES	\$125			\$0			\$0			\$0			\$210
TOTAL PROGRAM COST	\$240,366	149	\$246	\$36,663	64	\$473	\$30,282	119	\$302	\$35,915	135	\$272	\$36,671

P-1 SHOPPING LIST

ITEM NO.

12 PAGE NO. 5

- (1) Includes FY96 contract and additional units procured on FY97 contract
- (2) Fiscal Year 1997, includes emergent OSPREY rqmt (\$5,350) and FY 97 Kit buy (\$5,769)
- (3) Programmatic decision not to do ECP based on new competition for SSAT.

UNCLASSIFIED

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)

FEBRUARY 1998

TARGET SYSTEM: TOW TARGETS MANUFACTURER: VARIOUS COST CODE: EM100 FLYAWAY COST (\$000)	Prior Yrs Total Cost	FISCAL YEAR 1996			FISCAL YEAR 1997			FISCAL YEAR 1998			FISCAL YEAR 1999		
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
HARDWARE:													
TDU-32 BANNER SERIES	\$3,604			\$0			\$0			\$0			\$0
TDU-34	\$1,318			\$0			\$0			\$0			\$0
TA/AS MISSION SETS	\$1,458			\$0			\$0			\$0			\$0
TOTAL HARDWARE	\$6,380			\$0			\$0			\$0			\$0
PROCUREMENT SUPPORT (RECURRING):													
GOVERNMENT IN-HOUSE	\$7,185			\$0			\$0			\$0			\$0
DOCUMENTATION	\$2,007			\$0			\$0			\$0			\$0
GOVERNMENT TEST	\$1,040			\$0			\$0			\$0			\$0
TOTAL RECURRING	\$10,232			\$0			\$0			\$0			\$0
PROCUREMENT SUPPORT (NONRECURRING):													
PRODUCT IMPROVEMENT	\$0			\$0			\$0			\$0			\$0
TOOLING	\$0			\$0			\$0			\$0			\$0
TEST EQUIPMENT	\$0			\$0			\$0			\$0			\$0
TOTAL NONRECURRING	\$0			\$0			\$0			\$0			\$0
TOTAL FLYAWAY	\$16,612			\$0			\$0			\$0			\$0
GROUND EQUIPMENT/FLEET SUPPORT COST:													
GROUND EQUIPMENT	\$193			\$0			\$0			\$0			\$0
INSTALL & CHECKOUT	\$0			\$0			\$0			\$0			\$0
SPECIAL HANDLING EQUIPMENT	\$200			\$0			\$0			\$0			\$0
TOOLING	\$0			\$0			\$0			\$0			\$0
TEST EQUIPMENT	\$0			\$0			\$0			\$0			\$0
TRAINING DEVICES	\$251			\$0			\$0			\$0			\$0
DOCUMENTATION	\$0			\$0			\$0			\$0			\$0
ILS	\$2,581			\$0			\$0			\$0			\$0
TOTAL GRD EQUIP/FLEET SUP COST	\$3,225			\$0			\$0			\$0			\$0
WEAPONS SYSTEM COST	\$19,837			\$0			\$0			\$0			\$0
TARGETS INITIAL SPARES	\$0			\$0			\$0			\$0			\$0
TOTAL PROGRAM COST	\$19,837			\$0			\$0			\$0			\$0

P-1 SHOPPING LIST

UNCLASSIFIED

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)

FEBRUARY 1998

TARGET SYSTEM: OTHER TARGETS MANUF: VARIOUS COST CODE: EM200 FLYAWAY COST (\$000)	Prior Yrs Total Cost	FISCAL YEAR 1996			FISCAL YEAR 1997			FISCAL YEAR 1998			FISCAL YEAR 1999		
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
HARDWARE:													
MQM-8G(EER) VANDAL (1)	\$64,766	6	\$434	\$2,604	0		\$0	6	\$508	\$3,046	0		\$0
MA-31 (2)	\$0	0		\$0	9	\$849	\$7,643	0		\$0	6	\$397	\$2,382
SM-2 TARGET (3)	\$0	0		\$0	0		\$0	0		\$0	0		\$0
ANTI SHIP CRUISE MISSILE - SUBSONIC (4)	\$0	0		\$0	0		\$0	0		\$0	0		\$0
FOREIGN NDI - SUPERSONIC	\$0	0		\$0	0		\$0	1	\$1,951	\$1,951	2	\$1,491	\$2,982
FOREIGN NDI - SUBSONIC	\$0	0		\$0	0		\$0	0		\$0	3	\$1,491	\$4,473
ANCILLARY EQUIP	\$2,107			\$396			\$0			\$0			\$0
QF-4N	\$6,735												
TOTAL HARDWARE	\$73,608	6	\$500	\$3,000	9	\$849	\$7,643	7	\$714	\$4,997	11	\$894	\$9,837
PROCUREMENT SUPPORT (RECURRING):													
GOVERNMENT IN-HOUSE	\$7,856			\$649			\$0			\$121			\$679
DOCUMENTATION	\$1,000			\$0			\$0			\$0			\$39
GOVERNMENT TEST	\$0			\$300			\$0			\$0			\$0
TOTAL RECURRING	\$8,856			\$949			\$0			\$121			\$718
PROCUREMENT SUPPORT (NONRECURRING):													
PRODUCT IMPROVEMENT	\$3,726			\$0			\$0			\$0			\$0
CONTRACTOR ENGINEERING	\$1,435			\$0			\$0			\$0			\$0
TOOLING	\$0			\$0			\$0			\$0			\$0
TEST EQUIPMENT	\$0			\$0			\$0			\$0			\$0
TOTAL NONRECURRING	\$5,161			\$0			\$0			\$0			\$0
TOTAL FLYAWAY	\$87,625	6	\$658	\$3,949	9		\$7,643	7		\$5,118	11		\$10,555
GROUND EQUIPMENT/FLEET SUPPORT COST:													
GROUND EQUIPMENT	\$2,105			\$0			\$0			\$0			\$0
INSTALL & CHECKOUT	\$0			\$0			\$0			\$0			\$0
SPECIAL HANDLING EQUIPMENT	\$0			\$0			\$0			\$0			\$0
TOOLING	\$0			\$0			\$0			\$0			\$0
TEST EQUIPMENT	\$630			\$0			\$154			\$0			\$286
TRAINING DEVICES	\$0			\$64			\$0			\$0			\$0
DOCUMENTATION	\$1,665			\$0			\$0			\$0			\$0
ILS	\$2,256			\$253			\$0			\$0			\$0
TOTAL GRD EQUIP/FLEET SUP COST	\$6,656			\$317			\$154			\$0			\$286
WEAPONS SYSTEM COST	\$94,281	6	\$711	\$4,266	9		\$7,797	7		\$5,118	11		\$10,841
TARGETS INITIAL SPARES	\$405			\$0			\$0			\$0			\$0
TOTAL PROGRAM COST	\$94,686	6	\$711	\$4,266	9		\$7,797	7		\$5,118	11		\$10,841

P-1 SHOPPING LIST

- (1) MQM-8G(EER) VANDAL Unit Price for FY 98 increase due to the incorporation of both the Inerti: ITEM NO. Unit (IMU) and the Global Positioning System (GPS) (A Reliability Improvement)
- (2) MA-31 RDT&E PE 0604258N and FCT PE 0605130D.
- (3) SM-2 Target RDT&E PE 0604258N and PE 0604366N.
- (4) Formerly called the HARPOON Target.

12 PAGE NO. 7

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)

FEBRUARY 1998

TARGET SYSTEM: TA/AS MANUFACTURER: VARIOUS COST CODE: EM300 FLYAWAY COST (\$000)	Prior Yrs Total Cost	FISCAL YEAR 1996			FISCAL YEAR 1997			FISCAL YEAR 1998			FISCAL YEAR 1999		
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
HARDWARE:													
CDM/CONTROL EQUIPMENT	\$24,707			\$1,632			\$510			\$0			\$4,306
SCORING EQUIPMENT	\$11,880			\$2,405			\$1,860			\$2,152			\$2,084
LOCATION/ID EQUIP	\$10,698			\$298			\$294			\$1,604			\$1,760
ECM/EMITTER EQUIP	\$27,290			\$4,550			\$4,269			\$3,336			\$4,644
AUGMENT/NAVIGAT EQUIP	\$6,926			\$305			\$853			\$868			\$407
INSTALL/MISSION EQUIP	\$0			\$495			\$508			\$519			\$535
MOBILE SEA RANGE	\$12,598			\$270			\$0			\$0			\$0
TOTAL HARDWARE	\$94,099			\$9,955			\$8,294			\$8,479			\$13,736
PROCUREMENT SUPPORT (RECURRING):													
GOVERNMENT IN-HOUSE	\$17,228			\$3,034			\$3,080			\$2,558			\$3,154
DOCUMENTATION	\$0			\$12			\$87			\$0			\$0
GOVERNMENT TEST	\$0			\$164			\$112			\$0			\$0
TOTAL RECURRING	\$17,228			\$3,210			\$3,279			\$2,558			\$3,154
PROCUREMENT SUPPORT (NONRECURRING):													
PRODUCT IMPROVEMENT	\$1,300			\$0			\$0			\$0			\$0
TOOLING	\$0			\$0			\$0			\$0			\$0
TEST EQUIPMENT	\$0			\$0			\$0			\$0			\$0
TOTAL NONRECURRING	\$1,300			\$0			\$0			\$0			\$0
TOTAL FLYAWAY	\$112,627			\$13,165			\$11,573			\$11,037			\$16,890
GROUND EQUIPMENT/FLEET SUPPORT COST:													
GROUND EQUIPMENT	\$143			\$345			\$0			\$0			\$0
INSTALL & CHECKOUT	\$917			\$0			\$0			\$0			\$0
SPECIAL HANDLING EQUIPMENT	\$0			\$0			\$0			\$0			\$0
TOOLING	\$0			\$0			\$0			\$0			\$0
TEST EQUIPMENT	\$1,557			\$445			\$0			\$0			\$0
TRAINING DEVICES	\$336			\$68			\$15			\$25			\$25
DOCUMENTATION	\$0			\$0			\$0			\$0			\$0
ILS	\$9,094			\$926			\$1,007			\$1,059			\$1,233
TOTAL GRD EQUIP/FLEET SUP COST	\$12,047			\$1,784			\$1,022			\$1,084			\$1,258
WEAPONS SYSTEM COST	\$124,674			\$14,949			\$12,595			\$12,121			\$18,148
TARGETS INITIAL SPARES	\$156			\$0			\$0			\$298			\$212
TOTAL PROGRAM COST	\$124,830			\$14,949			\$12,595			\$12,419			\$18,360

P-1 SHOPPING LIST

UNCLASSIFIED

CLASSIFICATION:

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

B. APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/2; Other Missiles	C. P-1 ITEM NOMENCLATURE AERIAL TARGETS	SUBHEAD J2EM
---	--	-------------------------------

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
AQM-37C/FY-96	70	125	NAVAIR	8 DEC 94	C/Option	Raytheon A/C, Wichita, KS	FEB 96	JUN 97		
AQM-37C/FY-97	110	125	NAVAIR		C/Option	Raytheon A/C, Wichita, KS	FEB 97	JUN 98		
AQM-37C/FY-98	50	144(1)	NAVAIR		C/Option	Raytheon A/C, Wichita, KS	DEC 97	JUN 99	Yes	
AQM-37D/FY-99 (2)	35	156	NAVAIR		SS/FP	Raytheon A/C, Wichita, KS	FEB 99	JUN 00	Yes	MAY 98
BQM-74E/FY-96	120	218	NAVAIR	1 APR 95	C/FP	Northrop-Grumman, Hawthorne, CA	APR 96	JUL 97		
BQM-74E/FY-96 (3)	29	242	NAVAIR		C/Option	Northrop-Grumman, Hawthorne, CA	MAR 97	JUN 98		
BQM-74E/FY-97	64	242	NAVAIR		C/Option	Northrop-Grumman, Hawthorne, CA	MAR 97	JUN 98		
BQM-74E/FY-98	119	238	NAVAIR		C/Option	Northrop-Grumman, Hawthorne, CA	DEC 97	MAY 99	Yes	
BQM-74E/FY-99	135	222	NAVAIR		C/Option	Northrop-Grumman, Hawthorne, CA	FEB 99	JUN 00	Yes	
MQM-8G(EER)/FY-95	24	393	NAWC, Point Mugu	30 NOV 94	SS/FP	Allied-Signal, Mishawaka, IN	APR 95	MAR 96		
MQM-8G(EER)/FY-96	6	434(4)	NAWC, Point Mugu		SS/Option	Allied-Signal, Mishawaka, IN	JUL 96	OCT 97		
MQM-8G(EER)/FY-98	6	508(5)	NAWC, Point Mugu		SS/FP	Allied-Signal, Mishawaka, IN	FEB 98	MAR 99	Yes	
MA-31/FY-97	9	849	NAVAIR	14 OCT 94	SS/Option(6)	McDonnell Douglas, St. Louis, MO	JUN 97	MAR 98	Yes	
MA-31/FY-99	6	397	NAVAIR		SS/FP	McDonnell Douglas, St. Louis, MO	DEC 98	JUL 99	No	TBD
Foreign NDI-Supersonic/FY-98	1	1,951	NSMA	N/A	FP	CLASSIFIED	FEB 98	NOV98	N/A	
Foreign NDI-Supersonic/FY-99	2	1,491	NSMA		Option	CLASSIFIED	FEB 99	NOV99	N/A	
Foreign NDI-Subsonic/FY-99	3	1,491	NSMA	N/A	FP	CLASSIFIED	FEB 99	NOV99	N/A	

D. REMARKS

(1) Price increase in AQM-37C due to Power Supply ECP

(2) The FY-99 AQM-37D version will include the updated avionics system (old system will be replaced due to obsolete components).

(3) Additional units procured on FY 97 contract.

(4) The MQM-8G(EER) unit price includes the incorporation of the Inertia Measurement Unit (IMU) (a reliability improvement).

(5) The MQM-8G(EER) unit price includes the incorporation of both the Inertia Measurement Unit (IMU) and Global Positioning System (GPS) (a reliability improvement).

(6) Option on development contract.

FY 1998/99 BUDGET PRODUCTION SCHEDULE, P-21						DATE FEBRUARY 1998																								
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA-2 OTHER MISSILES						Weapon System						P-1 ITEM NOMENCLATURE AERIAL TARGETS																		
		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																
AQM-37C/D	Raytheon, Wichita, KS					3	10	20			16			E																
BQM-74E	Northrop-Grumman, Hawth, CA					7-8	20	40-45			16			E																
ITEM / MANUFACTURER	F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2001												FISCAL YEAR 2002												B A L
						2000			CALENDAR YEAR 2001									CALENDAR YEAR 2002												
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
AQM-37D/RAYTHEON	99	N	35	12	23	3	3	3	3	3	3	2																	0	
BQM-74E/NORTHROP	99	N	135	44	91	11	11	11	11	11	12	12																	0	
ITEM / MANUFACTURER	F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2003												FISCAL YEAR 2004												B A L
						2002			CALENDAR YEAR 2003									CALENDAR YEAR 2004												
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
Remarks:																														

FY 1998/99 BUDGET PRODUCTION SCHEDULE, P-21						DATE FEBRUARY 1998																								
APPROPRIATION/BUDGET ACTIVITY						Weapon System						P-1 ITEM NOMENCLATURE																		
Weapons Procurement, Navy/BA-2 - OTHER MISSILES						AERIAL TARGETS																								
		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																
MQM-8G	Allied-Signal, Mishawaka, IN					2	3	4			13			E																
MA-31	McDonnell Douglas, St Louis, MO					N/A	N/A	42+			7			E																
FOREIGN NDI	Foreign Non-Developmental Items					N/A	N/A	N/A			N/A			N/A																
ITEM / MANUFACTURER	F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 1997												FISCAL YEAR 1998												B A L
						1996						CALENDAR YEAR 1997						CALENDAR YEAR 1998												
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
MQM-8G(EER)/ALLIED-SIGNAL	95	N	24	14	10	2	2	2	2	2																	0			
MQM-8G(EER)/ALLIED-SIGNAL	96	N	6	0	6									3	3												0			
MQM-8G(EER)/ALLIED-SIGNAL	98	N	6	0	6													A									6			
MA-31/MCDONNELL DOUGLAS	97	N	9	0	9															1						4	0			
MA-31/MCDONNELL DOUGLAS	99	N	6	0	6						A																6			
Foreign NDI-Supersonic/Classified	98	N	1	0	1															A							1			
Foreign NDI-Supersonic/Classified	99	N	2	0	2																						2			
Foreign NDI-Subsonic/Classified	99	N	3	0	3																						3			
ITEM / MANUFACTURER	F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 1999												FISCAL YEAR 2000												B A L
						1998						CALENDAR YEAR 1999						CALENDAR YEAR 2000												
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
MQM-8G(EER)/ALLIED-SIGNAL	98	N	6	0	6																							0		
MA-31/MCDONNELL DOUGLAS	99	N	6	0	6																							0		
Foreign NDI-Supersonic/Classified	98	N	1	0	1																							0		
Foreign NDI-Supersonic/Classified	99	N	2	0	2																							0		
Foreign NDI-Subsonic/Classified	99	N	3	0	3																							0		
Remarks:																														

CLASSIFICATION:

UNCLASSIFIED

Exhibit P-20, Requirements Study		APPROPRIATION/BUDGET ACTIVITY					DATE:	
P-1 ITEM NOMENCLATURE		Admin Leadtime (after Oct1):			Prod Leadtime :			
AQM-37C/D (Aerial Targets)		4 Months			16 Months			
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Buy Summary	70	110	50	35	35	45	65	85
Unit Cost (Vehicle)	.13	.12	.14	.16	.16	.16	.15	.15
Total Cost	\$8.8	\$13.7	\$7.2	\$5.5	\$5.6	\$7.0	\$9.7	\$12.6
Asset Dynamics								
Beginning Asset Position	97	118	122	136	161	142	112	83
Deliveries from all prior year funding	114	94	48					
Deliveries from FY 1997 funding			36	74				
Deliveries from FY 1998 funding				16	34			
Deliveries from FY 1999 funding					12	23		
Deliveries from subsequent years' funding						12	36	52
Other Gains								
Combat Losses/Usage								
Training/Test/Other Losses/Usage	93	90	70	65	65	65	65	65
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	118	122	136	161	142	112	83	70
Inventory Objective:								
Combatant Shipfill								
Expenditures								
Training & Testing Rqmt								
Depot Maint. Pipeline								
Other-WSPD of DEC 95	140	140	140	140	140	140	140	140
Peacetime Pipeline								
TOTAL Inventory Objective:	140	140	140	140	140	140	140	140
Approved Acquisition Objective	140	140	140	140	140	140	140	140
Other than Training Usage		Remarks:						
Actual Training Expenditures								
FY 1997 thru 1/6/98: 23		FY 1997 thru 1/6/98: 52						
FY 1996: 37		FY 1996: 56						
FY 1995: 27		FY 1995: 69						
FY 1994: 22		FY 1994: 92						
FY 1993: 34		FY 1993: 67						

CLASSIFICATION:

UNCLASSIFIED

Exhibit P-20, Requirements Study		APPROPRIATION/BUDGET ACTIVITY					DATE:	
P-1 ITEM NOMENCLATURE		Admin Leadtime (after Oct1):			Prod Leadtime :			
BQM-74E (Aerial Targets)		4 Months			16 Months			
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Buy Summary	149	64	119	135	135	155	153	153
Unit Cost (Vehicle)	.22	.24	.24	.22	.23	.22	.23	.23
Total Cost	\$33.2	\$15.6	\$28.3	\$30.0	\$30.6	\$34.6	\$34.8	\$35.8
Asset Dynamics								
Beginning Asset Position	247	247	211	174	128	86	154	177
Deliveries from all prior year funding	157	119	94	19				
Deliveries from FY 1997 funding			24	40				
Deliveries from FY 1998 funding				50	69			
Deliveries from FY 1999 funding					44	91		
Deliveries from subsequent years' funding						132	178	150
Other Gains								
Combat Losses/Usage								
Training/Test/Other Losses/Usage	157	155	155	155	155	155	155	155
Disposals/Retirements/Attritions/etc.								
End of Year Asset Position	247	211	174	128	86	154	177	172
Inventory Objective:								
Combatant Shipfill								
Expenditures								
Training & Testing Rqmt								
Depot Maint. Pipeline								
Other-WSPD of DEC 95	240	240	240	240	240	240	240	240
Peacetime Pipeline								
TOTAL Inventory Objective:	240	240	240	240	240	240	240	240
Approved Acquisition Objective	240	240	240	240	240	240	240	240
		Remarks:						
Other than Training Usage	Actual Training Expenditures							
FY 1997 thru 1/6/98: 34	FY 1997 thru 1/6/98: 80							
FY 1996: 36	FY 1996: 117							
FY 1995: 31	FY 1995: 124							
FY 1994: 23	FY 1994: 130							
FY 1993: 34	FY 1993: 127							

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: FEBRUARY 1998				
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA-2; OTHER MISSILES							P-1 ITEM NOMENCLATURE DRONES AND DECOYS (J2DJ)					
Program Element for Code B Items: N/A							Other Related Program Elements N/A					
	Prior Years	ID Code	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY												
COST (In Millions)	\$207.9		\$0	\$17.1	\$3	\$3	\$0	\$0	\$0	\$0	\$0	\$225.6
<p>PROGRAM COVERAGE:</p> <p>Funding for Drones and Decoys from FY 1986 through FY 1993 has been used for continued procurements of ADM-141 Tactical Air Launched Decoy (TALD) units, which are non-powered, glide trajectory driven vehicles. The ADM-141 TALD is an expendable of similar size to a 500 pound general purpose bomb, and is carried similarly. After launched from strike aircraft, the ADM-141 TALD uses radar signature augmentation and preprogrammed flight profiles to simulate manned aircraft. Its mission is to deceive and saturate hostile radar controlled air defenses, thus enhancing strike aircraft survivability. Currently, the A-6, F/A-18, F-14 and S-3 are fully qualified to deploy the ADM-141 TALD in both land Based and CV operations. Additionally, an AV-8B/TALD capability is planned.</p> <p>Procurement of an improved TALD, (ITALD), ADM-141C, using FY 1994/95 funds was awarded in September 1996 for a total quantity of 98 ITALDs. A follow-on procurement is planned for approximately 110 ITALDs using FY 1997 funds. The major improvement to this decoy is an engine that will give the decoy a much longer stand-off range.</p> <p>The FY 1998 and FY 1999 budget requests provide funding for production support efforts necessary to support final ITALD deliveries to Navy inventory.</p>												

UNCLASSIFIED

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)

FEBRUARY 1998

TARGET SYSTEM: ITALD MANUFACTURER: IMI LTD, RATAT HASHARON, IS COST CODE: DJ010 FLYAWAY COST (\$000)	Prior Yrs Total Costs	FISCAL YEAR 96			FISCAL YEAR 97			FISCAL YEAR 98			FISCAL YEAR 99		
		QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
HARDWARE:													
ITALD 1/	\$21,220	0		\$0	110	\$140	\$15,400	0		\$0	0		\$0
CONTAINERS	\$200			\$0		\$5	\$275			\$0			\$0
TOTAL HARDWARE	\$21,420	0		\$0	110	\$143	\$15,675	0		\$0	0		\$0
PROCUREMENT SUPPORT (RECURRING):													
CONTRACTOR ENGINEERING	\$403			\$0			\$0			\$0			\$0
GOVERNMENT IN-HOUSE	\$1,370			\$0			\$952			\$292			\$298
DOCUMENTATION	\$85			\$0			\$0			\$0			\$0
GOVERNMENT TEST	\$1,100			\$0			\$500			\$0			\$0
OTHER	\$0			\$0			\$0			\$0			\$0
TOTAL RECURRING	\$2,958			\$0			\$1,452			\$292			\$298
PROCUREMENT SUPPORT (NONRECURRING):													
PRODUCT IMPROVEMENT	\$0			\$0			\$0			\$0			\$0
SPECIAL TOOLING AND TEST EQUIPMENT	\$0			\$0			\$0			\$0			\$0
TOTAL NONRECURRING	\$0			\$0			\$0			\$0			\$0
TOTAL FLYAWAY	\$24,378	0	\$0	\$0	110	\$156	\$17,127	0	\$0	\$292	0	\$0	\$298
GROUND EQUIPMENT/FLEET SUPPORT COST:													
GROUND EQUIPMENT	\$0			\$0			\$0			\$0			\$0
INSTALL & CHECKOUT	\$0			\$0			\$0			\$0			\$0
SPECIAL HANDLING EQUIPMENT	\$0			\$0			\$0			\$0			\$0
FLEET TEST EQUIPMENT	\$0			\$0			\$0			\$0			\$0
TRAINING DEVICES	\$24			\$0			\$0			\$0			\$0
DOCUMENTATION	\$0			\$0			\$0			\$0			\$0
ILS	\$527			\$0			\$0			\$0			\$0
TOTAL GRD EQUIP/FLEET SUP COST	\$551			\$0			\$0			\$0			\$0
WEAPONS SYSTEM COST	\$24,929	0	\$0	\$0	110	\$156	\$17,127	0	\$0	\$292	0	\$0	\$298
VARIOUS 2/	\$182,967			\$0			\$0			\$0			\$0
INITIAL SPARES	\$0			\$0			\$0			\$0			\$0
TOTAL PROGRAM COST	\$207,896	0	\$0	\$0	110	\$156	\$17,127	0	\$0	\$292	0	\$0	\$298

P-1 SHOPPING LIST

1/ FY-95 funding was used for first article test units.

2/ The amount identified against this cost element reflects total prior year funding associated with cost elements no longer financed in FY 1995 and beyond.

UNCLASSIFIED

CLASSIFICATION:

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)								A. DATE February 1998		
B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE				SUBHEAD	
Weapons Procurement, Navy/BA-2; Other Missiles					DRONES AND DECOYS				J2DJ	
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
ADM-141C/FY-94	81	195(1)	NAVAIR	15 MAY 96	SS/FP	Israeli Military Industries, Ramat Hasharon, IS	SEP 96	JUL 98	YES	N/A
ADM-141C/FY-95	17	318(1)	NAVAIR		SS/FP	Israeli Military Industries, Ramat Hasharon, IS	SEP 96	MAR 98	YES	N/A
ADM-141C/FY-97	110	140	NAVAIR		SS/FP	Israeli Military Industries, Ramat Hasharon, IS	FEB 98	JUN 99	YES	N/A
D. REMARKS										
(1) FY-94 and FY-95 contracts were awarded concurrently. FY-95 funding was used for first article test units. The actual unit cost for production vehicles was \$193,116.00										

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: February 1998
---	-------------------------------

APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA-2	P-1 ITEM NOMENCLATURE OTHER MISSILE SUPPORT/2290
--	--

Program Element for Code B Items: N/A	Other Related Program Elements N/A
---	--

	Prior Years	ID Code	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY											
COST (In Millions)	N/A	A	\$15.5	\$17.8	\$15.2	\$15.4	\$18.9	\$15.0	\$16.6	N/A	\$114.5

The Vertical Launching System (VLS) is a missile launching system for surface combatants, designed to launch Standard Missile, TOMAHAWK and Vertical Launch ASROC (VLA) weapons. The VLS significantly improves missile capacity, flexibility, multi-mission capability, reaction time and rate of fire and is designed to be adaptable to present and future weapons systems. Present requirements are to provide two 61 cell launchers for 22 TICONDEROGA (CG-47) Class Cruisers beginning with CG-52, one 61 cell launcher for 24 SPRUANCE (DD-963) Class destroyers and one 61 cell and one 29 cell launcher for 57 ARLEIGH BURKE (DDG-51) Class destroyers. A 61 cell launcher consists of eight VLS modules and 61 canisters. Canisters are used as a storage/shipping container for missiles ashore and as the magazine and firing tube aboard ship. In order to support the operating forces, it is necessary to have sufficient encanisterized missiles on hand to fill the logistic pipeline associated with the Combat Logistics Force (CLF) transportation times and mobilization considerations. To accomplish this one canister is required for every VLS missile variant that is procured. In addition, a small percentage of canisters are procured to cover those canisters that are lost, damaged or destroyed. The major portion of the WPN funds is for the procurement of VLS canisters. A small amount of funds is required to provide VLS unique equipment to the weapons stations and to provide ILS for canisters procured with WPN funds. Prior to FY-96, canisters were also funded by SCN and OPN Appropriations.

Evolved SEASPARROW Quad Pack (ESSM/QP) missile is being designed to provide an enhanced ship self defense capability for DDG-51 Flight IIA (DDG 79 and follow) ships. Procurement of ESSM/QP canisters is planned in FY00.

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5					Weapon System			DATE: February 1998			
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA-2			ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD OTHER MISSILE SUPPORT/12FD							
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS								
			FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
FD005	TYPE I CANISTERS SM-2 MR BLK III/IIIA/IIIB (MK-13)		80	41.7	3,339	72	52.3	3,766	70	50.0	3,500
FD006	TYPE II CANISTERS TOMAHAWK (MK-14) SM-2 BLK IV (MK-21 MOD 0)		48	107.3	5,152	38	135.0	5,130	45	132.0	5,940
FD009	CANISTER EQUIPMENT				1,045			1,043			435
FD970	ILS SUPPORT				6,008			6,958			4,952
FD980	INITIAL TRAINING SUPPORT							950			411
TOTAL					15,544			17,847			15,238

UNCLASSIFIED

CLASSIFICATION:

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System			A. DATE			
B. APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA-2					C. P-1 ITEM NOMENCLATURE OTHER MISSILE SUPPORT			February 1998			
								SUBHEAD 12FD			
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	IF YES WHEN AVAILABLE	
FY 97											
FD005/TYPE I CANISTERS SM-2 MR BLK III/IIIA/IIIB (MK-13)	80	41.7	NAVSEA		C/FP OPT	United Defense FMC/BM MINNEAPOLIS, MN	12/96	10/98	YES		
FD006/ TYPE II CANISTERS SM-2 BLK IV (MK-21 MOD 0)	48	107.3	NAVSEA		C/FP OPT	United Defense FMC/BM MINNEAPOLIS, MN	12/96	10/98	YES		
FY 98											
FD005/TYPE I CANISTERS SM-2 MR BLK III/IIIA/IIIB (MK-13)	72	52.3	NAVSEA	Jan-98	SS	United Defense FMC/BM MINNEAPOLIS, MN	3/98	10/99	YES		
FD006/ TYPE II CANISTERS SM-2 BLK IV (MK-21 MOD 0)	38	135.0	NAVSEA	Jan-98	SS	United Defense FMC/BM MINNEAPOLIS, MN	3/98	10/99	YES		
FY 99											
FD005/TYPE I CANISTERS SM-2 MR BLK III/IIIA/IIIB (MK-13)	70	50.0	NAVSEA		C/FP OPT	United Defense FMC/BM MINNEAPOLIS, MN	1/99	10/00	YES		
FD006/ TYPE II CANISTERS SM-2 BLK IV (MK-21 MOD 0)	45	132.0	NAVSEA		C/FP OPT	United Defense FMC/BM MINNEAPOLIS, MN	1/99	10/00	YES		
D. REMARKS											

FY 1998/99 BUDGET PRODUCTION SCHEDULE, P-21						DATE February 1998																									
APPROPRIATION/BUDGET ACTIVITY						Weapon System					P-1 ITEM NOMENCLATURE																				
Weapons Procurement, Navy/BA-2						OTHER MISSILE SUPPORT																									
		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																				
SM-2 BLK III/IIIA/IIIB	United Defense		120	330	480	3	3	18	18	21	E																				
SM-2 BLK IV	Minneapolis, Mn																														
ITEM / MANUFACTURER	F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2001												B A L													
						CALENDAR YEAR 2001																									
						CALENDAR YEAR 2002																									
						2000	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
SM-2 BLK III/IIIA/IIIB	99		70		70	6	6	6	6	6	6	6	6	6	6	5	5														0
SM-2 BLK IV (MK-21 MOD 0)	99		45		45	4	4	4	4	4	4	4	4	4	3	3	3													0	
ITEM / MANUFACTURER	F Y	S V C	Q T Y	D E L	B A L	FISCAL YEAR 2003												B A L													
						CALENDAR YEAR 2003																									
						CALENDAR YEAR 2004																									
						2002	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
Remarks:																															

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: February 1998				
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy							P-1 ITEM NOMENCLATURE TOMAHAWK MODS (J2DN)(PEO(CU)) (BLI: 230100)					
Program Element for Code B Items: BA2/Other Missiles							Other Related Program Elements					
	Prior Years	ID Code	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY												
COST (In Millions)	\$157.5	N/A	\$45.6	\$8.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	N/A	\$211.2
<p>Funds are required to procure modifications for the Tomahawk Cruise Missiles. The modifications will be installed on a "turnkey" basis during the normal recertification cycle of each missile at contractor depot facilities. As a result, installation costs are not priced separately from the hardware costs in this line.</p>												

UNCLASSIFIED

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: R/UGM Land Attack variants TYPE MODIFICATION: _____ MODIFICATION TITLE: Tomahawk Remanufacture

DESCRIPTION/JUSTIFICATION:

Develop complete, In production.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC	TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
FINANCIAL PLAN (IN MILLIONS)																								
<i>RDT&E</i>																							0	0.0
<i>PROCUREMENT</i>																								
INSTALLATION KITS	0	140.2	40	17.3	125	45.6	20	8.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	185	211.2
INSTALLATION KITS - UNIT COST				0.433		0.365		0.405																N/A
INSTALLATION KITS NONRECURRING																								0.0
EQUIPMENT																								0.0
EQUIPMENT NONRECURRING																								0.0
ENGINEERING CHANGE ORDERS																								0.0
DATA																								0.0
TRAINING EQUIPMENT																								0.0
SUPPORT EQUIPMENT																								0.0
OTHER																								0.0
OTHER																								0.0
OTHER																								0.0
INTERIM CONTRACTOR SUPPORT																								0.0
INSTALL COST																								0.0
TOTAL PROCUREMENT																								211.2

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: R/UGM Land Attack variant MODIFICATION TITLE: Tomahawk Remanufacture

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: Contractor Facilities (Depot)

ADMINISTRATIVE LEADTIME: 4

PRODUCTION LEADTIME: 13

CONTRACT DATES: FY 1997: Feb-97

FY 1998: N/A

FY 1999: N/A

DELIVERY DATE: FY 1997: Mar-98

FY 1998: N/A

FY 1999: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
PRIOR YEARS																									140.2	
FY 1995 EQUIPMENT			40	17.3																					40	17.3
FY 1996 EQUIPMENT				*	125	45.6																			125	45.6
FY 1997 EQUIPMENT								20	8.1																20	8.1
FY 1998 EQUIPMENT									*																	
FY 1999 EQUIPMENT																										
FY 2000 EQUIPMENT																										
FY 2001 EQUIPMENT																										
FY 2002 EQUIPMENT																										
FY 2003 EQUIPMENT																										
TO COMPLETE																									0	0

*TURNKEY OPERATION

INSTALLATION SCHEDULE:

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				IC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	10	10	10	10	32	31	31	31	5	5	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	185
Out	0	0	10	10	10	10	32	31	31	31	5	5	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	185

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40

DATE:
February 1998

APPROPRIATION/BUDGET ACTIVITY								P-1 ITEM NOMENCLATURE					
Weapons Procurement, Navy/ BA-2 OTHER MISSILES								SPARROW MODIFICATIONS #230400					
Program Element for Code B Items: 0604755N								Other Related Program Elements N/A					
	Prior Years	ID Code			FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total Program
QUANTITY													
COST (\$M)		B			\$2.5								\$2.5
Initial Spares (\$M)													
Total (\$M)					\$2.5								\$2.5
Unit Cost (\$M)					N/A								

The Sparrow Modification program provides the U.S. Navy with upgraded air-to-air (AIM-7) and surface-to-air (RIM-7) missiles capable of intercepting extremely low flying antiship missiles. Sparrow Modification funding has been terminated by the Navy starting in FY-98. The FY-97 funding remaining in this line supports the introduction of the Evolved Seasparrow Missile (ESSM).

ESSM will provide an evolved kinematically improved aft-end section for mating, as an all up round, with the modified RIM-7P forebody guidance and warhead section. The ESSM improvement will provide the capability to counter maneuvering anti-ship missiles, expand battle space, and increase system firepower. The ESSM is designed for "quadpack" in the MK41 Vertical Launching System and to be compatible with MK29 trainable launchers for employment in AEGIS, NSSMS, and SSDS ships.

The FY-97 funding provides for ESSM pre-production engineering. Funding for ESSM in FY-98 and out is in line item #230700.

ESSM is a Code "B" Item. Planned date of approval for service use is September 1999. ESSM RDT&E funding is included in Program Element 0604755N, Project U0173.

	<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>
ESSM	2,478	0	0	0	0	0	0

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: RIM-7P TYPE MODIFICATION: _____ MODIFICATION TITLE: EVOLVED SEASPARROW MISSILE

DESCRIPTION/JUSTIFICATION:

ESSM will provide an upgraded surface to air missile capable of countering maneuvering anti-ship missiles, expand battle space, and increase system firepower. Funding provides for ESSM pre-production engineering efforts. ESSM funds are budgeted in its own separate Line Item (#230700) starting in FY-98.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Currently in EMD. Major Milestones: CDR 7/97; LRIP PMR 9/98; OPEVAL 5/99; MS III 9/99

FINANCIAL PLAN (IN MILLIONS)	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		IC		TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<u>RDT&E</u>																								0	0.0
<u>PROCUREMENT</u>																									
INSTALLATION KITS																								0	0.0
INSTALLATION KITS NONRECURRING																									0.0
EQUIPMENT																									0.0
EQUIPMENT NONRECURRING																									0.0
ENGINEERING CHANGE ORDERS																									0.0
DATA																									0.0
TRAINING EQUIPMENT																									0.0
SUPPORT EQUIPMENT																									0.0
PRE-PRODUCTION ENGINEERING								2,478.0																	2,478.0
OTHER																									0.0
OTHER																									0.0
INTERIM CONTRACTOR SUPPORT																									0.0
INSTALL COST																									0.0
TOTAL PROCUREMENT								2,478.0																	2,478.0

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: RIM-7P MODIFICATION TITLE: EVOLVED SEASPARROW MISSILE

INSTALLATION INFORMATION: N/A

METHOD OF IMPLEMENTATION: _____

ADMINISTRATIVE LEADTIME: _____ PRODUCTION LEADTIME: _____

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

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

(\$ in Millions)

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

INSTALLATION SCHEDULE: Input=Delivery to the Facility, Output=Facility providing to Fleet, ready for issue

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

P-3A

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET											DATE:																
P-40											February 1998																
APPROPRIATION/BUDGET ACTIVITY							P-1 ITEM NOMENCLATURE																				
Weapons Procurement, Navy							AIM-9 Sidewinder Mods																				
Program Element for Code B Items:							Other Related Program Elements																				
							0207161N																				
	Prior Years	ID Code	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total Program															
QUANTITY							75	125	300	300	4,200	5,000															
COST (\$M)	\$29.6	A	\$15.0	\$2.1	\$0.3	\$0.0	\$32.0	\$35.5	\$62.0	\$66.4	\$1,230.0	\$1,472.9															
<p>The AIM-9 Sidewinder short-range air-to-air missile (SRM) is a launch and leave, air combat munition that uses passive infrared (IR) energy for acquisition and tracking of enemy aircraft and complements the Advanced Medium Range Air-to-Air Missile. Air superiority in the SRM arena is essential and includes first shot, first kill opportunity against an enemy employing IR countermeasures.</p> <p>The FY 1996 program procures AIM-9M modifications that provide the technology for an upgrade to the AIM-9M inventory. The Guidance and Control section of the AIM-9M missile will be modified at a government depot and/or contractor facilities. The AIM-9M-8/9 modification program improves the robustness of Counter Counter-Measures (CCM) without changing any basic AIM-9M characteristics. FY 1997 funds the installation of AIM-9M mods and production engineering support. FY 1998 provides funding to complete the installation of the AIM-9M mods.</p> <p>Funds in 2000 and beyond will fund the AIM-9X. The AIM-9X is a long-term evolution to the AIM-9 which provides improvements in missile seeker, fuze, and kinematics which allow retrofit of components to current missiles to the maximum extent possible. Retrofitting of components will extend the operational effectiveness of existing inventories at an affordable cost while continuing evolution of the AIM-9 series.</p> <p>AIM-9X PE 0207161N, E0457</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 20%;">AIM-9X Quantities:</td> <td style="width: 15%; text-align: center;"><u>FY 2000</u></td> <td style="width: 15%; text-align: center;"><u>FY 2001</u></td> <td style="width: 15%; text-align: center;"><u>FY 2002</u></td> <td style="width: 15%; text-align: center;"><u>FY 2003</u></td> </tr> <tr> <td style="padding-left: 20px;">Air Force</td> <td style="text-align: center;">75</td> <td style="text-align: center;">125</td> <td style="text-align: center;">300</td> <td style="text-align: center;">300</td> </tr> <tr> <td style="padding-left: 20px;">Navy</td> <td style="text-align: center;">75</td> <td style="text-align: center;">125</td> <td style="text-align: center;">300</td> <td style="text-align: center;">300</td> </tr> </table>													AIM-9X Quantities:	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	Air Force	75	125	300	300	Navy	75	125	300	300
AIM-9X Quantities:	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>																							
Air Force	75	125	300	300																							
Navy	75	125	300	300																							

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A		INDIVIDUAL MODIFICATION																					
MODELS OF SYSTEM AFFECTED: <u>AIM-9M</u>		TYPE MODIFICATION: <u>Missile Modification</u>										MODIFICATION TITLE: <u>AIM-9M Product Improvement Program</u>											
DESCRIPTION/JUSTIFICATION: The current AIM-9M Sidewinder does not meet the Infrared Counter-Measures threat environment. This modification program provides the technology for an upgrade to the AIM-9M inventory. The Guidance and Control section of the AIM-9M missile will be modified at a government depot and/or contractor facility. The AIM-9M-8/9 modification program improves the robustness of CCM without changing any basic AIM-9M characteristics.																							
DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: <u>IN PRODUCTION</u>																							
		<u>FY1995 and Prior</u>		<u>FY 1996</u>		<u>FY 1997</u>		<u>FY 1998</u>		<u>FY 1999</u>		<u>FY 2000</u>		<u>FY 2001</u>		<u>FY 2002</u>		<u>FY 2003</u>		<u>TC</u>		<u>TOTAL</u>	
		<u>QTY</u>	<u>\$</u>	<u>QTY</u>	<u>\$</u>	<u>QTY</u>	<u>\$</u>	<u>QTY</u>	<u>\$</u>	<u>QTY</u>	<u>\$</u>	<u>QTY</u>	<u>\$</u>	<u>QTY</u>	<u>\$</u>	<u>QTY</u>	<u>\$</u>	<u>QTY</u>	<u>\$</u>	<u>QTY</u>	<u>\$</u>	<u>QTY</u>	<u>\$</u>
FINANCIAL PLAN (IN MILLIONS)																							
<i>RDT&E</i>																						0	0.0
<i>PROCUREMENT</i>																							
INSTALLATION KITS		2529	14.1			1678	9.1															4207	23.2
INSTALLATION KITS - UNIT COST			\$0.00				0.005																
INSTALLATION KITS NONRECURRING			0.5																				0.5
TRAINING EQUIPMENT			1.1				0.8																1.9
GOV'T IN-HOUSE SYS ENGR/TEST			5.2				3.1		0.8														9.1
ILS SUPPORT EQUIPMENT			3.0				1.4																4.4
INSTALL COST			5.7				0.6		1.3		0.3												7.9
TOTAL PROCUREMENT			23.9				14.4		0.8		0.0												39.1
TOTAL COST			29.6				15.0		2.1		0.3												47.0

CLASSIFICATION: UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

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

MODELS OF SYSTEMS AFFECTED: _____ MODIFICATION TITLE: **AIM-9M Product Improvement Program**

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: Depot and Weapon Station

ADMINISTRATIVE LEADTIME: _____ PRODUCTION LEADTIME: _____ Months
CONTRACT DATES: FY 1997: _____ FY 1998: N/A FY 1999: N/A
DELIVERY DATE: FY 1997: _____ FY 1998: N/A FY 1999: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS	2529	5.5																			2529	5.5
FY 1995 EQUIPMENT																						
FY 1996 EQUIPMENT		0.2	439	0.6	981	1.3	258	0.3													1678	#REF!
FY 1997 EQUIPMENT																						
FY 1998 EQUIPMENT																						
FY 1999 EQUIPMENT																						
FY 2000 EQUIPMENT																						
FY 2001 EQUIPMENT																						
FY 2002 EQUIPMENT																						
FY 2003 EQUIPMENT																						
TO COMPLETE																						

INSTALLATION SCHEDULE:

	FY 1996 & Prior	FY 1997					FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				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		
In	2555	112	434	220	120	120	78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	#REF!
Out	2529	26	112	434	120	120	120	78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	#REF!

Note: Input: Induction to Contractor
Output: Delivery of modified GCS from contractor

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET											DATE:	
P-40											FEB 1998	
APPROPRIATION/BUDGET ACTIVITY							P-1 ITEM NOMENCLATURE					
Weapons Procurement, Navy/BA2-Other Missiles							HARPOON/SLAM MODIFICATION (J2EW) (PEO-CU)					
Program Element for Code B Items:							Other Related Program Elements					
N/A							0604603N					
	Prior Years	ID Code	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total Program
QUANTITY												
COST (\$M)	\$160.6		\$2.5	\$40.3	\$30.0	\$39.5	\$35.6	\$30.8	\$34.1	\$35.7	\$189.5	\$598.6
<p>MISSION AND DESCRIPTION: The HARPOON/SLAM missile modification program provides funds for Engineering Change Proposals (ECPs) and other improvements to its weapons components which are already in the inventory and requires retrofit activity to produce the SLAM EXPANDED RESPONSE and HARPOON BLK II missile. Additionally, exercise sections are procured to meet fleet training requirements. The SLAM ER missile with the addition of Automatic Target Acquisition (ATA), Automated Mission Planning, Real Time Target Capability, Increased Range and Flight Envelope and Increased Warhead Penetration has matured into a permanent Standoff Outside Area Defense (SOAD) weapon that will remain effective through the year 2015. HARPOON BLK II modification retrofits the integrated global positioning system/inertial navigation system (GPS/INS) from the Joint Direct Attack Missile (JDAM) guidance set. The HARPOON BLK II is designed to meet the current requirements for effectiveness in littoral waters.</p>												
MODIFICATION	Prior Years	FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03			
CAPSULE	3.068	1.807	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
ENCAPSULATED EX	2.221	0.741	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
SURFACE LAUNCH EX	11.718	0.000	0.042	0.000	0.000	0.000	0.000	0.000	0.000			
AIR LAUNCH EX	1.403	0.000	0.129	0.000	0.000	0.000	0.000	0.000	0.000			
SLAM-ER	0.000	0.000	40.178	30.016	39.506	35.582	28.024	28.441	29.218			
HARPOON BLK 2	0.000	0.000	0.000	0.000	0.000	0.000	2.800	5.700	6.500			
VARIOUS 1/	142.207	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
TOTALS	160.617	2.548	40.349	30.016	39.506	35.582	30.824	34.141	35.718			

1/ The amount identified against this cost element reflects total prior year funding associated with cost elements no longer funded in FY 95 and beyond.

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: UGM-84C/D TYPE MODIFICATION: _____ MODIFICATION TITLE: CAPSULE

DESCRIPTION/JUSTIFICATION:
 Capsule for submarine launched HARPOON-CORROSION corrective actions change-replace non-ready-for-issue or expended capsule assemblies.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: PRODUCTION

FINANCIAL PLAN (IN MILLIONS)	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL			
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
<i>RD&E</i>																								0	0.0	
<i>PROCUREMENT</i>																										
INSTALLATION KITS	5	2.0	2	1.1	7	1.1																		14	4.2	
INSTALLATION KITS - UNIT COST				0.550		0.157																				
INSTALLATION KITS NONRECURRING																									0.0	
EQUIPMENT																									0.0	
EQUIPMENT NONRECURRING																									0.0	
ENGINEERING CHANGE ORDERS																									0.0	
DATA																									0.0	
TRAINING EQUIPMENT						0.7																			0.7	
SUPPORT EQUIPMENT																									0.0	
OTHER																									0.0	
OTHER																									0.0	
OTHER																									0.0	
INTERIM CONTRACTOR SUPPORT																									0.0	
INSTALL COST		0.0		0.0		0.0																			0.0	
TOTAL PROCUREMENT	5	2.0	2	1.1	7	1.8	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	14	4.9

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

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

MODELS OF SYSTEMS AFFECTED: UGM-84C/D MODIFICATION TITLE: CAPSULE

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: _____

ADMINISTRATIVE LEADTIME: 7 Months

PRODUCTION LEADTIME: 24 Months

CONTRACT DATES: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

DELIVERY DATE: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS					5	0.0																	5	0
FY 1995 EQUIPMENT							2	0.0															2	0
FY 1996 EQUIPMENT									7	0.0													7	0
FY 1997 EQUIPMENT																							0	0
FY 1998 EQUIPMENT																							0	0
FY 1999 EQUIPMENT																							0	0
FY 2000 EQUIPMENT																							0	0
FY 2001 EQUIPMENT																							0	0
FY 2002 EQUIPMENT																							0	0
FY 2003 EQUIPMENT																							0	0
TO COMPLETE																							0	0

INSTALLATION SCHEDULE:

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	5	0	0	2	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	
Out	5	0	0	2	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14		

NOTE: INSTALLATIONS ARE INCIDENTAL TO REGULARLY SCHEDULED MISSILE BUILD-UP AT 1 LEVEL. THEREFORE NO INSTALLATION FUNDING REQUIRED.

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: UGM-84C/D TYPE MODIFICATION: _____ MODIFICATION TITLE: ENCAPSULATED HARPOON EXERCISE ROUND

DESCRIPTION/JUSTIFICATION:

Convert sub-launch tactical missiles to fleet exercise/telemetry missiles.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Procurement/Installation Exercise; No milestones required

FINANCIAL PLAN (IN MILLIONS)	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<i>RDT&E</i>																								0	0.0
<i>PROCUREMENT</i>																									
INSTALLATION KITS	10	1.1	4	1.0	2	0.7																		16	2.8
INSTALLATION KITS - UNIT COST				0.250		0.350																			
INSTALLATION KITS NONRECURRING																									0.0
EQUIPMENT																									0.0
EQUIPMENT NONRECURRING																									0.0
ENGINEERING CHANGE ORDERS																									0.0
DATA																									0.0
TRAINING EQUIPMENT																									0.0
SUPPORT EQUIPMENT																									0.0
OTHER																									0.0
OTHER																									0.0
OTHER																									0.0
INTERIM CONTRACTOR SUPPORT																									0.0
INSTALL COST		0.1																						0.2	0.3
TOTAL PROCUREMENT	10	1.2	4	1.0	2	0.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.2	16	3.1	

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

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

MODELS OF SYSTEMS AFFECTED: UGM-84C/D MODIFICATION TITLE: ENCAPSULATED HARPOON EXERCISE ROUND CONVERSION KITS

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: _____

ADMINISTRATIVE LEADTIME: 7 Months

PRODUCTION LEADTIME: 24 Months

CONTRACT DATES: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

DELIVERY DATE: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete *		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS	6	0.1																			4	0.1	10	0.2
FY 1995 EQUIPMENT																					4	0.1	4	0.1
FY 1996 EQUIPMENT																					2	0.0	2	0.0
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT																								
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE:

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
In	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	10	16			
Out	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	10	16			

*Actual cost is \$20K per unit.

P-3A

P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO. 18

PAGE NO. 5

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**
 MODELS OF SYSTEM AFFECTED: RGM-84C/D TYPE MODIFICATION: _____ MODIFICATION TITLE: SURFACE LAUNCH HARPOON EXERCISE ROUND CONVERSION KITS

DESCRIPTION/JUSTIFICATION:
 Capsule for submarine launched HARPOON-CORROSION corrective actions change-replace non-ready-for-issue or expended capsule assemblies.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: PROCUREMENT/INSTALLATION EXERCISE; NO MILESTONES REQUIRED

FINANCIAL PLAN (IN MILLIONS)	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL			
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
<i>RDT&E</i>																								0	0.0	
<i>PROCUREMENT</i>																										
INSTALLATION KITS	34	9.3	3	1.7																	15	5.3	52	16.3		
INSTALLATION KITS - UNIT COST				0.567																						
INSTALLATION KITS NONRECURRING																									0.0	
EQUIPMENT																									0.0	
EQUIPMENT NONRECURRING																									0.0	
ENGINEERING CHANGE ORDERS																									0.0	
DATA																									0.0	
TRAINING EQUIPMENT																									0.0	
SUPPORT EQUIPMENT																									0.0	
OTHER																									0.0	
OTHER																									0.0	
OTHER																									0.0	
INTERIM CONTRACTOR SUPPORT																									0.0	
INSTALL COST		0.5		0.2		0.0		0.1																0.4	1.2	
TOTAL PROCUREMENT	34	9.8	3	1.9	0	0	7	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	5.7	52	17.5

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: RGM-84C/D

MODIFICATION TITLE: SURFACE LAUNCH HARPOON EXERCISE ROUND CONVERSION KITS

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: _____

ADMINISTRATIVE LEADTIME: 7 Months

PRODUCTION LEADTIME: 24 Months

CONTRACT DATES: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

DELIVERY DATE: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997 *		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
PRIOR YEARS	22	0.5	8	0.2			4	0.1																34	0.8	
FY 1995 EQUIPMENT							3	0.0																3	0.0	
FY 1996 EQUIPMENT																										
FY 1997 EQUIPMENT																										
FY 1998 EQUIPMENT																										
FY 1999 EQUIPMENT																										
FY 2000 EQUIPMENT																										
FY 2001 EQUIPMENT																										
FY 2002 EQUIPMENT																										
FY 2003 EQUIPMENT																										
TO COMPLETE																							15	0.4	15	0.4

INSTALLATION SCHEDULE:

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	30	0	0	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	52
Out	30	0	0	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	52

*Actual cost is \$6K per unit.

P-1 SHOPPING LIST

ITEM NO. 18

PAGE NO.7

P-3A

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AGM-84C/D TYPE MODIFICATION: _____ MODIFICATION TITLE: AIR LAUNCH HARPOON EXERCISE ROUND

MOD KITS

DESCRIPTION/JUSTIFICATION:

Capsule for submarine launched HARPOON-CORROSION corrective actions change-replace non-ready-for-issue or expended capsule assemblies.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: PROCUREMENT/INSTALLATION EXERCISE; NO MILESTONES REQUIRED

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
FINANCIAL PLAN (IN MILLIONS)																									
<u>RDT&E</u>																								0	0.0
<u>PROCUREMENT</u>																									
INSTALLATION KITS			6.0	1.4																				6	1.4
INSTALLATION KITS - UNIT COST				0.233																					
INSTALLATION KITS NONRECURRING																									0.0
EQUIPMENT																									0.0
EQUIPMENT NONRECURRING																									0.0
ENGINEERING CHANGE ORDERS																									0.0
DATA																									0.0
TRAINING EQUIPMENT																									0.0
SUPPORT EQUIPMENT																									0.0
OTHER																									0.0
OTHER																									0.0
OTHER																									0.0
INTERIM CONTRACTOR SUPPORT																									0.0
INSTALL COST								0.1																	0.1
TOTAL PROCUREMENT	0	0	6	1.4	0	0		0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	1.5	

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

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

MODELS OF SYSTEMS AFFECTED: AGM-84C/D MODIFICATION TITLE: AIR LAUNCH HARPOON EXERCISE ROUND MOD KITS

INSTALLATION INFORMATION:
 METHOD OF IMPLEMENTATION: _____
 ADMINISTRATIVE LEADTIME: 7 Months
 CONTRACT DATES: FY 1997: N/A
 DELIVERY DATE: FY 1997: N/A

PRODUCTION LEADTIME: 24 Months
 FY 1998: N/A FY 1999: N/A
 FY 1998: N/A FY 1999: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS																									
FY 1995 EQUIPMENT							6	0.1																6	0.1
FY 1996 EQUIPMENT																									
FY 1997 EQUIPMENT																									
FY 1998 EQUIPMENT																									
FY 1999 EQUIPMENT																									
FY 2000 EQUIPMENT																									
FY 2001 EQUIPMENT																									
FY 2002 EQUIPMENT																									
FY 2003 EQUIPMENT																									
TO COMPLETE																									

INSTALLATION SCHEDULE:

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

P-1 SHOPPING LIST

ITEM NO. 18 PAGE NO. 9

P-3A

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: AGM-84E TYPE MODIFICATION: _____ MODIFICATION TITLE: SLAM EXPANDED RESPONSE (ER)

DESCRIPTION/JUSTIFICATION:

Converts SLAM to SLAM ER configuration, increasing range, accuracy, lethality, and enhances inter-service compatibility.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: PRODUCTION

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
FINANCIAL PLAN (IN MILLIONS)																									
RDT&E		14.8		62.2		50.8		30.3		28.0		5.2		1.6		3.0		3.1		4.7					203.7
PROCUREMENT																									
INSTALLATION KITS (1) (2) (3) (4)							60	33.6	42	24.2	54	27.2	56	28.7	38	23.1	38	23.4	38	24.1	299	159.2	625	343.5	
INSTALLATION KITS NONRECURRING								0.560		0.577		0.504		0.513		0.608		0.616		0.634		0.532			
EQUIPMENT							0.3		0.4		1.3													0.0	
EQUIPMENT NONRECURRING																								2.0	
ENGINEERING CHANGE ORDERS								1.5		0.2		0.4		0.4		0.3		0.3		0.3		2.6		6.0	
DATA								1.0		0.3		0.6												1.9	
TRAINING EQUIPMENT (Exercise Sections)							10	1.0	0	0.0	7	1.0	5	0.7	0	0.0	0	0.0	0	0.0	27	4.3	49	7.0	
SUPPORT EQUIPMENT (Containers)							60	0.8	42	0.4	54	0.6	56	0.7	38	0.5	38	0.5	38	0.5	299	4.0	625	8.0	
OTHER (Field Activity Support)								1.9		4.3		4.0		4.1		4.1		4.2		4.3		13.5		40.4	
INTERIM CONTRACTOR SUPPORT										0.2		0.2												0.4	
INSTALL COST																								0.0	
ATA RETROFIT (5)											110	4.2	25	1.0										135	
TOTAL PROCUREMENT	0	0.0	0	0.0	0	0.0	60	40.1	42	30.0	54	39.5	56	35.6	38	28.0	38	28.4	38	29.2	299	183.6	625	414.4	

P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO. 18 PAGE NO. 10

UNCLASSIFIED

Note(s):

- (1) Kit consists of GFE SLAM AUR, and CFE components.
- (2) Installations costs are included in the Installation Kits line since kit costs and installation are non-severable.
- (3) Estimates costs for installation kits/installation of Hardware is effected by concurrent FMS production (Harpoon). FMS assumptions include 95 units in FY 97, and 100 units in FY 98-TC.
- (4) SLAM ER Hardware and engineering unaffected by FMS Harpoon quantities (No commonality).
- (5) Retrofits required to convert inventory to a single configuration.

CLASSIFICATION: **UNCLASSIFIED**

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

MODELS OF SYSTEMS AFFECTED: AGM-84E MODIFICATION TITLE: SLAM EXPANDED RESPONSE (ER)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: _____
 ADMINISTRATIVE LEADTIME: 7 Months

PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 1997: APR 97 FY 1998: APR 98 FY 1999: APR 99

DELIVERY DATE: FY 1997: APR 98 FY 1998: APR 99 FY 1999: APR 00

(\$ in Millions)

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

INSTALLATION SCHEDULE:

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	60	0	0	0	42	0	0	0	54	0	0	0	56	0	0	0	38	0	0	0	38	0	0	0	38	0	0	299	625
Out	0	0	0	0	0	0	15	15	15	15	11	11	10	10	14	14	13	13	14	14	14	14	10	10	9	9	10	10	355	625	

1/ Input schedule reflects delivery of fleet baseline SLAM missiles to the contractor's site for modification.

P-1 SHOPPING LIST

ITEM NO. 18 PAGE NO. 11

P-3A
 CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: RGM-84L TYPE MODIFICATION: _____ MODIFICATION TITLE: HARPOON BLOCK II

DESCRIPTION/JUSTIFICATION:
 HARPOON Block II modifies existing missiles to improve missile accuracy in a littoral environment.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: PRODUCTION

	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC	TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
FINANCIAL PLAN (IN MILLIONS)																								
<i>RD&E</i>											2.0		2.0		1.0							0	5.0	
<i>PROCUREMENT</i>																								
INSTALLATION KITS (1)														44	2.5	110	5.4	146	6.3			300	14.2	
INSTALLATION KITS - UNIT COST															0.057		0.049		0.043					
INSTALLATION KITS NONRECURRING																							0.0	
EQUIPMENT																							0.0	
EQUIPMENT NONRECURRING																							0.0	
ENGINEERING CHANGE ORDERS																							0.0	
DATA															0.1								0.1	
TRAINING EQUIPMENT (Exercise Sections)																	0.1						0.1	
SUPPORT EQUIPMENT (Containers)																							0.0	
OTHER (Field Activity Support)															0.2		0.2		0.2				0.6	
OTHER																							0.0	
OTHER																							0.0	
INTERIM CONTRACTOR SUPPORT																							0.0	
INSTALL COST																							0.0	
TOTAL PROCUREMENT	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	44	2.8	110	5.7	146	6.5	0	0.0	300	15.0

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

(1) Installation costs are included in the installation kits line since kit costs and installations are non-severable.

CLASSIFICATION: **UNCLASSIFIED**

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

MODELS OF SYSTEMS AFFECTED: RGM-84L MODIFICATION TITLE: HARPOON BLK II

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: _____

ADMINISTRATIVE LEADTIME: 7 months

PRODUCTION LEADTIME: 12 months

CONTRACT DATES: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

DELIVERY DATE: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

(\$ in Millions)

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

INSTALLATION SCHEDULE:

In	1/	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44	0	0	0	110	0	0	0	146	0	0	0	300
Out		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	11	11	11	28	28	200	300				

1/ Input schedule reflects delivery of fleet baseline Harpoon missile to the contractor's site for modification.

P-3A

P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO. 18

PAGE NO. 13

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET								DATE: FEBRUARY 1998																																									
P-40																																																	
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA-2								P-1 ITEM NOMENCLATURE STANDARD MISSILES MODIFICATION (12FK) BLI:235600																																									
Program Element for Code B Items:								Other Related Program Elements																																									
	Prior Years	ID Code	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total																																				
QUANTITY																																																	
COST (In Millions)			N/A	N/A	\$16.9	\$49.7	\$45.3	\$43.9	\$52.3	\$49.2	\$50.9		\$308.2																																				
<p>PROGRAM OVERVIEW: The Standard Missile Modification Program provides for improvements in operational readiness and electronic counter measures (ECM) performance in the STANDARD Missiles currently deployed. All of these modifications are "turn-key" and do not involve separate install funding. The following modification projects included in this budget are:</p> <table style="width:100%; margin-top: 20px;"> <thead> <tr> <th></th> <th>FY97</th> <th>FY98</th> <th>FY99</th> <th>FY00</th> <th>FY01</th> <th>FY02</th> <th>FY03</th> <th>TO COMPLETE</th> </tr> </thead> <tbody> <tr> <td>SM-1</td> <td style="text-align: right;">7,427</td> <td style="text-align: right;">0</td> <td style="text-align: right;">0</td> <td style="text-align: right;">0</td> <td style="text-align: right;">0</td> <td style="text-align: right;">0</td> <td style="text-align: right;">0</td> <td style="text-align: right;">0</td> </tr> <tr> <td>Missile Homing (WP,N)</td> <td style="text-align: right;">9,437</td> <td style="text-align: right;">49,680</td> <td style="text-align: right;">45,303</td> <td style="text-align: right;">43,942</td> <td style="text-align: right;">52,294</td> <td style="text-align: right;">49,233</td> <td style="text-align: right;">50,897</td> <td style="text-align: right;">154,870</td> </tr> <tr> <td>Improvement Program (RDT&E)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>															FY97	FY98	FY99	FY00	FY01	FY02	FY03	TO COMPLETE	SM-1	7,427	0	0	0	0	0	0	0	Missile Homing (WP,N)	9,437	49,680	45,303	43,942	52,294	49,233	50,897	154,870	Improvement Program (RDT&E)								
	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TO COMPLETE																																									
SM-1	7,427	0	0	0	0	0	0	0																																									
Missile Homing (WP,N)	9,437	49,680	45,303	43,942	52,294	49,233	50,897	154,870																																									
Improvement Program (RDT&E)																																																	

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

DATE: FEBRUARY 1998

P3A

MODELS OF SYSTEM AFFECTED: _____
 STANDARD Missile RIM-66E (SM-1 Block VI)

TYPE MODIFICATION:

MODIFICATION TITLE: Low Altitude Improvement

DESCRIPTION/JUSTIFICATION:

The STANDARD Missile Low Altitude Improvements which were approved by SECNAV in PMP 85-02 on 22 May 1986. In SM-1, the modifications are only to the missile with no interface change with the ship. Therefore, the common nomenclature is a letter change to the block number. Specifically, SM-1 Block VIB. Backfit of the initial changes into SM-1 Block VI is by replacement of the electronics assembly in the TDDs by an ORDALT to the guidance section.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL			
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
FINANCIAL PLAN (IN MILLIONS)	324		30		0		0		0		0		0		0		0		0		354	
<i>RD&E</i>																						
<i>PROCUREMENT</i>																						
INSTALLATION KITS		45659		6897		0		0		0		0		0		0		0		0		52556
INSTALLATION KITS NONRECURRING		0		0		0		0		0		0		0		0		0		0		0
EQUIPMENT		0		0		0		0		0		0		0		0		0		0		0
EQUIPMENT NONRECURRING		0		0		0		0		0		0		0		0		0		0		0
ENGINEERING CHANGE ORDERS		90		30		0		0		0		0		0		0		0		0		120
DATA		540		0		0		0		0		0		0		0		0		0		540
TRAINING EQUIPMENT		1435		0		0		0		0		0		0		0		0		0		1435
SUPPORT EQUIPMENT		400		0		0		0		0		0		0		0		0		0		400
OTHER		8004		500		0		0		0		0		0		0		0		0		8504
OTHER																						
OTHER																						
INTERIM CONTRACTOR SUPPORT																						
INSTALL COST		0		0		0		0		0		0		0		0		0		0		0
TOTAL PROCUREMENT		56128		7427		0		0		0		0		0		0		0		0		63555

UNCLASSIFIED

P-3A

Low Altitude Improvement BLK VIB

Date: FEBRUARY 1998

(U) Contract Date: Prior Year: 07/96 Current Year: 02/97 Budget Year: 00 Budget Year +1: 00

(U) Production Delivery Date: Prior Year: 11/97 Current Year: 12/98 Budget Year: 00 Budget Year +1: 00

(U) Installation Schedule:

	FY1996 & Prior	FY97	FY98	FY99	FY00	FY01	FY02	FY03	TOTAL
		1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	
In		11 20 20 14	10 9 9 9	7 8 8 7					132
Out		9 18 20 18	10 9 9 9	8 8 8 6					132

CLASSIFICATION: UNCLASSIFIED

DATE: FEBRUARY 1998

P3A

MODELS OF SYSTEM AFFECTED: _____ TYPE MODIFICATION: _____ MODIFICATION TITLE: _____ Missile Homing Improvement Program (MHIP)

STANDARD Missile IMR) RIM-66G/H

DESCRIPTION/JUSTIFICATION:

The STANDARD Missile SM-2 is an Integral element of the AEGIS weapon system and provides area defense against air threats. The SM-2 Block IIIB MHIP provides Homing Improvements to SM-2 Blk II/III missiles for operations in a hostile ECM environment. The SM-2 Blk IIIB Modification Kit includes the IR seeker, the MK45 Mod 9 Target Detecting Device (TDD), the Mk125 Warhead, the MK54 S&A Device and an updated Digital Signal Processor (DSP). Additionally, in FY* and outyears, the SM-2 Blk IIIB Modification shall include a regained MK104 Rocket Motor and replacement components for the guidance section and autopilot battery unit to address safety, performance and aging issues in the population of SM-2 Block II/III missiles being upgraded to the SM-2 Block IIIB configuration.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: _____

PLAN (IN MILLIONS)	FY 1996 & Prior		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
PLAN (IN MILLIONS)	135		32		71		93		88		109		109		114						
<i>RD&E</i>																					
<i>PROCUREMENT</i>																					
INSTALLATION KITS IIIB	135	49627	32	9437	80	29808	93	27812	88	26365	109	31376	109	29540	114	30538	340	105676	1100	288479	
INSTALLATION KITS SLEP		0		0	80	19872	93	17491	88	17577	109	20918	109	19693	114	20359	340	57763	933	173673	
INSTALLATION KITS NONRECURRING		0		0		0		0		0		0		0		0				0	
EQUIPMENT		0		0		0		0		0		0		0		0				0	
EQUIPMENT NONRECURRING		0		0		0		0		0		0		0		0				0	
ENGINEERING CHANGE ORDERS		0		0		0		0		0		0		0		0				0	
DATA		0		0		0		0		0		0		0		0				0	
TRAINING EQUIPMENT		0		0		0		0		0		0		0		0				0	
SUPPORT EQUIPMENT		0		0		0		0		0		0		0		0				0	
OTHER		0		0		0		0		0		0		0		0				0	
OTHER		0		0		0		0		0		0		0		0				0	
OTHER		0		0		0		0		0		0		0		0				0	
INTERIM CONTRACTOR SUPPORT		0		0		0		0		0		0		0		0				0	
INSTALL COST		0		0		0		0		0		0		0		0				0	
TOTAL PROCUREMENT		49627		9437		49680		45303		43942		52294		49233		50897	680	163439	2033	462152	

ITEM

19

PAGE

4

CLASSIFICATION: UNCLASSIFIED

UNCLASSIFIED

Missile Homing Improvement Program (MHIP) BLK III B

Date: FEBRUARY 1998

Method of Implementation: Guidance sections will be reworked at the depots and modified into SM-2 Block III B configuration at a rate which will provide a constant workload. The modified sections will then be sent to the contractor All-Up-Round (AUR) facility for integration into the round. SLEP Mods (Starting in FY98) will be incorporated concurrently.

<u>Contract Date:</u>	<u>Prior Year</u>	<u>Current Year</u>	<u>Budget Year</u>	<u>Budget Year +1</u>	<u>Budget Year +2</u>	<u>Budget Year +3</u>	<u>Budget Year +4</u>
SEEKER	4/97	1/98	1/99	1/00	1/01	1/02	1/03
Target Detecting Device (TDD)	6/97	6/98	6/99	6/00	6/01	6/02	6/03
SLEP/GC&A	4/97	1/98	1/99	1/00	1/01	1/02	1/03
MK125 Warhead	4/97	4/98	4/99	4/00	4/01	4/02	4/03
MK54 Safe and Arm	4/97	3/98	3/99	3/00	3/01	3/02	3/03
SLEP MK104	N/A	3/98	3/99	3/00	3/01	3/02	3/03

<u>Production Delivery Date:</u>	<u>Prior Year</u>	<u>Current Year</u>	<u>Budget Year</u>	<u>Budget Year +1</u>	<u>Budget Year +2</u>	<u>Budget Year +3</u>	<u>Budget Year +4</u>
SEEKER	4/99	1/00	12/00	12/01	12/02	12/03	12/04
Target Detecting Device (TDD)	6/99	10/99	9/00	9/01	9/02	9/03	9/04
SLEP/GC&A	4/99	1/00	12/00	12/01	12/02	12/03	12/04
MK125 Warhead	4/99	10/99	9/00	9/01	9/02	9/03	9/04
MK54 Safe and Arm	4/99	10/99	9/00	9/01	9/02	9/03	9/04
SLEP MK104	N/A	10/99	10/00	10/01	10/02	10/03	10/04

Installation Schedule:

FY 1997 & PRIOR	FY98				FY99				FY00				FY01				FY02				FY03				TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
IN	8	25	26		26	25	25	11	21	21	21	23	23	27	26	26	24	25	24	24	20				459
OUT		25	26		25	26	25	21	12	21	22	23	21	26	27	26	23	26	27	26	23				459

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40							DATE: February 1998					
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy							P-1 ITEM NOMENCLATURE Weapons Industrial Facilities					
Program Element for Code B Items:							Other Related Program Elements					
	Prior Years	ID Code	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY												
COST (In Millions)	\$456.7		\$41.8	\$33.4	\$29.8	\$27.1	\$7.9	\$9.0	\$8.6	\$9.3	cont	cont
<p>This line item provides for the Capital Type Rehabilitation projects at government-owned contractor operated plants for weapons systems such as Sparrow, Sea Sparrow, Hawk, Standard, Sidewinder, VLS and Mark 45 Gun Mounts, Phalanx, and rocket motors. Federal Acquisition Regulation Part 52.245-7 specifies that Facilities Use contracts require that the government fund capital type rehabilitation projects to support and maintain these facilities. These plants have an average age of 45 years and lack of proper maintenance will limit capabilities to maintain scheduled production rates and overall productivity. The following estimates are for capital type rehabilitation areas. Funding is separated to reflect environmental, safety, major repair, energy conservation and facilities restoration.</p> <p>- ENVIRONMENTAL: Provides funds to eliminate environmental deficiencies in compliance with local, state, and federal regulations. These regulations mandate requirements which must be met if plant shutdowns, criminal liability, and severe financial penalties are to be avoided.</p> <p>- SAFETY: Provides funds to eliminate safety deficiencies in compliance with local, state, and federal OSHA regulations. These regulations mandate requirements which must be met if plant shutdowns and severe financial penalties are to be avoided.</p> <p>- MAJOR REPAIR: Provides funds for critical upgrades to maintain high liability areas such as fire and security systems, roofs, boilers, electrical distribution systems, bridge crane systems, and other structural repairs essential to maintain the industrial integrity of the plant.</p> <p>- ENERGY CONSERVATION: Provides funds to decrease energy consumption by installing new energy efficient systems and provides increased maintenance on these systems. Mandated in 1993 by Congress.</p> <p>-FACILITIES RESTORATION: Provides funds for replacement of Weapons Industrial Facilities that have exceeded their useful life and deteriorated beyond safe operations.</p>												

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5						Weapon System						DATE: February 1998			
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy BA 2 - Other Missiles						ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD Weapons Industrial Facilities								
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years	FY 1996		FY 1997			FY 1998			FY 1999			
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	Capital Type Rehabilitation														
	Environmental														
	(SEA)		1,700			1,000					1,000				3,843
	(AIR)		4,622			2,678									
	Safety														
	(SEA)		2,652			450					475				1,250
	(AIR)		1,298			1,301									
	Major Repairs														
	(SEA)		383			814			705		391				737
	(AIR)		9,836			2,556									
	Energy Conservation														
	(SEA)		2,200			2,315					850				590
	Closure Costs														
	NWIRP, McGregor	(AIR)				721			2,676		2,044				2,713
	Facilities Restoration (ABL)														
	(SEA)		28,500			30,000			30,000		25,000				18,000
	Prior Years		405,590												
	TOTAL Weapons Industrial Facilities														
	(SEA)		35,435			34,579			30,705		27,716				24,420
	(AIR)		15,756			7,256			2,676		2,044				2,713
			456,781			41,835			33,381		29,760				27,133

BUDGET ITEM JUSTIFICATION SHEET										DATE January 1994		
APPROPRIATION/BUDGET ACTIVITY WEAPONS PROCUREMENT, NAVY/BA-2 OTHER MISSILES								P-1 ITEM NOMENCLATURE FLEET SATELLITE COMMUNICATIONS (A)			SUBHEAD Q2EU	
	PY	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	TO COMP	TOTAL
QUANTITY												
COST (in millions)	\$ 1,499.7		\$87.4	\$110.1								
<p>The Fleet Satellite Communications (FLTSATCOM) System satisfies Department of Defense (DOD) worldwide Ultra High Frequency (UHF) mobile user communication requirements. This includes protected fleet broadcast to all Navy ships plus command control for Anti-Submarine Warfare platforms, fleet Ballistic Missile submarines, aircraft carriers, cruisers and other selected aircraft, ships and submarines. The system satisfies the Air Force equatorial satellite communications requirements including Presidential airborne command post, Strategic Air Command and emergency mission support. Existing fleet Satellite (FLTSAT) will continue to be used as long as their performance is operationally acceptable. UHF/FO satellites are being deployed to replace the aging FLTSAT/LEASAT constellation.</p> <p>FY 1996 and FY1997 funded launch service payments for satellites #7 through #9 and provide technical support for satellite production. FY96 and FY97 also funded the Global Broadcast System (GBS) ECP to F8, F9 and F10.</p> <p>The sixth satellite was launched in October 1995 and the seventh satellite was successfully launched in July 1996. F8, F9 and F10 are scheduled to launch in March 1998, September 1998, and February 1999 respectively.</p>												

P-1 SHOPPING LIST

ITEM NO. PAGE NO.
21 1

Exhibit P-40

**UNCLASSIFIED
CLASSIFICATION**

COST ANALYSIS											DATE: FEBRUARY 1998			
B. APPROPRIATION/BUDGET ACTIVITY WEAPONS PROCUREMENT, NAVY/BA-2 - OTHER MISSILES							C. P-1 ITEM NOMENCLATURE FLEET SATELLITE COMMUNICATIONS (A)				SUBHEAD Q2EU			
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS											
			PY		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999	
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
2000	UHF FOLLOW-ON SPACECRAFT AND LAUNCH			1,411,207				26,467		22,272				
	Global Broadcast Services (GBS)							57,721		86,737				
	ENGINEERING SUPPORT			43,465				3,195		1,064				
	SUBTOTAL			1,454,672				87,383		110,073				
3000	LEASAT SPACECRAFT			45,000										
	TOTAL PROGRAM			1,499,672				87,383		110,073		0		0

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

FLEET SATELLITE COMMUNICATIONS (Shore Installations)

The Fleet Satellite Communications (FLTSATCOM) System satisfies DOD worldwide Ultra High Frequency (UHF) mobile user communication requirements. This includes protected fleet broadcast to all Navy ships plus command control for Anti-Submarine Warfare platforms, Fleet Ballistic Missile submarines, aircraft carriers, cruisers and other selected aircraft, ships and submarines, selected aircraft, ships and submarines. The system satisfies Air Force equatorial satellite communications requirements Presidential airborne command post, Strategic Air Command and emergency mission support. UHF/FO satellites are being deployed to replace the aging FLTSAT/LEASAT constellation. Install funding is for the installation of ground support equipment.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Fully developed off the shelf procurement.
 FINANCIAL PLAN: (\$ in millions)

	PY		FY 95		FY 96		FY 97		FY 98		FY 99		FY 00		FY 01		FY 02		FY 03		TC		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																									
PROCUREMENT:																									
Kit Quantity																									
Installation Kits																									
Installation Kits Nonrecurring																									
Equipment	5	11.5																					5	11.5	
Equipment Nonrecurring																									
Engineering Change Orders																									
Data																									
Training Equipment																									
Support Equipment																									
Other																									
Intern Contractor Support																									
Installation of Hardware*	5	3.9	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	5	3.9	
PRIOR YR EQUIP	5	3.9																						5	3.9
FY 95 EQUIP																								0	0.0
FY 96 EQUIP																								0	0.0
FY 97 EQUIP																								0	0.0
FY 98 EQUIP																								0	0.0
FY 99 EQUIP																								0	0.0
FY 00 EQUIP																								0	0.0
FY 01 EQUIP																								0	0.0
FY 02 EQUIP																								0	0.0
FY 03 EQUIP																								0	0.0
FY TC EQUIP																								0	0.0
TOTAL INSTALLATION COST		3.9		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		3.9	
TOTAL PROCUREMENT COST		15.4		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		15.4	

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

PROCUREMENT LEADTIME:

CONTRACT DATES:

FY 1996:

FY 1997:

FY 1998:

FY 1999:

DELIVERY DATES:

FY 1996:

FY 1997:

FY 1998:

FY 1999:

INSTALLATION SCHEDULE:

PY	FY 95				FY 96				FY 97				FY 98				FY 99							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
INPUT	5																							
OUTPUT	5																							

INSTALLATION SCHEDULE:

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

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: September 1997					
APPROPRIATION/BUDGET ACTIVITY WEAPONS PROCUREMENT, NAVY BA-2: Other Missiles								P-1 ITEM NOMENCLATURE/LINE ITEM # Ordnance Support Equipment 84E3					
Program Element for Code B Items:								OTHER RELATED PROGRM ELEMENTS					
	Prior Years	ID Code	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													0
EQUIPMENT COST (In Millions)	N/A			\$9.7	\$14.1	\$5.1	\$6.2	\$4.2	\$3.3	\$4.4	\$5.7		\$52.7
SPARES COST (In Millions)													0
PROGRAM DESCRIPTION/JUSTIFICATION: No justification materials are submitted in this backup book due to security considerations.													

UNCLASSIFIED

UNCLASSIFIED

Department of the Navy

FY 1999 Procurement Program

Exhibit P-1

APPROPRIATION: 1507N Weapons Procurement, Navy

DATE: 01/23/98

LINE NO	ITEM NOMENCLATURE	IDENT CODE	(DOLLARS) FY 1999 UNIT COST	TOA, \$ IN MILLIONS						S E C
				-----FY 1997-----		-----FY 1998-----		-----FY 1999-----		
				QUANTITY	COST	QUANTITY	COST	QUANTITY	COST	
BUDGET ACTIVITY 03: Torpedoes and Related Equipment										

Torpedoes And Related Equipment										
23	3141 ASW Targets	A			4.1		.7		4.2	U
24	3145 Vertical Launched ASROC (VLA)	A		16	12.7		-		-	U
Mod Of Torpedoes And Related Equip										
25	3215 MK-46 Torpedo Mods	A			1.3		.3		.*	U
26	3225 MK-48 Torpedo ADCAP Mods	A			52.3		53.5		52.8	U
Support Equipment										
27	3301 Torpedo Support Equipment	A			20.7		24.9		24.2	U
28	3302 ASW Range Support	A			14.4		11.5		14.7	U
Destination Transportation										
29	2410 First Destination Transportation	A			2.6		1.8		2.0	U
TOTAL Torpedoes and Related Equipment					108.1		92.6		97.8	

* ITEMS UNDER \$50,000

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

Identification code	17-1507-0-1-051	Budget Plan (amounts for PROCUREMENT actions programed)			Obligations		
		1997 actual	1998 est.	1999 est.	1997 actual	1998 est.	1999 est.
Program by activities:							
Direct program:							
00.0101	Ballistic missiles	314,815	269,834	323,650	366,815	286,465	292,984
00.0201	Other missiles	830,648	618,864	832,908	926,354	600,517	740,014
00.0301	Torpedoes and related equipment	108,108	92,621	97,837	100,236	111,289	105,517
00.0401	Other weapons	36,636	85,022	27,232	34,966	73,804	39,515
00.0601	Spares and repair parts	41,809	21,422	45,918	47,140	31,335	46,165
00.9101	Total direct program	1,332,016	1,087,763	1,327,545	1,475,511	1,103,410	1,224,195
01.0101	Reimbursable program	21,000	74,800	74,800	243	95,800	74,800
10.0001	Total	1,353,016	1,162,563	1,402,345	1,475,754	1,199,210	1,298,995
Financing:							
Offsetting collections from:							
11.0001	Federal funds(-)	-21,000	-74,800	-74,800	-15,784	-74,800	-74,800
17.0001	Recovery of prior year obligations				-12,077		
Unobligated balance available, start of year:							
21.4002	For completion of prior year budget plans				-448,823	-311,568	-274,920
21.4003	Available to finance new budget plans	-16,000	-6,726		-16,000	-6,726	
21.4009	Reprogramming from/to prior year budget plan	-21,378					
22.1001	Unobligated balance transferred to other acco		6,726			6,726	
Unobligated balance available, end of year:							
24.4002	For completion of prior year budget plans				311,568	274,920	378,270
24.4003	Available to finance subsequent year budget	6,726			6,726		
25.0001	Unobligated balance expiring	21,378			21,378		
39.0001	Budget authority	1,322,742	1,087,763	1,327,545	1,322,742	1,087,763	1,327,545
Budget authority:							
40.0001	Appropriation	1,364,231	1,102,193	1,327,545	1,364,231	1,102,193	1,327,545
40.7601	Reduction pursuant to P.L. 105-56 (-), 8041		-21,230			-21,230	
41.0001	Transferred to other accounts (-)	-41,489			-41,489		
42.0001	Transferred from other accounts		6,800			6,800	
43.0001	Appropriation (adjusted)	1,322,742	1,087,763	1,327,545	1,322,742	1,087,763	1,327,545

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

Identification code	17-1507-0-1-051	Budget Plan (amounts for PROCUREMENT actions programed)			Obligations		
		1997 actual	1998 est.	1999 est.	1997 actual	1998 est.	1999 est.
Relation of obligations to outlays:							
71.0001	Obligations incurred				1,459,970	1,124,410	1,224,195
72.1001	Orders on hand, SOY				-37,434	-34,608	-34,608
72.4001	Obligated balance, start of year				3,286,784	2,765,572	2,270,295
74.1001	Orders on hand, EOY				34,608	34,608	34,608
74.4001	Obligated balance, end of year				-2,765,572	-2,270,295	-2,109,757
77.0001	Adjustments in expired accounts (net)				15,891		
78.0001	Adjustments in unexpired accounts				-12,077		
90.0001	Outlays (net)				1,982,170	1,619,687	1,384,733

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

Identification code	17-1507-0-1-051	1997 actual	1998 est.	1999 est.

Direct obligations:				
122.001	Transportation of things	2,566	2,008	2,028
125.101	Advisory and assistance services	23,256	24,591	24,701
	Purchases goods/services (inter/intra) Fed accounts			
125.303	Purchases from revolving funds	200,392	203,192	179,946
126.001	Supplies and materials	78,820	70,461	82,862
131.001	Equipment	1,170,477	803,158	934,658
		-----	-----	-----
199.001	Total Direct obligations	1,475,511	1,103,410	1,224,195
Reimbursable obligations:				
226.001	Supplies and materials	243	95,800	21,900
231.001	Equipment			52,900
		-----	-----	-----
299.001	Total Reimbursable obligations	243	95,800	74,800
		-----	-----	-----
999.901	Total obligations	1,475,754	1,199,210	1,298,995

Comparison of FY 1998 Program Requirements as Reflected
in the FY 1998 Budget with FY 1998 Program Requirements as
Shown in FY 1999 Budget (In Thousands of Dollars)

	FY 1998 Total Program Requirements <u>Per FY 1998 Budget</u>	FY 1998 Program Requirements <u>Per FY 1999 Budget</u>	Increase (+) or Decrease (-)
Ballistic Missiles	341,412	269,834	-71,578
Other Missiles	612,993	618,864	+5,871
Torpedoes and Related Equipment	95,715	92,621	-3,094
Other Weapons	59,230	85,022	+25,792
Spares and Repair Parts	26,943	21,422	-5,521
Subtotal Direct Program	1,136,293	1,087,763	-48,530
Reimbursable	74,800	74,800	-
Total Fiscal Year	1,211,093	1,162,563	-48,530

Explanation of Changes in FY 1998 Program Requirements

1. Ballistic Missiles (-\$71.6 million)
Decrease reflects Congressional undistributed and inflation reductions (-\$6.6 million) and a program reduction of 2 Trident II missiles (-\$65.0 million) to slow the production rate of Trident II missiles specifically earmarked for the D5 Backfit submarines.
2. Other Missiles (+\$5.9 million)
Changes include Congressional adjustments to JSOW (+\$5.0 million), Standard Missile (-\$15.4 million), Hellfire (+\$20.0 million), Penguin (+\$7.5 million), Aerial Targets (-\$7.0 million), ESSM (-\$5.0 million), Standard Missile Modifications (+\$15.3 million), and Weapons Industrial Facility (-\$4.5 million). Reprogrammings requiring Congressional approval include the SLAM-ER program (+\$9.0 million) and RAM (-\$2.0 million) are also part of the change. Adjustments also include Congressional undistributed general and inflation reductions (-\$17.0 million).
3. Torpedoes and Related Equipment (-\$3.1 million)
Changes include Congressional undistributed general and inflation reductions (-\$2.9 million) and a reprogramming requiring Congressional approval to the First Destination Transportation program (-\$0.2 million).
4. Other Weapons (+\$25.8 million)
Changes include Congressional adjustments for the Close-In-Weapons-System (+\$15.0 million), 5/54 Gun Mount Modifications (+\$10.0 million), and Pioneer (+\$3.0 million) and Congressional undistributed reductions (-\$2.2 million).
6. Spares & Repair Parts (\$-5.5 million)
Changes include adjustments for Congressional reductions (-\$5.0 million) and undistributed Congressional reductions (-\$.5 million).

Comparison of FY 1998 Financing as Reflected in the FY 1998 Budget
with FY 1998 Financing as Shown in FY 1998 Budget
(In Thousands of Dollars)

	FY 1998 Financing Per <u>FY 1998 Budget</u>	FY 1998 Financing Per <u>FY 1999 Budget</u>	Increase (+) Decrease (-)
Program Requirements (Total)			
Program Requirements (Direct)	(1,136,293)	(1,087,763)	(-48,530)
Program Requirements (Reimb)	(74,800)	(74,800)	
Less:			
Anticipated Reimbursements	74,800	74,800	-
Add:			
Unob bal avail, start of year to finance new budget plans		-6,726	-6,726
Unob bal transferred to other accts		6,726	6,726
Appropriation Adjusted	1,136,293	1,087,763	-48,530
Budget Authority:			
FY 1998 DoD Appropriations Act	1,136,293	1,102,193	-34,100
Reduct Pursuant to P. L. 105-56		-21,230	-21,230
Transferred from other accounts		6,800	+6,800
Appropriation (Adjusted)	1,136,293	1,087,763	-48,530

Explanation of Changes in Financing

The \$48.5 million change in program financing is the net result of Congressional specific (-\$34.1 million) and undistributed general reductions (-\$21.2 million); and Prior Approval Congressional reprogrammings associated with a more cost efficient procurement profile for the SLAM-ER program (+\$9.0 million), and funding from RAM (-\$2.0 million) and First Destination Transportation (-\$0.2 million) funding to fund emergent DOD requirements.

Comparison of FY 1997 Program Requirements as Reflected
in the FY 1998 Budget with FY 1997 Program
Requirements as Shown in FY 1999 Budget (In Thousands of Dollars)

	FY 1997 Total Program Requirements <u>Per FY 1998 Budget</u>	FY 1997 Total Program Requirements <u>Per FY 1999 Budget</u>	Increase (+) or Decrease (-)
Ballistic Missiles	316,332	314,815	-1,517
Other Missiles	844,202	830,648	-13,554
Torpedoes and Related Equipment	120,594	108,108	-12,486
Other Weapons	30,815	36,636	+5,821
Spares and Repair Parts	46,490	41,809	-4,681
Subtotal Direct Program	1,358,433	1,332,016	-26,417
Reimbursable	74,800	21,000	-53,800
Total Fiscal Year	1,433,233	1,353,016	-80,217

Explanation of Changes in FY 1997 Program Requirements

1. Ballistic Missiles (-\$1.5 million)

Change is a result of revised economic assumption reflected in the FY 1997 Supplemental Appropriation (-\$1.3 million) and minor below threshold reprogramming actions (-\$0.2 million).

2. Other Missiles (-\$13.6 million)

Change reflects a reduction to AMRAAM (-\$4.2 million) to fund the AEGIS Baseline Consolidation effort; and a net increase to fund additional MA-31 Aerial Target procurement (\$1.5 million). Adjustments were also associated with revised economic assumptions reflected in the FY 1997 Supplemental Appropriation (-\$3.6 million), and minor below threshold reprogramming actions.

3. Torpedoes and Related Equipment (-\$12.5 million)

Change reflects minor below threshold reprogrammings (-\$9.4 million), and reductions associated with the revised economic assumptions reflected in the FY 1997 Supplemental appropriation (-\$0.5 million). Reduction also include funding reprogrammed to support the AEGIS Baseline Consolidation effort (-\$2.5 million).

4. Other Weapons (+\$5.8 million)

Change reflects minor below threshold reprogrammings (+\$6.0 million) and revised economic assumption reflected in the FY 1997 Supplemental Appropriation (-\$0.1 million).

6. Spares & Repair Parts (-\$4.7 million)

Change reflects minor below threshold reprogrammings (-\$4.5 million) and revised economic assumptions reflected in the FY 1997 Supplemental Appropriation (-\$0.2 million).

Comparison of FY 1997 Financing as Reflected in the FY 1998 Budget
with FY 1997 Financing as Shown in FY 1999 Budget
(In Thousands of Dollars)

	FY 1997 Financing Per FY 1998 Budget	FY 1997 Financing Per FY 1999 Budget	Increase (+) Decrease (-)
Program Requirements (Total)	1,433,233	1,353,016	-80,217
Program Requirements (Direct)	(1,358,433)	(1,332,016)	(-26,417)
Program Requirements (Reimb)	(74,800)	(21,000)	(-53,800)
Less:			
Anticipated Reimbursements	-74,800	-21,000	-53,800
Add:			
Federal Funds (-):	-	-21,000	-21,000
Available to finance new budget plans	-	-16,000	-16,000
Reprogrammed from/to prior year budget plan:	-	-21,378	-21,378
Available to finance subsequent year budget:	-	6,726	+6,726
Unobligated balance expiring	-	21,378	+21,378
Appropriation Adjusted	1,358,433	1,322,742	-35,691
Budget Authority:			
FY 1997 DoD Appropriations Act	1,389,913	1,364,231	-25,682
Reduction pursuant to P.L. 104-208, 8037 (h)	-3,682	-	+3,682
Transferred from other accts	-	-	-
Transferred to other accounts	-27,798	-41,489	-13,691
Appropriation (Adjusted)	1,358,433	1,322,742	-35,691

Explanation of Changes in Financing

Primary changes in program financing are a result of reductions associated with revised economic assumptions reflected in the FY 1997 Supplemental Appropriation (-\$5.7 million), transfers to other accounts (-\$13.7 million), and funding reprogrammed for AEGIS Baseline Consolidation efforts (-\$6.7 million).

CLASSIFICATION: Unclassified

**WEAPONS PROCUREMENT, NAVY
BUDGET ITEM JUSTIFICATION SHEET (EXHIBIT P-40)**

DATE:
February 1998

BUDGET ACTIVITY:
BA-3: Torpedo and Related Equipment

P-1 ITEM NOMENCLATURE:
ASW Targets

LI # 314100
C3TG

	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Quantity							
Cost (In Millions)	4.1	0.7	4.2	3.7	4.8	16.4	16.2

ITEM DESCRIPTION/JUSTIFICATION

This line item funds:
MK 39 Mod 1 (Cost Codes TG002, TG832, TG842, TG852, TG862, and TG902).

The FY1994 Defense Authorization Conference directed the Navy to provide Congressional Defense Committees a plan on how the current ASW target programs could be expanded to include supporting MK48 and MK50 torpedoes and shallow water ASW training operations. ASN(RDA) submitted the ASW Target Plan on June 15, 1994 to the various Congressional defense committees; funding has been included in this WPN line item for the procurement of the MK 39 Mod 1, which will support these expanded requirements through the award of a competitive contract to be awarded in the 3rd QTR FY 97.

DD Form 2454, Jul 88

P-1 SHOPPING LIST LINE ITEM NO.	PAGE NO.
23	1

CLASSIFICATION: Unclassified

CLASSIFICATION: Unclassified

APPROPRIATION: Weapons Procurement, Navy	WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)	DATE: February 1998
---	--	------------------------

BUDGET ACTIVITY: BA-3: Torpedo and Related Equipment	P-1 ITEM NOMENCLATURE: ASW Targets	SUBHEAD: C3TG
---	---------------------------------------	------------------

COST CODE	ELEMENT OF COST	I/C	FY 1997		FY 1998		FY 1999			
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST		
TG002	MK39 Mod 1 - EMATT				1,000	\$3,409		\$0	1,125	\$2,868
TG800	Production Engineering					\$50		\$0		\$0
TG832	Production Engineering (In-house)					\$380		\$239		\$795
TG842	Quality Assurance					\$46		\$103		\$100
TG852	Product Improvement					\$42		\$77		\$80
TG862	Acceptance T & E					\$109		\$135		\$144
TG902	Production Engineering (Contractor)					\$72		\$105		\$165
						\$4,108		\$659		\$4,152

P-1 SHOPPING LIST LINE ITEM NO.	PAGE NO.
23	2

CLASSIFICATION: Unclassified

CLASSIFICATION: Unclassified

APPROPRIATION: Weapons Procurement, Navy	PROCUREMENT HISTORY & PLANNING (EXHIBIT P-5A)	DATE: February 1998
---	--	------------------------

BUDGET ACTIVITY: BA-3: Torpedo and Related Equipment	P-1 ITEM NOMENCLATURE: ASW Targets	SUBHEAD: C3TG
---	---------------------------------------	------------------

COST CODE	FISCAL YEAR ELEMENT OF COST	CONTRACTOR AND LOCATION	CONTRACT METHOD AND TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAIL NOW WHEN	ARE SPEC REVISIONS REQUIRED?	IF YES, WHEN AVAILABLE
FY 1997											
TG002	MK39 Mod 1 - EMATT/ECPs	Sippican, Inc. Marion, MA	C/FFP	NAVSEA	Jun-97	Sep-98	1,000	\$2,495	Yes	No	
FY 1999											
TG002	MK39 Mod 1 - EMATT/ECPs	Sippican, Inc. Marion, MA	C/FFP-Option	NAVSEA	Oct-98	Oct-99	1,125	\$2,398	Yes	No	

REMARKS:

P-1 SHOPPING LIST NO.	PAGE NO.
23	3

CLASSIFICATION: Unclassified

CLASSIFICATION: Unclassified

APPROPRIATION: Weapons Procurement, Navy	FY96 PRODUCTION SCHEDULE (EXHIBIT P-21)	DATE: 1-Feb-98
---	--	-------------------

BUDGET ACTIVITY: BA-3: Torpedo and Related Equipment	P-1 ITEM NOMENCLATURE: ASW Targets - MK 39 Mod 1	SUBHEAD: C3TG
---	---	------------------

COST CODE	PROCUREMENT YEAR ITEM/MANUFACTURER	S E R V	ACCEPT PROC. QTY TO 1 OCT	BALANCE DUE AS OF 1 OCT	FISCAL YEAR 99												FISCAL YEAR 00												FISCAL YEAR 01												L A T E
					98			CALENDER YEAR 99									CALENDER YEAR 00									CALENDER YEAR 01															
					O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
FY 1997																																									
TG002	MK39 MOD 1 SIPPICAN		1,000	35	965		193		193		193																											0			
FY 1999																																									
TG002	MK39 MOD 1 SIPPICAN		1,125	0	1,125	A																																0			

MANUFACTURER'S NAME & LOCATION	PRODUCTION RATES			REACHED DATE	PROCUREMENT LEAD TIME				REMARKS:	
	MINIMUM SUST.	1-8-5	MAXI- MUM		ADMIN LEAD TIME		MANU- FACTUR- ING TIME	TOTAL AFTER 1 OCT		
					PRIOR 1 OCT	AFTER 1 OCT				
Sippican, Inc	40	250	500							
				INITIAL	10	4	10	24		
				REORDER (Previous Source)	0	10	10	20	A = Contract Award	

Form 2445, Jul 87

P-1 SHOPPING LIST ITEM NO.	PAGE
23	5

CLASSIFICATION: Unclassified

EXHIBIT P-20, REQUIREMENTS STUDY	APPROPRIATION: Weapons Procurement, Navy	BA-3: Torpedo and Related Equipment	DATE: February 1998
---	---	-------------------------------------	------------------------

P-1 ITEM NOMENCLATURE: ASW Targets - MK 39 Mod 1	SUBHEAD: C3TG	Admin Leadtime (after Oct 1): 4	Prod Leadtime: 10
---	------------------	---------------------------------	-------------------

	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Buy Summary	1,000	0	1,125	1,125	1,125	1,250	1,250
Unit Cost	2.5	0	2.381	2.403	2.411	2.464	2.518
Total Cost	2,500	0	2,679	2,703	2,712	3,080	3,148
Asset Dynamics							
Beginning Asset Position	1,907	3,793	5,029	3,885	2,901	353	0
Deliveries from all prior year funding	3,600	3,300	0	0	0	0	0
Deliveries from FY 97 funding	0	35	965	0	0	0	0
Deliveries from FY 98 funding	0	0	0	0	0	0	0
Deliveries from FY 99 funding	0	0	0	1,125	0	0	0
Deliveries from subsequent years' funding	0	0	0	0	1,125	1,125	1,250
Other Gains	0	0	0	0	0	0	0
Combat Losses/Usage	0	0	0	0	0	0	0
Training Losses/Usage	-1,498	-1,999	-1,999	-1,999	-3,563	-3,563	-3,563
Test Losses/Usage	-96	-75	-90	-90	-90	-90	-90
Other Losses/Usage	-120	-25	-20	-20	-20	-20	-20
Disposals/Retirements/Attritions/Etc.	0	0	0	0	0	0	0
End of Year Asset Position	3,793	5,029	3,885	2,901	353	0	0
Inventory Objective or Current Authorized Allowance	885	885	3,763	3,673	3,673	3,673	3,673
Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)	Vehicles Eligible for FY 98 Replacement	Aircraft: TOAI:	n/a	
Assets Rqd for Combat Loads: 775	FY 96 thru 30-Sep-1996: 793	FY 96 thru 30-Sep-1996: 130	FY 96 thru 30-Sep-1996: 0	Vehicles Eligible for FY 99 Replacement	PAA: TAI:	n/a	
WRM Rqmt: 500	FY 1995 839	FY 1995 105	FY 1995 0	Vehicle Augment:	Attrition Res:	0	
Pipeline: 500	FY 1994 912	FY 1994 100	FY 1994 0		BAI	0	
Other: 150	FY 1993 653	FY 1993 120	FY 1993 0		Inactive Inv:	0	
TOTAL: 1,425	3,197	455			Storage:	0	

REMARKS:
Starting in FY97, MK39 EMATT procurements represent MK39 Mod 1 instead of MK39 Mod 0.

P-1 SHOPPING LIST	
LINE ITEM NO.	PAGE NO.
23	6

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET

P-40

DATE:

February 1998

APPROPRIATION/BUDGET ACTIVITY

Weapons Procurement, Navy/ Torpedoes & Related Equipment, BA-3

P-1 ITEM NOMENCLATURE

Vertical Launch ASROC (C3DQ), LI# 314500

Program Element for Code B Items:

0204228N

Other Related Program Elements

	Prior Years	ID Code	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY	390	A		13	17		0	0	0	0	0	0	420
COST (\$M)	\$227.3			\$9.5	\$12.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$249.5
Initial Spares (\$M)	\$2.3			\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$2.3
Total (\$M)	\$229.6			\$9.5	\$12.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$251.8
Unit Cost (\$M)	\$0.6			\$0.7	\$0.7	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.6

ITEM DESCRIPTION/JUSTIFICATION:

VLA provides an Intermediate range, quick-reaction, all weather, ASW capability for ships receiving the new Vertical Launching System. The VLA Missile utilizes the MK-46 MOD 5A(S) and MK-46 MOD 5A(SW) torpedo payload.

FOT&E tests were completed in September 1992 and Full Production authorized in January 1993.

Installation Data: These missiles will be a part of the ASW ordnance inventory to support combatants equipped with VLS (DD-963, DDG-51, CG-47 Class Ships).

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS P-5						Weapon System			DATE: February 1998					
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/ Torpedoes & Related Equipment, BA-3					ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD Vertical Launch ASROC, C3DQ, LI# 314500								
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
						FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
DQ003	<u>VLA Missiles</u>	A				17	594	10,096	0		0	0		0
DQ830	<u>Production Engineering (In-House)</u> <u>Production Engineering (Contractor)</u>							1,744 400			0 0			0 0
DQ860	<u>Acceptance Test & Evaluation</u> <i>Bosnia</i>							477			0			0
TOTAL								12,717			0			0

CLASSIFICATION:

UNCLASSIFIED

**BUDGET ITEM JUSTIFICATION SHEET
P-40**

DATE:

February 1998

APPROPRIATION/BUDGET ACTIVITY

Weapons Procurement, Navy/ Torpedoes & Related Equipment, BA-3

P-1 ITEM NOMENCLATURE

Torpedo MK46 Mods, C3F5, LI# 321500

Program Element for Code B Items:

0204228N

Other Related Program Elements

	Prior Years	ID Code			FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY SLEP	675	A			73	0	0	0	0	0	0	0	748
QUANTITY LHT	0	B			0	0	0	13	44	55	75	813	1000
(In Millions)	\$27.9				\$1.3	\$0.3	\$0.0	\$16.2	\$27.2	\$30.7	\$36.8	\$380.9	\$521.4
Initial Spares (\$M)					\$0.2	\$0.7	\$1.5	\$0.9	\$2.6	\$2.8	\$3.2		\$11.9
Total (\$M)	\$27.9				\$1.5	\$1.0	\$1.5	\$17.1	\$29.8	\$33.5	\$40.0	\$380.9	\$533.3
Unit Cost (\$M)	\$0.04				\$0.02	\$0.00	\$0.00	\$1.32	\$0.68	\$0.61	\$0.53	\$0.47	\$0.31

ITEM DESCRIPTION/JUSTIFICATION:

The MK46 is an in-service lightweight torpedo designed for launch from surface vessel torpedo tubes, VLA, and fixed/rotary wing aircraft. The product improvement program will improve effectiveness. (Asroc retired from active service 30 Sept 1997).

Procurement of SLEP kits in FY94 through FY97 will provide improvements in warfighting capabilities in Bottom Avoidance, CCM Shallow, and Aft Seal.

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS						Weapon System			DATE:					
P-5						P-1 ITEM NOMENCLATURE/SUB 35674			February 1998					
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/ Torpedoes & Related Equipment, BA-3						Torpedo MK46 Mods, C3F5, LI# 321500								
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
						FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
F5103	<u>SLEP Hardware</u>	A				73	12	905	0		0	0		0
F5830	<u>Production Engineering (In-House)</u>							382			211			15
F5860	<u>Acceptance Test & Evaluation</u>							41			30			0
F5900	<u>Production Engineering (Contractor)</u>							0			25			0
TOTAL						73	12	1,328	0	0	266	0	0	15

DD FORM 2446, JUN 86

P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO. 25

PAGE NO. 2

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: MK46 SLEP TYPE MODIFICATION: MODIFICATION TITLE: Bottom Avoidance/CCM Shallow Water/Aft Seal (F5103)

DESCRIPTION/JUSTIFICATION:

The Counter-Counter Measure (CCM) Shallow Water modification modifies algorithms and PWBs in the control group of the MK46 torpedo to improve performance against counter-measures in a shallow water environment. The Aft Seal modification provides an improved seal on the drive shaft of the MK46 torpedo to prevent water entry. The Bottom Avoidance modification provides search depth setting limitations on the MK46 torpedo to provide bottom avoidance in shallow water environments.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994 & Prior		FY 1995*		FY 1996		FY 1997**		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL			
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
FINANCIAL PLAN (IN MILLIONS)																										
<i>RD&E</i>																									0	0
<i>PROCUREMENT</i>																									0	0
INSTALLATION KITS	675	12,134	180	1,627	220	3,177	73	905																1,148	17,843	
INSTALLATION KITS NONRECURRING																									0	0
EQUIPMENT																									0	0
EQUIPMENT NONRECURRING																									0	0
ENGINEERING CHANGE ORDERS																									0	0
DATA																									0	0
TRAINING EQUIPMENT																									0	0
SUPPORT EQUIPMENT																									0	0
OTHER		15,016		720		231		423		241		15													16,646	0
OTHER																									0	0
OTHER																									0	0
INTERIM CONTRACTOR SUPPORT		792		96		102		0		25															1,015	0
INSTALL COST																									0	0
TOTAL PROCUREMENT	675	27,942	180	2,443	220	3,510	73	1,328	0	266	0	15	0	0	0	0	0	0	0	0	0	0	0	1,148	35,504	

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: MK46 SLEP

MODIFICATION TITLE: Bottom Avoidance/CCM Shallow Water/Aft Seal (F5103)

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **Firm Fixed Price Contract - Alliant Techsystems contracted by NAVSEA.**

ADMINISTRATIVE LEADTIME:

PRODUCTION LEADTIME: _____

CONTRACT DATES: PY: Apr-96

CY: Mar-97

DELIVERY DATE: PY: Feb-97

CY: Jan-98

(\$ in Millions)

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

INSTALLATION SCHEDULE: Input=Delivery to the Facility, Output=Facility providing to Fleet, ready for issue

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	450	150	150	150	88	87	20	20	20	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1148
Out	200	68	68	69	69	62	62	63	63	81	82	82	82	24	24	24	25	0	0	0	0	0	0	0	0	0	0	0	0	0	1148

P-3A

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40										DATE: February 1998			
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/ Torpedoes & Related Equipment, BA-3							P-1 ITEM NOMENCLATURE MK48 ADCAP MODS TORPEDO (C3D1), LI# 322500						
Program Element for Code B Items: 0204228N							Other Related Program Elements						
	Prior Years	ID Code			FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY MODS	0	A			135	139	104	104	95	90	82	59	1046
QUANTITY CBASS	0	B			0	0	0	0	0	25	55	966	1046
COST (\$M)	\$0.0				\$52.3	\$53.5	\$52.8	\$52.2	\$50.6	\$61.6	\$69.2	\$456.8	\$849.0
Initial Spares (\$M)					\$6.9	\$1.2	\$4.0	\$2.8	\$2.1	\$2.3	\$2.4		\$21.7
Total (\$M)	\$0.0				\$59.2	\$54.7	\$56.8	\$55.0	\$52.7	\$63.9	\$71.6	\$456.8	\$870.8
Unit Cost (\$M)	\$0.00				\$0.44	\$0.39	\$0.55	\$0.53	\$0.55	\$0.56	\$0.52	\$0.45	\$0.42

ITEM DESCRIPTION/JUSTIFICATION:

This line item procures Modification Kits for the MK48 ADCAP Torpedo. The MK48 ADCAP MODS program incorporates both a Guidance and Control (G&C) modification and a Torpedo Propulsion Upgrade (TPU) modification to the baseline ADCAP system.

The G&C Modification addresses the need to increase memory and processing capacity of the G&C hardware and to replace obsolete and sunset electronic component parts. The increased capacity is required for future advanced signal processing techniques that will be needed for performance upgrades in shallow water target detection/classification. The TPU addresses the Navy's operational requirement for a quieter ADCAP torpedo. These modifications will allow the MK48 ADCAP torpedo to operate effectively in adverse environments, thus enabling the MK48 ADCAP torpedo to counter enemy submarine threats into the 21st century.

RDT&E PE #0205632N, PU #V0366

WEAPONS SYSTEM COST ANALYSIS P-5						Weapon System			DATE: February 1998					
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/ Torpedoes & Related Equipment, BA-3					ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD MK48 ADCAP MODS TORPEDO (C3D1), LI# 322500								
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
						FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
D1001	ADCAP MODS CBASS	A B				135	169	22,880 0	139	180	25,064 0	104	225	23,350 0
D1003	Support and Ancillary Equipment							2,593			2,513			2,864
D1830	Production Engineering (Contractor)							8,528			6,171			5,941
D1830	Production Engineering (In-House)							7,401			7,437			8,109
D1860	Acceptance Test & Evaluation (Contractor)							554			810			865
D1860	Acceptance Test & Evaluation (In-House)							10,357			11,523			11,684
TOTAL								52,313			53,518			52,813

CLASSIFICATION: UNCLASSIFIED

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: MK48 ADCAP MODIFICATION TITLE: MK48 ADCAP MODS Torpedo (D1001)

DESCRIPTION/JUSTIFICATION:

The Modification Kits for the MK48 ADCAP Torpedo allows the MK48 ADCAP torpedo to operate in adverse environments such as shallow water, thus enabling the MK48 ADCAP torpedo to counter enemy submarine threats into the 21st century.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: MS II approved in Jan 1993; MS III approved in Apr. 1996

FINANCIAL PLAN (IN MILLIONS)	FY 1994 & Prior		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC	TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
<i>RDT&E</i>						16434		10275		7340		12162		8022		7189		14536		24794			100752	
<i>PROCUREMENT</i>																								
INSTALLATION KITS	0	0	88	12110	150	20014	135	16400	139	18022	104	16957	104	16797	95	16155	90	14174	82	13131	59	11359	1046	155119
INSTALLATION KITS NONRECURRING EQUIPMENT																								
EQUIPMENT NONRECURRING						2320																		2320
ENGINEERING CHANGE ORDERS																								
DATA																								
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT				3871		2657		2593		2513		2864		2875		2892		2518		1789		4262		28834
OTHER				28833		26229		21640		21101		22202		22020		21822		18567		14675		17893		214982
OTHER																								
OTHER																								
INTERIM CONTRACTOR SUPPORT				4964		5088		5200		4840		4397		4494		4593		3823		3611		6015		47025
INSTALL COST				0		0		6480		7042		6393		6001		5144		5105		4856		10353		51374
TOTAL PROCUREMENT	0	0	88	49778	150	56308	135	52313	139	53518	104	52813	104	52187	95	50606	90	44187	82	38062	59	49882	1046	499654

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: MK48 ADCAP

MODIFICATION TITLE: MK48 ADCAP MODS Torpedo

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: FPI - Northrop Grumman contracted by NAVSEA.

ADMINISTRATIVE LEADTIME: 3 Months

PRODUCTION LEADTIME: 16 Months

CONTRACT DATES: FY1997: Jan-97

FY1998: Jan-98

FY1999: Jan-99

DELIVERY DATE: FY1997: May-98

FY1998: May-99

FY1999: May-00

(\$ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total								
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$							
PRIOR YEARS																								0	0						
FY 1995 EQUIPMENT							88	3988																	88	3988					
FY 1996 EQUIPMENT							55	2492	95	4401															150	6893					
FY 1997 EQUIPMENT									57	2641	78	3694														135	6335				
FY 1998 EQUIPMENT											57	2699	82	3968													139	6667			
FY 1999 EQUIPMENT													42	2033	62	3066												104	5099		
FY 2000 EQUIPMENT															42	2077	62	3134											104	5211	
FY 2001 EQUIPMENT																	39	1971	56	2893									95	4864	
FY 2002 EQUIPMENT																		38	1963	52	2745								90	4708	
FY 2003 EQUIPMENT																				82	4384								82	4384	
TO COMPLETE																														59	3223
Totals								143	6480	152	7042	135	6393	124	6001	104	5143	101	5105	94	4856	193	10352	1046	51372						

INSTALLATION SCHEDULE: Input=Delivery to the Facility, Output=Facility providing to Fleet, ready for issue

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	14	21	48	60	43	43	32	34	34	33	34	34	35	35	29	25	26	27	26	25	26	27	24	24	24	24	23	23	193	1046
Out	0			14	21	48	60	43	43	32	34	34	33	34	34	35	35	29	25	26	27	26	25	26	27	24	24	24	24	239	1046

P-3A

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: February 1998					
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/Torpedo and Related Equipment								P-1 ITEM NOMENCLATURE Torpedo Support Equipment					
Program Element for Code B Items: LI #330100								Other Related Program Elements					
	Prior Years	ID Code			FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													
COST (In Millions)					\$20.7	\$24.9	\$24.2	\$23.9	\$22.7	\$24.6	\$25.8		\$166.9
<p>The Torpedo Support Equipment account procures various torpedo components required to ready weapons for Anti-Submarine Warfare forces afloat, Sub-Surface and Airborne to achieve and maintain a readiness posture sufficient to counter the enemy sub-surface threat. The objective of this line is to provide the fleet with ready exercise weapons for conducting training maneuvers which involve actually firing the torpedoes, and to maintain warshot inventories in an operational ready-for-issue status in support of combat ready deployment by anti-submarine warfare forces. After a torpedo is fired during a training exercise it is recovered and all expendable components such as batteries, cables, igniters (as well as various accessories required for air-launched torpedoes), must be replaced. These items as well as components such as exercise heads, fuel tanks, and exhaust valves which may be used more than once, but which are worn out or lost in service, are procured each fiscal year in quantities dependent upon the fleet training requirements and tempo of operations. The torpedoes requiring support are the MK46, MK46 SLEP, MK50, MK48 Mod 4 and ADCAP. In addition to components procurement, this account provides for production support and test/evaluation for these components and procurement of product improvement hardware and related equipment.</p>													

CLASSIFICATION:

UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS P-5						Weapon System			DATE: February 1998					
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/Torpedo and Related Equipment						ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD Torpedo Support Equipment/C3F8							
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			FY 1996			FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	PEO (UNDERSEA WARFARE)													
	Lightweight Support Equipment							\$1,585			\$4,835			\$6,060
	MK48/ADCAP Support Equipment							\$19,094			\$20,055			\$18,146
	Torpedo Support Equipment							\$20,679			\$24,890			\$24,206
TOTAL														

WEAPONS SYSTEM COST ANALYSIS P-5						Weapon System Lightweight Torpedo			DATE: February 1998					
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/Torpedo and Related Equipment					ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD Torpedo Support Equipment/C3F8								
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS											
						FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
F8001	Lightweight Support Equipment													
	MK46 Lead Dropper					0		\$0	1211	\$0.358	\$434	710	\$0.366	\$260
	MK46 Mod 5 Seawater Battery					0		\$0	1383	\$0.286	\$396	458	\$0.292	\$134
	MK46 Pressure Cylinder (Short)					0		\$0	675	\$0.450	\$304	402	\$0.460	\$185
	MK89 Mod 1 Suspension Bands					0		\$0	500	\$0.430	\$215	1200	\$0.448	\$538
	MK50 MK 33 Air Stabilizer					0		\$0	450	\$1.123	\$505	310	\$1.148	\$356
	MK50 MK 32 Air Stabilizer					0		\$0	400	\$1.842	\$737	371	\$1.883	\$698
	Sub-Total							\$0			\$2,590			\$2,170
F8002	Other Equipment Investment													
	Product Improvement Hardware							\$0			\$0			\$181
	ORDALT Procurement							\$506			\$0			\$784
	FES Replacement/Improvement							\$0			\$883			\$0
	Test Equipment Upgrade							\$0			\$0			\$1,447
	Sub-Total							\$506			\$883			\$2,412
F8830	Production Engineering - In House							\$875			\$810			\$936
F8840	Quality Assurance							\$0			\$180			\$207
F8850	Product Improvement							\$0			\$0			\$0
F8860	Acceptance T & E							\$204			\$175			\$162
F8900	Production Engineering - Contractor							\$0			\$197			\$173
TOTAL								\$1,585			\$4,835			\$6,060

CLASSIFICATION:

UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS P-5						Weapon System Heavyweight Torpedo			DATE: February 1998					
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/Torpedo and Related Equipment					ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD Torpedo Support Equipment/C3F8								
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
						FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
F8100	EXERCISE EXPENDABLES AND COMPONENT REPLACEMENT													
	TORPEDO WIRE COIL		0	\$0.000	\$0	500	\$2.500	\$1,250	0	\$2.553	\$0	0	\$2.553	\$0
	SUBMARINE WIRE COIL		500	\$2.000	\$1,000	0	\$2.044	\$0	750	\$2.087	\$1,565	0	\$2.087	\$1,565
	FLEX HOSE (IMPROVED)		515	\$2.325	\$1,197	500	\$1.700	\$850	500	\$1.736	\$868	0	\$1.736	\$868
	OTTO FUEL (1,000 lbs per unit)		392	\$5.340	\$2,093	285	\$6.880	\$1,961	295	\$7.031	\$2,074	0	\$7.031	\$2,074
	IGNITER		0	\$0.136	\$0	0	\$0.139	\$0	1,000	\$0.141	\$141	0	\$0.141	\$141
	PROPELLANT (Long)		0	\$0.500	\$0	1,500	\$0.565	\$848	500	\$0.577	\$288	0	\$0.577	\$288
	UMBILICAL CABLE (IMPROVED)		330	\$5.865	\$1,935	410	\$5.988	\$2,455	377	\$6.120	\$2,307	0	\$6.120	\$2,307
	ARMING DEVICE		0	\$0.000	\$0	0	\$0.000	\$0	0	\$0.000	\$0	0	\$0.000	\$0
	SUBTOTAL							\$6,226			\$7,363			\$7,244
F8101	OTHER EQUIPMENT INVESTMENT													
	PRODUCT IMPROVEMENT							\$1,753			\$1,665			\$1,569
	FES REPLACEMENT/IMPROVEMENT							\$1,299			\$1,115			\$1,142
	PROPULSION FUEL TANK SUPPORT							\$830			\$857			\$793
	EXERCISE FUEL TANK UPGRADE PROGRAM							\$0			\$480			\$411
	ORDALT MATERIAL							\$3,335			\$3,269			\$2,420
	ORDALT INSTALLATION							\$2,025			\$1,791			\$1,377
	CHAMBER & VALVE RELOADS							\$462			\$496			\$459
	RECOVERY SYSTEMS							\$0			\$140			\$131
	TIES III EXERCISE SECTION UPGRADE							\$409			\$452			\$416
	TEST EQUIPMENT UPGRADE							\$126			\$127			\$121
	SUBTOTAL							\$10,239			\$10,392			\$8,839
	PRODUCTION SUPPORT													
F8833	PRODUCTION ENGINEERING (IN-HOUSE)							\$502			\$505			\$477
F8843	QUALITY ASSURANCE							\$1,580			\$1,313			\$1,179
F8863	ACCEPTANCE TEST & EVALUATION							\$547			\$482			\$407
TOTAL								\$19,094			\$20,055			\$18,146

UNCLASSIFIED

CLASSIFICATION:

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System Lightweight Torpedo		A. DATE February 1998			
B. APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/Torpedo Support Equipment					C. P-1 ITEM NOMENCLATURE Torpedo Support Equipment				SUBHEAD C3F8	
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	IF YES WHEN AVAILABLE
<u>FY1996</u>										
MK46 Lead Dropper	228	\$0.367	NOC/IMSD		PD/FFP	Reisner Products Inc.	7/96	7/97	Yes	
MK46 Seawater Battery	460	\$0.286	NOC/IMSD		PD/FFP	Magne Volt, NC	7/96	7/98	Yes	
MK50 MK32 Air Stabilizer	374	\$2.051	NOC/IMSD		PD/FFP	Paranetics	9/96	9/98	Yes	
<u>FY 1998</u>										
MK46 Lead Dropper	1211	\$0.358	NUWC, Keyport		RC/FFP	Unknown	7/98	7/99	Yes	
MK46 Seawater Battery	1383	\$0.286	NUWC, Keyport		RC/FFP	Unknown	7/98	7/00	Yes	
MK46 Pressure Cylinder (Short)	675	\$0.450	NUWC, Keyport		RC/FFP	Unknown	7/98	7/00	Yes	
MK89 Mod 1 Suspension Band	500	\$0.430	NUWC, Keyport		RC/FFP	Unknown	7/98	7/00	Yes	
MK50 MK33 Air Stabilizer	450	\$1.123	NUWC, Keyport		RC/FFP	Unknown	7/98	7/00	Yes	
MK50 MK32 Air Stabilizer	400	\$1.842	NUWC, Keyport		RC/FFP	Unknown	7/98	7/00	Yes	
<u>FY1999</u>										
MK46 Lead Dropper	710	\$0.366	NUWC, Keyport		RC/FFP	Unknown	7/99	7/00	Yes	
MK46 Seawater Battery	458	\$0.292	NUWC, Keyport		RC/FFP	Unknown	7/99	7/01	Yes	
MK46 Pressure Cylinder (Short)	402	\$0.460	NUWC, Keyport		RC/FFP	Unknown	7/99	7/01	Yes	
MK89 Mod 1 Suspension Band	1200	\$0.448	NUWC, Keyport		RC/FFP	Unknown	7/99	7/01	Yes	
MK50 MK33 Air Stabilizer	310	\$1.148	NUWC, Keyport		RC/FFP	Unknown	7/99	7/01	Yes	
MK50 MK32 Air Stabilizer	371	\$1.883	NUWC, Keyport		RC/FFP	Unknown	7/99	7/01	Yes	
D. REMARKS										

UNCLASSIFIED

CLASSIFICATION:

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System Heavyweight Torpedo		A. DATE February 1998			
B. APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/Torpedo Support Equipment					C. P-1 ITEM NOMENCLATURE Torpedo Support Equipment				SUBHEAD C3F8	
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	IF YES WHEN AVAILABLE
<u>FY1996</u>										
Igniter	1101	\$0.133	NOC/IMSD		PD/FFP	Qunatic Inc, CA	2/96	8/96	Yes	
Propellant (Long)	1000	\$0.500	NOC/IMSD		PD/FFP	Thiokol, MD	1/97	8/98	Yes	
<u>FY1997</u>										
Flex Hose (Improved)	515	\$2.325	NUWC, Keyport	3-Apr-97	RC/FFP	Entwistle, MA	9/97	8/98	Yes	
Sub Wire Coil	500	\$2.000	NUWC, Keyport	12-Mar-97	RC/FFP	Entwistle, MA	7/97	9/99	Yes	
Otto Fuel (1,000 lbs per unit)	392	\$5.340	Indian Head, MD		WR	Indian Head, MD	10/96	7/98	Yes	
Umbilical Cables (Improved)	330	\$5.865	NUWC, Newport		RC/FFP	Sea Con	7/97	5/98	Yes	
<u>FY1998</u>										
Flex Hose (Improved)	500	\$1.700	NUWC, Keyport		RC/FFP	Unknown	6/98	8/99	Yes	
Torpedo Wire Coil	500	\$2.500	NUWC, Keyport		RC/FFP	Unknown	6/98	9/00	Yes	
Otto Fuel (1,000 lbs per unit)	285	\$6.880	Indian Head, MD		WR	Indian Head, MD	1/98	7/99	Yes	
Propellant (Long)	1500	\$0.565	NUWC, Keyport		RC/FFP	Unknown	6/98	8/00	Yes	
Umbilical Cables (Improved)	410	\$5.988	NUWC, Keyport		RC/FFP	Unknown	6/98	5/99	Yes	
<u>FY 1999</u>										
Sub Wire Coil	750	\$2.087	NUWC, Keyport		RC/FFP	Unknown	6/99	7/01	Yes	
Flex Hose (Improved)	500	\$1.736	NUWC, Keyport		RC/FFP	Unknown	6/99	8/00	Yes	
Otto Fuel (1,000 lbs per unit)	295	\$7.031	Indian Head, MD		WR	Indian Head, MD	10/98	7/00	Yes	
Igniter	1000	\$0.141	NUWC, Keyport		RC/FFP	Unknown	6/99	8/01	Yes	
Propellant (Long)	500	\$0.577	NUWC, Keyport		RC/FFP	Unknown	6/99	8/01	Yes	
<p>D. REMARKS I: Umbilical Cable unit cost variations FY96-FY98</p> <p>The increase in unit cost for the Umbilical Cable from FY96-FY97 is attributed to the inclusion of 330 Receptacles and 500 Inserts in the FY97 unit price for Umbilical Cables, as well as First Article and Qualification Testing increases associated with a new vendor award. The FY96 P-5 and P-5a Umbilical Cable unit price does not include receptacles and inserts.</p> <p>Like FY97 procurement, the FY98 Umbilical Cable unit price includes 410 cables, 410 receptacles, and 500 inserts; thus, the unit price increase from FY97-FY98 is solely attributed to inflation (2.1%).</p>										

Exhibit P-20, Requirements Study		Approp Code/BA 1507/			Subhead C3F8		Date: February 1998		
P-1 Line Item Nomenclature Lightweight Torpedo Support Equipment LI # 330100		Admin Leadtime (after Oct 1): 7 months				Prod Leadtime: 17 months			
Project Uni F8001/MK46 Lead Droppers	NALC TW32	PY FY 1996	PY FY 1997	CY FY 1998	BY1 FY 1999	BY2 FY 2000	BY2+1 FY 2001	BY2+2 FY 2002	BY2+3 FY 2003
Buy Summary QTY		228	0	1,211	710	710	810	810	810
Unit Cost		\$0.367		\$0.358	\$0.366	\$0.374	\$0.382	\$0.391	\$0.399
Total Cost		\$84	\$0	\$434	\$260	\$265	\$310	\$316	\$323
Asset Dynamics									
Beginning Asset Position		906	551	267	1349	710	1282	1353	1424
SE deliveries from all prior year funding		0	0	228	0	0	0	0	0
Spares deliveries from all prior year funding		291	364	1,482	0	0	0	0	0
Deliveries from FY 1997 funding		0	0	0	0	0	0	0	0
Deliveries from FY 1998 funding		0	0	0	0	1,211	0	0	0
Deliveries from FY 1999 funding		0	0	0	0	0	710	0	0
Deliveries from FY 2000 funding		0	0	0	0	0	0	710	0
Deliveries from FY 2001 funding		0	0	0	0	0	0	0	810
Combat Losses/Usage		0	0	0	0	0	0	0	0
Training Losses/Usage		646	648	628	639	639	639	639	639
Test Losses/Usage		0	0	0	0	0	0	0	0
Other Losses/Usage		0	0	0	0	0	0	0	0
Disposals/Retirements/Attritions/etc.		0	0	0	0	0	0	0	0
End of Year Asset Position		551	267	1349	710	1282	1353	1424	1595
Inventory Objective/Current Authorized Allowance		1922	1915	1906	1917	1917	1917	1917	1917
Example:									
Inventory	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru FY96: 646	PY thru FY96:		PY thru FY96:					
	FY95: 409	FY95:	0	FY95:	0				
	FY94: 490	FY94:	0	FY94:	0				
	FY93: 370	FY93:	0	FY93:	0				
TOTAL:									
REMARKS Training Losses/Usage: Item expended after each firing. Updated to reflect Sponsor-directed Non-Combat Expenditure Allocation (NCEA) firings. Lead droppers expended during MK46 EXTORP (tube, fixed wing, rotary wing) and REXTORP (fixed wing) firings.									

Exhibit P-20, Requirements Study		Approp Code/BA 1507/			Subhead C3F8		Date: February 1998		
P-1 Line Item Nomenclature Lightweight Torpedo Support Equipment LI # 330100		Admin Leadtime (after Oct 1): 7 months			Prod Leadtime: 17 months				
Project Uni F8001/Mk46 Seawater Battery	NALC TU44 PY FY 1996	PY FY 1997	CY FY 1998	BY1 FY 1999	BY2 FY 2000	BY2+1 FY 2001	BY2+2 FY 2002	BY2+3 FY 2003	
Buy Summary QTY	460	0	1,383	458	455	455	455	457	
Unit Cost	\$0.286	\$0.286	\$0.286	\$0.292	\$0.299	\$0.305	\$0.312	\$0.319	
Total Cost	\$132	\$0	\$396	\$134	\$136	\$139	\$142	\$146	
Asset Dynamics	0								
Beginning Asset Position	1146	786	609	688	297	1066	1133	1197	
Deliveries from all prior year funding	0	0	460	0	0	0	0	0	
Spares deliveries from all prior year funding	0	223	0	0	0	0	0	0	
Deliveries from FY 1997 funding	0	0	0	0	0	0	0	0	
Deliveries from FY 1998 funding	0	0	0	0	1,383	0	0	0	
Deliveries from FY 1999 funding	0	0	0	0	0	458	0	0	
Deliveries from FY 2000 funding	0	0	0	0	0	0	455	0	
Deliveries from FY 2001 funding	0	0	0	0	0	0	0	455	
Combat Losses/Usage	0	0	0	0	0	0	0	0	
Training Losses/Usage	360	400	381	391	391	391	391	391	
Test Losses/Usage	0	0	0	0	0	0	0	0	
Other Losses/Usage	0	0	0	0	223	0	0	0	
Disposals/Retirements/Attritions/etc.	0	0	0	0	0	0	0	0	
End of Year Asset Position	786	609	688	297	1066	1133	1197	1261	
Inventory Objective/Current Authorized Allowance	1141	1172	1386	1396	1396	1396	1396	1396	
Example:									
Inventory	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)						
	PY thru FY96: 360	PY thru FY96: 0	PY thru FY96: 0						
	FY95: 380	FY95: 0	FY95: 0						
	FY94: 490	FY94: 0	FY94: 0						
	FY93: 348	FY93: 0	FY93: 0						
TOTAL:									
REMARKS Training Losses/Usage: Item expended after each firing. Updated to reflect Sponsor-directed Non-Combat Expenditure Allocation (NCEA) firings. Other Losses/Usage: Repaid assets to Replen Spares (FY00). MK46 Seawater Battery expended during EXTORP (tube, fixed wing, rotary wing) firings.									

Exhibit P-20, Requirements Study		Approp Code/BA 1507/		Subhead C3F8		Date: February 1998		
P-1 Line Item Nomenclature F8100/Mk46 Press Cyl (Short)		Admin Leadtime (after Oct 1): 7 months				Prod Leadtime: 17 months		
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Buy Summary QTY	0	0	675	402	402	402	402	402
Unit Cost			\$0.450	\$0.460	\$0.470	\$0.480	\$0.491	\$0.502
Total Cost	\$0	\$0	\$304	\$185	\$189	\$193	\$197	\$202
Asset Dynamics								
Beginning Asset Position	2493	2133	1733	1352	961	1245	1256	1267
Deliveries from all prior year funding	0	0	0	0	0	0	0	0
Spares deliveries from all prior year funding	0	0	0	0	0	0	0	0
Deliveries from FY 1997 funding	0	0	0	0	0	0	0	0
Deliveries from FY 1998 funding	0	0	0	0	675	0	0	0
Deliveries from FY 1999 funding	0	0	0	0	0	402	0	0
Deliveries from FY 2000 funding	0	0	0	0	0	0	402	0
Deliveries from FY 2001 funding	0	0	0	0	0	0	0	402
Combat Losses/Usage	0	0	0	0	0	0	0	0
Training Losses/Usage	360	400	381	391	391	391	391	391
Test Losses/Usage	0	0	0	0	0	0	0	0
Other Losses/Usage	0	0	0	0	0	0	0	0
Disposals/Retirements/Attritions/etc.	0	0	0	0	0	0	0	0
End of Year Asset Position	2133	1733	1352	961	1245	1256	1267	1278
Inventory Objective/Current Authorized Allowance	1141	1172	1163	1173	1173	1173	1173	1173
Example:								
Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)					
	PY thru FY96: 360	PY thru FY96: 0	PY thru FY96:					
	FY95: 727	FY95: 0	FY95: 0					
	FY94: 781	FY94: 0	FY94: 0					
	FY93: 0	FY93: 0	FY93: 0					
TOTAL:								
REMARKS Training Losses/Usage: Item expended after each firing. Updated to reflect Sponsor-directed Non-Combat Expenditure Allocation (NCEA) firings. MK46 Pressure Cylinder (Short) expended during EXTORP (tube, fixed wing, rotary wing) firings.								

Exhibit P-20, Requirements Study		Approp Code/BA 1507/		Subhead C3F8		Date: February 1998		
P-1 Line Item Nomenclature		Admin Leadtime (after Oct 1): 7 months				Prod Leadtime: 17 months		
F8001/MK89 Mod 1 Susp Bands	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Buy Summary QTY	0	0	500	1,200	900	900	900	900
Unit Cost			\$0.430	\$0.448	\$0.458	\$0.468	\$0.478	\$0.489
Total Cost	\$0	\$0	\$215	\$538	\$412	\$421	\$430	\$440
Asset Dynamics								
Beginning Asset Position	1597	5771	5445	4795	4133	3971	4509	4747
Deliveries from all prior year funding	4500	0	0	0	0	0	0	0
Spares deliveries from all prior year funding	0	0	0	0	0	0	0	0
Deliveries from FY 1997 funding	0	0	0	0	0	0	0	0
Deliveries from FY 1998 funding	0	0	0	0	500	0	0	0
Deliveries from FY 1999 funding	0	0	0	0	0	1,200	0	0
Deliveries from FY 2000 funding	0	0	0	0	0	0	900	0
Deliveries from FY 2001 funding	0	0	0	0	0	0	0	900
Combat Losses/Usage	0	0	0	0	0	0	0	0
Training Losses/Usage	326	326	650	662	662	662	662	662
Test Losses/Usage	0	0	0	0	0	0	0	0
Other Losses/Usage	0	0	0	0	0	0	0	0
Disposals/Retirements/Attritions/etc.	0	0	0	0	0	0	0	0
End of Year Asset Position	5771	5445	4795	4133	3971	4509	4747	4985
Inventory Objective/Current Authorized Allow	4102	4438	4774	4786	4786	4786	4786	4786
Example:								
Inventory	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)					
	PY thru FY96: 326	PY thru FY96: 0	PY thru FY96: 0					
	FY95: 0	FY95: 0	FY95: 0					
	FY94: 0	FY94: 0	FY94: 0					
	FY93: 0	FY93: 0	FY93: 0					
TOTAL:								
REMARKS Training Losses/Usage: Item expended after each firing. Updated to reflect Sponsor-directed Non-Combat Expenditure Allocation (NCEA) firings. Suspension bands expend MK46/MK50 Warshot, EXTORP (rotary and fixed wing), and REXTORP (rotary and fixed wing) firings. Inventory Objective: FY96-97 using old bands for MK50 firings only; FY98-03 increase due to use of MOD 1 bands for all MK46 and MK50 firings.								

Exhibit P-20, Requirements Study		Approp Code/BA 1507/		Subhead C3F8		Date: February 1998			
P-1 Line Item Nomenclature Lightweight Torpedo Support Equipment LI # 330100			Admin Leadtime (after Oct 1): 7 months			Prod Leadtime: 17 months			
Project Uni	NALC 5W14	PY	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3
F8001/MK50 MK33 Air Stabilizer		FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Buy Summary QTY		0	0	450	310	295	160	160	160
Unit Cost				\$1.123	\$1.148	\$1.173	\$1.199	\$1.225	\$1.252
Total Cost		\$0	\$0	\$505	\$356	\$346	\$192	\$196	\$200
Asset Dynamics									
Beginning Asset Position		250	250	217	59	0	291	442	578
Deliveries from all prior year funding		0	0	0	0	0	0	0	0
Spares deliveries from all prior year funding		0	87	0	100	0	0	0	0
Deliveries from FY 1997 funding		0	0	0	0	0	0	0	0
Deliveries from FY 1998 funding		0	0	0	0	450	0	0	0
Deliveries from FY 1999 funding		0	0	0	0	0	310	0	0
Deliveries from FY 2000 funding		0	0	0	0	0	0	295	0
Deliveries from FY 2001 funding		0	0	0	0	0	0	0	160
Combat Losses/Usage		0	0	0	0	0	0	0	0
Training Losses/Usage		0	120	158	159	159	159	159	159
Test Losses/Usage		0	0	0	0	0	0	0	0
Other Losses/Usage		0	0	0	0	0	0	0	0
Disposals/Retirements/Attritions/etc.		0	0	0	0	0	0	0	0
End of Year Asset Position		250	217	59	0	291	442	578	579
Inventory Objective/Current Authorized Allowance		578	737	776	777	777	777	777	777
Example:									
Inventory	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru	PY thru		PY thru					
	FY96: 0	FY96: 0	0	FY96: 0	0				
	FY95: 0	FY95: 0	0	FY95: 0	0				
	FY94: 0	FY94: 0	0	FY94: 0	0				
	FY93: 0	FY93: 0	0	FY93: 0	0				
TOTAL:									
REMARKS MK33 Air Stabilizer expended during EXTORP rotary wing special firings and REXTORP rotary wing NCER firings.									

Exhibit P-20, Requirements Study			Approp Code/BA 1507/		Subhead C3F8		Date: February 1998		
P-1 Line Item Nomenclature Lightweight Torpedo Support Equipment LI # 330100			Admin Leadtime (after Oct 1): 7 months			Prod Leadtime: 17 months			
Project Uni	NALC CWDN	PY	PY	CY	BY1	BY2	BY2+1	BY2+2	BY2+3
F8001/MK50 MK32 Air Stabilizer		FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Buy Summary QTY		374	0	400	371	408	400	400	400
Unit Cost		\$2.051		\$1.842	\$1.883	\$1.924	\$1.966	\$2.010	\$2.054
Total Cost		\$767	\$0	\$737	\$698	\$785	\$787	\$804	\$821
Asset Dynamics									
Beginning Asset Position		30	30	0	127	0	152	275	435
Deliveries from all prior year funding		0	0	374	0	0	0	0	0
Spares deliveries from all prior year funding		0	157	0	121	0	0	0	0
Deliveries from FY 1997 funding		0	0	0	0	0	0	0	0
Deliveries from FY 1998 funding		0	0	0	0	400	0	0	0
Deliveries from FY 1999 funding		0	0	0	0	0	371	0	0
Deliveries from FY 2000 funding		0	0	0	0	0	0	408	0
Deliveries from FY 2001 funding		0	0	0	0	0	0	0	400
Combat Losses/Usage		0	0	0	0	0	0	0	0
Training Losses/Usage		0	187	247	248	248	248	248	248
Test Losses/Usage		0	0	0	0	0	0	0	0
Other Losses/Usage		0	0	0	0	0	0	0	0
Disposals/Retirements/Attritions/etc.		0	0	0	0	0	0	0	0
End of Year Asset Position		30	0	127	0	152	275	435	587
Inventory Objective/Current Authorized Allowance		734	982	1043	1044	1044	1044	1044	1044
Example:									
Inventory	Actual Training Expenditures	Other than Training Usage		Disposals (Vehicles/Other)					
	PY thru	PY thru		PY thru					
	FY96: 0	FY96: 0	0	FY96: 0	0				
	FY95: 0	FY95: 0	0	FY95: 0	0				
	FY94: 0	FY94: 0	0	FY94: 0	0				
	FY93: 0	FY93: 0	0	FY93: 0	0				
TOTAL:									
REMARKS MK32 Air Stabilizer expended during EXTORP fixed wing special firings and REXTORP fixed wing NCER firings.									

Exhibit P-20, Requirements Study		Approp Code/BA 1507/		Subhead C3F8		Date: February 1998		
P-1 Line Item Nomenclature Heavyweight Torpedo Support Equipment LI# 330100			Admin Leadtime (after Oct 1): 7 months			Prod Leadtime: 17 months		
Project Unit/Item F8100/Torpedo Wire Coil	PY FY 1996	PY FY 1997	CY FY 1998	BY1 FY 1999	BY2 FY 2000	BY2+1 FY 2001	BY2+2 FY 2002	BY2+3 FY 2003
Buy Summary QTY	0	0	500	0	1,000	870	580	600
Unit Cost	\$0.000	\$0.000	\$2.500	\$2.553	\$2.606	\$2.661	\$2.717	\$2.776
Total Cost	0	\$0	\$1,250	\$0	\$2,606	\$2,315	\$1,576	\$1,666
Asset Dynamics								
Beginning Asset Position	5551	4728	3805	2842	1994	1707	950	1192
Deliveries from all prior year funding	0	0	0	0	0	0	0	0
Deliveries from FY 1997 funding	0	0	0	0	0	0	0	0
Deliveries from FY 1998 funding	0	0	0	0	500	0	0	0
Deliveries from FY 1999 funding	0	0	0	0	0	0	0	0
Deliveries from FY 2000 funding	0	0	0	0	0	0	1,000	0
Deliveries from FY 2001 funding	0	0	0	0	0	0	0	870
Combat Losses/Usage	0	0	0	0	0	0	0	0
Training Losses/Usage	823	923	963	848	787	757	758	748
Test Losses/Usage	0	0	0	0	0	0	0	0
Other Losses/Usage	0	0	0	0	0	0	0	0
Disposals/Retirements/Attritions/etc.	0	0	0	0	0	0	0	0
End of Year Asset Position	4728	3805	2842	1994	1707	950	1192	1314
Inventory Objective/Current Authorized Allow	2709	2734	2598	2392	2302	2263	2263	2263
Example:								
Inventory	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)					
	FY96: 823	FY96: 0	FY96: 0					
	FY95: 849	FY95: 0	FY95: 0					
	FY94: 916	FY94: 0	FY94: 0					
	FY93: 1030	FY93: 0	FY93: 0					
TOTAL:								
REMARKS Training Losses/Usage: Reflect Sponsor-directed firings.								

Exhibit P-20, Requirements Study	Approp Code/BA 1507/		Subhead C3F8		Date: February 1998			
P-1 Line Item Nomenclature Heavyweight Torpedo Support Equipment LI# 330100		Admin Leadtime (after Oct 1): 7 months			Prod Leadtime: 17 months			
Project Unit/Item F8100/Submarine Wire Coil	PY FY 1996	PY FY 1997	CY FY 1998	BY1 FY 1999	BY2 FY 2000	BY2+1 FY 2001	BY2+2 FY 2002	BY2+3 FY 2003
Buy Summary QTY	0	500	0	750	750	750	750	750
Unit Cost		\$2.000	\$2.044	\$2.087	\$2.131	\$2.175	\$2.221	\$2.268
Total Cost	0	\$1,000	\$0	\$1,565	\$1,598	\$1,632	\$1,666	\$1,701
Asset Dynamics								
Beginning Asset Position	3517	2694	2779	1873	1556	795	811	827
Deliveries from all prior year funding	0	872	0	0	0	0	0	0
Deliveries from FY 1997 funding	0	0	0	500	0	0	0	0
Deliveries from FY 1998 funding	0	0	0	0	0	0	0	0
Deliveries from FY 1999 funding	0	0	0	0	0	750	0	0
Deliveries from FY 2000 funding	0	0	0	0	0	0	750	0
Deliveries from FY 2001 funding	0	0	0	0	0	0	0	750
Combat Losses/Usage	0	0	0	0	0	0	0	0
Training Losses/Usage	823	787	906	817	761	734	734	725
Test Losses/Usage	0	0	0	0	0	0	0	0
Other Losses/Usage	0	0	0	0	0	0	0	0
Disposals/Retirements/Attritions/etc.	0	0	0	0	0	0	0	0
End of Year Asset Position	2694	2779	1873	1556	795	811	827	852
Inventory Objective/Current Authorized	2516	2510	2484	2312	2229	2193	2193	2193
Example:								
Inventory	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)					
	FY96: 823	FY96: 0	FY96:					
	FY95: 849	FY95: 0	FY95: 0					
	FY94: 916	FY94: 0	FY94: 0					
	FY93: 1030	FY93: 0	FY93: 0					
TOTAL:								
REMARKS Training Losses/Usage: Reflect Sponsor-directed firings.								

Exhibit P-20, Requirements Study		Approp Code/BA 1507/		Subhead C3F8		Date: February 1998		
P-1 Line Item Nomenclature Heavyweight Torpedo Support Equipment LI# 330100			Admin Leadtime (after Oct 1): 7 months			Prod Leadtime: 17 months		
Project Unit/Item F8100/Flex Hose (Improved)	PY FY 1996	PY FY 1997	CY FY 1998	BY1 FY 1999	BY2 FY 2000	BY2+1 FY 2001	BY2+2 FY 2002	BY2+3 FY 2003
Buy Summary QTY	0	515	500	500	750	750	748	754
Unit Cost		\$2.325	\$1.700	\$1.736	\$1.772	\$1.809	\$1.847	\$1.886
Total Cost	0	\$1,197	\$850	\$868	\$1,329	\$1,357	\$1,382	\$1,422
Asset Dynamics								
Beginning Asset Position	0	982	2656	1920	1752	1610	1486	1584
Deliveries from all prior year funding	2305	2106	0	0	0	0	0	0
Deliveries from FY 1997 funding	0	0	0	515	0	0	0	0
Deliveries from FY 1998 funding	0	0	0	0	500	0	0	0
Deliveries from FY 1999 funding	0	0	0	0	0	500	0	0
Deliveries from FY 2000 funding	0	0	0	0	0	0	750	0
Deliveries from FY 2001 funding	0	0	0	0	0	0	0	750
Combat Losses/Usage	0	0	0	0	0	0	0	0
Training Losses/Usage	0	432	736	683	642	624	652	680
Test Losses/Usage	0	0	0	0	0	0	0	0
Other Losses/Usage	1323	0	0	0	0	0	0	0
Disposals/Retirements/Attritions/etc.	0	0	0	0	0	0	0	0
End of Year Asset Position	982	2656	1920	1752	1610	1486	1584	1654
Inventory Objective/Current Authorized Allow	2491	1851	2061	1949	1918	1956	1956	1956
Example:								
Inventory	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)					
	FY96: 823	FY96: 0	FY96:					
	FY95: 849	FY95: 0	FY95: 0					
	FY94: 916	FY94: 0	FY94: 0					
	FY93: 1030	FY93: 0	FY93: 0					
TOTAL:								
REMARKS Training Losses/Usage: Reflect Sponsor-directed firings for Improved Flex Hose. Other Losses/Usage: New item installed in Torpedo Mounted Dispenser (TMD) FY96 and introduced to Fleet in FY97. Prior Year usage reflects Standard Flex Hose firings; FY97-FY03 Training Losses/Usage reflects Improved Flex Hose firings only.								

F8100/Otto Fuel II	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Buy Summary QTY (1,000 lbs. Per Unit)	123	392	285	295	300	400	400	400
Unit Cost	\$5.410	\$5.340	\$6.880	\$7.031	\$7.186	\$7.344	\$7.506	\$7.671
Total Cost	\$665	\$2,093	\$1,961	\$2,074	\$2,156	\$2,938	\$3,002	\$3,068
Asset Dynamics								
Beginning Asset Position	466	674	636	751	942	1054	1083	1012
Deliveries from Other Sources (Reclamation)	230	229	225	223	222	119	20	20
Deliveries from all prior year funding	473	154	123	0	0	0	0	0
Deliveries from FY 1997 funding	0	0	239	392	0	0	0	0
Deliveries from FY 1998 funding	0	0	0	0	285	0	0	0
Deliveries from FY 1999 funding	0	0	0	0	0	295	0	0
Deliveries from FY 2000 funding	0	0	0	0	0	0	300	0
Deliveries from FY 2001 funding	0	0	0	0	0	0	0	400
Combat Losses/Usage	0	0	0	0	0	0	0	0
Training Losses/Usage	495	421	472	424	395	385	391	399
Test Losses/Usage	0	0	0	0	0	0	0	0
Other Losses/Usage	0	0	0	0	0	0	0	0
Disposals/Retirements/Attritions/etc.	0	0	0	0	0	0	0	0
End of Year Asset Position	674	636	751	942	1054	1083	1012	1033
Inventory Objective/Current Authorized Allowance	1388	1317	1291	1204	1171	1175	1175	1175
Example:								
Inventory Objective	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)					
	FY96: 495	FY96: 0	FY96: 0					
	FY95: 440	FY95: 0	FY95: 0					
	FY94: 410	FY94: 0	FY94: 0					
	FY93: 445	FY93: 0	FY93: 0					
TOTAL:								
REMARKS Training Losses/Usage: Reflect Sponsor-directed firings. Deliveries from Other Sources: Adjusted to reflect reclaimed Otto fuel. FY01 decrease in reclamation due to the completion of Deep Stow.								

Exhibit P-20, Requirements Study	Approp Code/BA 1507/		Subhead C3F8		Date: February 1998			
P-1 Line Item Nomenclature Heavyweight Torpedo Support Equipment LI# 330100			Admin Leadtime (after Oct 1): 7 months		Prod Leadtime: 17 months			
Project Unit/Item F8100/Igniter	PY FY 1996	PY FY 1997	CY FY 1998	BY1 FY 1999	BY2 FY 2000	BY2+1 FY 2001	BY2+2 FY 2002	BY2+3 FY 2003
Buy Summary QTY	1,101	0	0	1,000	1,000	1,000	1,000	850
Unit Cost	\$0.133	\$0.136	\$0.139	\$0.141	\$0.145	\$0.148	\$0.151	\$0.155
Total Cost	\$146	\$0	\$0	\$141	\$145	\$148	\$151	\$132
Asset Dynamics								
Beginning Asset Position	8544	7721	6798	6936	6088	5301	5544	5786
Deliveries from all prior year funding	0	0	1,101	0	0	0	0	0
Deliveries from FY 1997 funding	0	0	0	0	0	0	0	0
Deliveries from FY 1998 funding	0	0	0	0	0	0	0	0
Deliveries from FY 1999 funding	0	0	0	0	0	1,000	0	0
Deliveries from FY 2000 funding	0	0	0	0	0	0	1,000	0
Deliveries from FY 2001 funding	0	0	0	0	0	0	0	1,000
Combat Losses/Usage	0	0	0	0	0	0	0	0
Training Losses/Usage	823	923	963	848	787	757	758	748
Test Losses/Usage	0	0	0	0	0	0	0	0
Other Losses/Usage	0	0	0	0	0	0	0	0
Disposals/Retirements/Attritions/etc.	0	0	0	0	0	0	0	0
End of Year Asset Position	7721	6798	6936	6088	5301	5544	5786	6038
Inventory Objective/Current Authorized Allow	2709	2734	2598	2392	2302	2263	2263	2263
Example:								
Inventory	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)					
	FY96: 823	FY96: 0	FY96: 0					
	FY95: 849	FY95: 0	FY95: 0					
	FY94: 916	FY94: 0	FY94: 0					
	FY93: 1030	FY93: 0	FY93: 0					
TOTAL:								
REMARKS Training Losses/Usage: Reflect Sponsor-directed firings. End Year Inventories include use of Chamber and Valves (C&V) that had Ignitor pre-installed.								

P-1 Shopping List Item No

Exhibit P-20, Requirements Study	Approp Code/BA 1507/		Subhead C3F8	Date: February 1998				
P-1 Line Item Nomenclature Heavyweight Torpedo Support Equipment LI# 330100			Admin Leadtime (after Oct 1): 7 months		Prod Leadtime: 17 months			
Project Unit/Item F8100/Propellant (Long)	PY FY 1996	PY FY 1997	CY FY 1998	BY1 FY 1999	BY2 FY 2000	BY2+1 FY 2001	BY2+2 FY 2002	BY2+3 FY 2003
Buy Summary QTY	1,000	0	1,500	500	1,000	500	1,000	1,000
Unit Cost	\$0.500	\$0.500	\$0.565	\$0.577	\$0.589	\$0.601	\$0.614	\$0.627
Total Cost	\$500	\$0	\$848	\$288	\$589	\$301	\$614	\$627
Asset Dynamics								
Beginning Asset Position	1338	1000	670	877	163	995	848	1172
Deliveries from all prior year funding	0	0	1,000	0	0	0	0	0
Deliveries from FY 1997 funding	0	0	0	0	0	0	0	0
Deliveries from FY 1998 funding	0	0	0	0	1,500	0	0	0
Deliveries from FY 1999 funding	0	0	0	0	0	500	0	0
Deliveries from FY 2000 funding	0	0	0	0	0	0	1,000	0
Deliveries from FY 2001 funding	0	0	0	0	0	0	0	500
Combat Losses/Usage	0	0	0	0	0	0	0	0
Training Losses/Usage	0	270	793	714	668	647	676	703
Test Losses/Usage	0	0	0	0	0	0	0	0
Other Losses/Usage	338	60	0	0	0	0	0	0
Disposals/Retirements/Attritions/etc.	0	0	0	0	0	0	0	0
End of Year Asset Position	1000	670	877	163	995	848	1172	969
Inventory Objective/Current Authorized A	1461	1837	2175	2029	1991	2026	2026	2026
Example:								
Inventory	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)					
	FY96: 823	FY96: 0	FY96: 0					
	FY95: 849	FY95: 0	FY95: 0					
	FY94: 916	FY94: 0	FY94: 0					
	FY93: 1030	FY93: 0	FY93: 0					
TOTAL:								
REMARKS Training Losses/Usage: Reflect Sponsor-directed firings; new item introduced to Fleet FY97. Prior Year expenditures reflect Short Grain Propellant firings; FY97-FY03 usage reflects Long Grain firings only. Other Losses/Usage: Reflect installations into Chamber and Valves (C&V), FY96-FY97.								

Exhibit P-20, Requirements Study		Approp Code/BA 1507/		Subhead C3F8		Date: February 1998		
P-1 Line Item Nomenclature Heavyweight Torpedo Support Equipment LI# 330100			Admin Leadtime (after Oct 1): 7 months			Prod Leadtime: 17 months		
Project Unit/Item F8100/Umbilical Cables (Impro	PY FY 1996	PY FY 1997	CY FY 1998	BY1 FY 1999	BY2 FY 2000	BY2+1 FY 2001	BY2+2 FY 2002	BY2+3 FY 2003
Buy Summary QTY	362	330	410	377	186	0	0	0
Unit Cost	\$3.248	\$5.865	\$5.988	\$6.120	\$6.254	\$6.392	\$6.533	\$6.676
Total Cost	\$1,176	\$1,935	\$2,455	\$2,307	\$1,163	\$0	\$0	\$0
Asset Dynamics								
Beginning Asset Position	0	0	1228	1442	1635	1916	2168	2223
Deliveries from all prior year funding	0	1267	362	0	0	0	0	0
Deliveries from FY 1997 funding	0	0	0	330	0	0	0	0
Deliveries from FY 1998 funding	0	0	0	0	410	0	0	0
Deliveries from FY 1999 funding	0	0	0	0	0	377	0	0
Deliveries from FY 2000 funding	0	0	0	0	0	0	186	0
Deliveries from FY 2001 funding	0	0	0	0	0	0	0	0
Combat Losses/Usage	0	0	0	0	0	0	0	0
Training Losses/Usage	0	39	148	137	129	125	131	136
Test Losses/Usage	0	0	0	0	0	0	0	0
Other Losses/Usage	0	0	0	0	0	0	0	0
Disposals/Retirements/Attritions/etc.	0	0	0	0	0	0	0	0
End of Year Asset Position	0	1228	1442	1635	1916	2168	2223	2087
Inventory Objective/Current Authorized All	2369	2369	2369	2369	2369	2369	2369	2369
Example:								
Inventory	Actual Training Expenditures	Other than Training Usage	Disposals (Vehicles/Other)					
	FY96: 0	FY96: 0	FY96: 0					
	FY95: 0	FY95: 0	FY95: 0					
	FY94: 0	FY94: 0	FY94: 0					
	FY93: 0	FY93: 0	FY93: 0					
TOTAL:								
REMARKS Training Losses/Usage: Reflect Sponsor-directed firings; new cable can be reused up to 5 times before replacement. Fleet introduction of new cable to be complete FY99.								

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: February 1998					
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy BA 3 - Torpedoes and Related Equipment								P-1 ITEM NOMENCLATURE ASW Range Support/330200					
Program Element for Code B Items:								Other Related Program Elements					
	Prior Years	ID Code			FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													
COST (In Millions)					\$14.4	\$11.5	\$14.7	\$15.4	\$13.4	\$13.2	\$13.5		\$96.1
<p>The ASW Range support program provides training range equipment, weapon proofing range equipment, and Fleet support equipment for use on the Navy's underwater ranges. This equipment is used to instrument Fleet exercises and torpedo firings, ASW readiness assessment and ASW weapon production acceptance testing. The Weapon Fleet training ranges supported are Southern California Offshore Range (SCORE), Barking Sands Tactical Underwater Range/Barking Sands Underwater Range Extension (BARSTUR/BSURE), Atlantic Underwater Test and Evaluation Center (AUTEC) and Atlantic Fleet Weapons Training Facility (AFWTF). Test and Evaluation (T&E) ranges are Nanoose, Dabob Bay and Quinalt.</p> <p>F4001 - Pinger Exercise Components are placed in weapons and other underwater vehicles for tracking during training and T&E exercises, and to insure safe operation and movement of all craft and weapons on the ranges. In addition, pinger components are also procured to support the future Shallow Water Training Ranges at both coasts and Hawaii.</p> <p>F4003 - Recovery Equipment is used on T&E ranges for recovering weapons on or buried in the sea floor. Approximately \$20 million of hardware is recovered each year using these devices.</p> <p>F4004 - The T&E Range Equipment line provides for improvement and modernization of the Underwater Weapons Evaluation Facility; range equipment for YTT (Yard Torpedo Tender) and test crafts; portable tracking range components used at remote sites for testing requirements in different sea-bottom, littoral and cold water environments; and other range systems in support of weapon T&E operations.</p> <p>F4005 - The ASW Target MK 30 Mod 1 provides essential fleet ASW training on the Navy's underwater tracking ranges. The MK 30 Mod 1 is currently used at the BARSTUR - Hawaii, AUTEC- Bahamas, AFWTF - St. Croix, Virgin Islands and SCORE. ASW range support funds are used to procure components for the MK 30 that are consumed/expended during fleet in-water runs. These funds are also used to replace obsolete components and improve maintenance and reliability of the targets.</p> <p>F4006 - The stationary target components include the MK 28 Targets, the MK 69 Target, and the Over-the-Side (OTS) Target. MK 28 Targets are used for conducting Service Weapons Test (SWT) on in-service and advanced warshot torpedoes. The SWT is the only test the Navy has to verify the explosive chain of torpedoes. Funding is used to procure target systems and components expended during SWT operations in addition to improvement and modernization projects. The MK 69 is a bottom mounted stationary target and Over-the-side (OTS) is a surface deployed target used to test various weapon attributes during T&E exercises. These targets are needed to fill specific technical requirements for the MK 48 ADCAP and MK 50 torpedoes. Funding is used to procure components that improve operability and maintenance of the target.</p> <p>Production Engineering funds support efforts performed by a field activity or contractor during the production phase of these projects.</p>													

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS P-5							Weapon System			DATE: February 1998				
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy BA 3 - Torpedoes and Related Equipment						ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD ASW Range Support (83F4)							
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
						FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	<u>N85</u>													
F4001	Pinger Exercise Components							132			-			-
	<u>N86</u>													
F4001	Pinger Exercise Components							103			253			386
F4002	Proofing Pinger Components							206			-			-
F4003	Recovery Equipment							105			83			142
F4004	Test & Evaluation Range Equipment							286			222			373
F4005-30	MK30 Components							-			-			-
F4005-R	Stationary Target Components							187			-			-
F4006	Stationary Target Components							-			120			183
F4830	Production Engineering In-House							84			66			77
F4840	Quality Assurance - In-House							46			-			-
F4850	Product Improvement							94			52			59
F4860	Acceptance Test & Evaluation In-House							62			-			-
F4900	Production Engineering - Contractors							54			46			51
	<u>N87</u>													
F4001	Pinger Exercise Components							451			1,328			1,652
F4002	Proofing Pinger Components							901			-			-
F4003	Recovery Equipment							460			453			641
F4004	Test & Evaluation Range Equipment							1,252			1,267			1,759
F4005-30	MK30 Components							-			-			-
F4005-R	Stationary Target Components							820			-			-
F4006	Stationary Target Components							-			656			820
F4830	Production Engineering In-House							370			361			345
F4840	Quality Assurance - In-House							202			-			-
F4850	Product Improvement							413			284			267
F4860	Acceptance Test & Evaluation In-House							270			-			-
F4900	Production Engineering - Contractors							236			250			232
	<u>N88</u>													
F4001	Pinger Exercise Components							511			419			528
F4005-30	MK30 Components							-			-			-
F4830	Production Engineering In-House							78			68			68
F4840	Quality Assurance - In-House							52			-			-
F4850	Product Improvement							104			69			53
F4860	Acceptance Test & Evaluation In-House							26			-			-
F4900	Production Engineering - Contractors							60			54			67
SUBTOTAL RANGE Components							0				6,051			7,703

CLASSIFICATION:

UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS P-5							Weapon System			DATE: February 1998				
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy BA 3 - Torpedoes and Related Equipment					ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD ASW Range Support (83F4)								
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			FY 1997			FY 1998			FY 1999					
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	<u>N85</u>													
F4001	Pinger Exercise Components													
	<u>N86</u>													
F4001	Pinger Exercise Components													
F4002	Proofing Pinger Components													
F4003	Recovery Equipment													
F4004	Test & Evaluation Range Equipment													
F4005-30	MK30 Components					765		415					516	
F4005-R	Stationary Target Components													
F4006	Stationary Target Components													
F4830	Production Engineering In-House					56		85					136	
F4840	Quality Assurance - In-House													
F4850	Product Improvement					117		114					241	
F4860	Acceptance Test & Evaluation In-House													
F4900	Production Engineering - Contractors					15		10					10	
	<u>N87</u>													
F4001	Pinger Exercise Components													
F4002	Proofing Pinger Components													
F4003	Recovery Equipment													
F4004	Test & Evaluation Range Equipment													
F4005-30	MK30 Components					3,319		2,107					2,664	
F4005-R	Stationary Target Components													
F4006	Stationary Target Components													
F4830	Production Engineering In-House					243		468					610	
F4840	Quality Assurance - In-House													
F4850	Product Improvement					514		626					792	
F4860	Acceptance Test & Evaluation In-House													
F4900	Production Engineering - Contractors					67		57					46	
	<u>N88</u>													
F4001	Pinger Exercise Components													
F4005-30	MK30 Components					1,551		1,338					1,606	
F4830	Production Engineering In-House					51		88					120	
F4840	Quality Assurance - In-House													
F4850	Product Improvement					129		153					215	
F4860	Acceptance Test & Evaluation In-House													
F4900	Production Engineering - Contractors					17		12					13	
SUBTOTAL Target Components								6,844					5,473	
TOTAL								14,409					11,524	

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET							DATE:	
P-40							February 1998	
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE			
Weapons Procurement, Navy BA - 3 Torpedoes and Related Equipment					BLI 2410 FIRST DESTINATION TRANSPORTATION (FDT) / 93TA			
		FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (In Millions)		2.6	1.8	2.0	2.0	2.0	2.1	2.1
First Destination Transportation (FDT) provides for the movement of newly procured equipment and material from the contractor's plant to the initial point of receipt for subsequent shipment to its destination.								

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS								DATE:			
P-5								February 1998			
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM NOMENCLATURE/SUBHEAD						
Weapons Procurement, Navy					First Destination Transportation (FDT) / 93TA						
BA 3 Torpedoes and Related Equipment											
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS								
					FY 1997		FY 1998		FY 1999		
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	
TA001	First Destination Transportation					2,554			1,764		1,979
			0		2,554			1,764		1,979	

UNCLASSIFIED

UNCLASSIFIED

Department of the Navy

FY 1999 Procurement Program

Exhibit P-1

APPROPRIATION: 1507N Weapons Procurement, Navy

DATE: 01/23/98

LINE NO	ITEM NOMENCLATURE	IDENT CODE	(DOLLARS) FY 1999 UNIT COST	TOA, \$ IN MILLIONS				S E C	
				-----FY 1997----- QUANTITY	-----FY 1997----- COST	-----FY 1998----- QUANTITY	-----FY 1998----- COST		-----FY 1999----- QUANTITY
BUDGET ACTIVITY 04: Other Weapons									

Guns And Gun Mounts									
30	4129 Small Arms and Weapons	A			.8		1.0	.9	U
Modification Of Guns And Gun Mounts									
31	4205 CIWS Mods	A			20.0		24.4	2.8	U
32	4210 5/54 Gun Mount Mods	A			2.8		10.0	.9	U
33	4213 MK-75 76MM Gun Mount Mods	A			.7		-	2.0	U
34	4220 Mods Under \$2 Million	A			1.6		1.3	1.3	U
Other									
35	4222 Pioneer	A			-		48.4	19.4	U
36	4500 Cancelled Account Adjustments	A			.1		-	-	U
37	4501 Cancelled Account Adjustments	A			.*		-	-	U
38	4502 Cancelled Account Adjustments	A			1.1		-	-	U
39	4610 Judgement Fund	A			9.5		-	-	U
TOTAL Other Weapons					36.6		85.0	27.2	
* ITEMS UNDER \$50,000									

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

Identification code	17-1507-0-1-051	Budget Plan (amounts for PROCUREMENT actions programed)			Obligations		
		1997 actual	1998 est.	1999 est.	1997 actual	1998 est.	1999 est.
Program by activities:							
Direct program:							
00.0101	Ballistic missiles	314,815	269,834	323,650	366,815	286,465	292,984
00.0201	Other missiles	830,648	618,864	832,908	926,354	600,517	740,014
00.0301	Torpedoes and related equipment	108,108	92,621	97,837	100,236	111,289	105,517
00.0401	Other weapons	36,636	85,022	27,232	34,966	73,804	39,515
00.0601	Spares and repair parts	41,809	21,422	45,918	47,140	31,335	46,165
00.9101	Total direct program	1,332,016	1,087,763	1,327,545	1,475,511	1,103,410	1,224,195
01.0101	Reimbursable program	21,000	74,800	74,800	243	95,800	74,800
10.0001	Total	1,353,016	1,162,563	1,402,345	1,475,754	1,199,210	1,298,995
Financing:							
Offsetting collections from:							
11.0001	Federal funds(-)	-21,000	-74,800	-74,800	-15,784	-74,800	-74,800
17.0001	Recovery of prior year obligations				-12,077		
Unobligated balance available, start of year:							
21.4002	For completion of prior year budget plans				-448,823	-311,568	-274,920
21.4003	Available to finance new budget plans	-16,000	-6,726		-16,000	-6,726	
21.4009	Reprogramming from/to prior year budget plan	-21,378					
22.1001	Unobligated balance transferred to other acco		6,726			6,726	
Unobligated balance available, end of year:							
24.4002	For completion of prior year budget plans				311,568	274,920	378,270
24.4003	Available to finance subsequent year budget	6,726			6,726		
25.0001	Unobligated balance expiring	21,378			21,378		
39.0001	Budget authority	1,322,742	1,087,763	1,327,545	1,322,742	1,087,763	1,327,545
Budget authority:							
40.0001	Appropriation	1,364,231	1,102,193	1,327,545	1,364,231	1,102,193	1,327,545
40.7601	Reduction pursuant to P.L. 105-56 (-), 8041		-21,230			-21,230	
41.0001	Transferred to other accounts (-)	-41,489			-41,489		
42.0001	Transferred from other accounts		6,800			6,800	
43.0001	Appropriation (adjusted)	1,322,742	1,087,763	1,327,545	1,322,742	1,087,763	1,327,545

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

Identification code	17-1507-0-1-051	Budget Plan (amounts for PROCUREMENT actions programed)			Obligations		
		1997 actual	1998 est.	1999 est.	1997 actual	1998 est.	1999 est.
Relation of obligations to outlays:							
71.0001	Obligations incurred				1,459,970	1,124,410	1,224,195
72.1001	Orders on hand, SOY				-37,434	-34,608	-34,608
72.4001	Obligated balance, start of year				3,286,784	2,765,572	2,270,295
74.1001	Orders on hand, EOY				34,608	34,608	34,608
74.4001	Obligated balance, end of year				-2,765,572	-2,270,295	-2,109,757
77.0001	Adjustments in expired accounts (net)				15,891		
78.0001	Adjustments in unexpired accounts				-12,077		
90.0001	Outlays (net)				1,982,170	1,619,687	1,384,733

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

Identification code	17-1507-0-1-051	1997 actual	1998 est.	1999 est.

Direct obligations:				
122.001	Transportation of things	2,566	2,008	2,028
125.101	Advisory and assistance services	23,256	24,591	24,701
	Purchases goods/services (inter/intra) Fed accounts			
125.303	Purchases from revolving funds	200,392	203,192	179,946
126.001	Supplies and materials	78,820	70,461	82,862
131.001	Equipment	1,170,477	803,158	934,658
		-----	-----	-----
199.001	Total Direct obligations	1,475,511	1,103,410	1,224,195
Reimbursable obligations:				
226.001	Supplies and materials	243	95,800	21,900
231.001	Equipment			52,900
		-----	-----	-----
299.001	Total Reimbursable obligations	243	95,800	74,800
		-----	-----	-----
999.901	Total obligations	1,475,754	1,199,210	1,298,995

Comparison of FY 1998 Program Requirements as Reflected
in the FY 1998 Budget with FY 1998 Program Requirements as
Shown in FY 1999 Budget (In Thousands of Dollars)

	FY 1998 Total Program Requirements <u>Per FY 1998 Budget</u>	FY 1998 Program Requirements <u>Per FY 1999 Budget</u>	Increase (+) or Decrease (-)
Ballistic Missiles	341,412	269,834	-71,578
Other Missiles	612,993	618,864	+5,871
Torpedoes and Related Equipment	95,715	92,621	-3,094
Other Weapons	59,230	85,022	+25,792
Spares and Repair Parts	26,943	21,422	-5,521
Subtotal Direct Program	1,136,293	1,087,763	-48,530
Reimbursable	74,800	74,800	-
Total Fiscal Year	1,211,093	1,162,563	-48,530

Explanation of Changes in FY 1998 Program Requirements

1. Ballistic Missiles (-\$71.6 million)
Decrease reflects Congressional undistributed and inflation reductions (-\$6.6 million) and a program reduction of 2 Trident II missiles (-\$65.0 million) to slow the production rate of Trident II missiles specifically earmarked for the D5 Backfit submarines.
2. Other Missiles (+\$5.9 million)
Changes include Congressional adjustments to JSOW (+\$5.0 million), Standard Missile (-\$15.4 million), Hellfire (+\$20.0 million), Penguin (+\$7.5 million), Aerial Targets (-\$7.0 million), ESSM (-\$5.0 million), Standard Missile Modifications (+\$15.3 million), and Weapons Industrial Facility (-\$4.5 million). Reprogrammings requiring Congressional approval include the SLAM-ER program (+\$9.0 million) and RAM (-\$2.0 million) are also part of the change. Adjustments also include Congressional undistributed general and inflation reductions (-\$17.0 million).
3. Torpedoes and Related Equipment (-\$3.1 million)
Changes include Congressional undistributed general and inflation reductions (-\$2.9 million) and a reprogramming requiring Congressional approval to the First Destination Transportation program (-\$0.2 million).
4. Other Weapons (+\$25.8 million)
Changes include Congressional adjustments for the Close-In-Weapons-System (+\$15.0 million), 5/54 Gun Mount Modifications (+\$10.0 million), and Pioneer (+\$3.0 million) and Congressional undistributed reductions (-\$2.2 million).
6. Spares & Repair Parts (\$-5.5 million)
Changes include adjustments for Congressional reductions (-\$5.0 million) and undistributed Congressional reductions (-\$.5 million).

Comparison of FY 1998 Financing as Reflected in the FY 1998 Budget
with FY 1998 Financing as Shown in FY 1998 Budget
(In Thousands of Dollars)

	FY 1998 Financing Per <u>FY 1998 Budget</u>	FY 1998 Financing Per <u>FY 1999 Budget</u>	Increase (+) Decrease (-)
Program Requirements (Total)			
Program Requirements (Direct)	(1,136,293)	(1,087,763)	(-48,530)
Program Requirements (Reimb)	(74,800)	(74,800)	
Less:			
Anticipated Reimbursements	74,800	74,800	-
Add:			
Unob bal avail, start of year to finance new budget plans		-6,726	-6,726
Unob bal transferred to other accts		6,726	6,726
Appropriation Adjusted	1,136,293	1,087,763	-48,530
Budget Authority:			
FY 1998 DoD Appropriations Act	1,136,293	1,102,193	-34,100
Reduct Pursuant to P. L. 105-56		-21,230	-21,230
Transferred from other accounts		6,800	+6,800
Appropriation (Adjusted)	1,136,293	1,087,763	-48,530

Explanation of Changes in Financing

The \$48.5 million change in program financing is the net result of Congressional specific (-\$34.1 million) and undistributed general reductions (-\$21.2 million); and Prior Approval Congressional reprogrammings associated with a more cost efficient procurement profile for the SLAM-ER program (+\$9.0 million), and funding from RAM (-\$2.0 million) and First Destination Transportation (-\$0.2 million) funding to fund emergent DOD requirements.

Comparison of FY 1997 Program Requirements as Reflected
in the FY 1998 Budget with FY 1997 Program
Requirements as Shown in FY 1999 Budget (In Thousands of Dollars)

	FY 1997 Total Program Requirements <u>Per FY 1998 Budget</u>	FY 1997 Total Program Requirements <u>Per FY 1999 Budget</u>	Increase (+) or Decrease (-)
Ballistic Missiles	316,332	314,815	-1,517
Other Missiles	844,202	830,648	-13,554
Torpedoes and Related Equipment	120,594	108,108	-12,486
Other Weapons	30,815	36,636	+5,821
Spares and Repair Parts	46,490	41,809	-4,681
Subtotal Direct Program	1,358,433	1,332,016	-26,417
Reimbursable	74,800	21,000	-53,800
Total Fiscal Year	1,433,233	1,353,016	-80,217

Explanation of Changes in FY 1997 Program Requirements

1. Ballistic Missiles (-\$1.5 million)

Change is a result of revised economic assumption reflected in the FY 1997 Supplemental Appropriation (-\$1.3 million) and minor below threshold reprogramming actions (-\$0.2 million).

2. Other Missiles (-\$13.6 million)

Change reflects a reduction to AMRAAM (-\$4.2 million) to fund the AEGIS Baseline Consolidation effort; and a net increase to fund additional MA-31 Aerial Target procurement (\$1.5 million). Adjustments were also associated with revised economic assumptions reflected in the FY 1997 Supplemental Appropriation (-\$3.6 million), and minor below threshold reprogramming actions.

3. Torpedoes and Related Equipment (-\$12.5 million)

Change reflects minor below threshold reprogrammings (-\$9.4 million), and reductions associated with the revised economic assumptions reflected in the FY 1997 Supplemental appropriation (-\$0.5 million). Reduction also include funding reprogrammed to support the AEGIS Baseline Consolidation effort (-\$2.5 million).

4. Other Weapons (+\$5.8 million)

Change reflects minor below threshold reprogrammings (+\$6.0 million) and revised economic assumption reflected in the FY 1997 Supplemental Appropriation (-\$0.1 million).

6. Spares & Repair Parts (-\$4.7 million)

Change reflects minor below threshold reprogrammings (-\$4.5 million) and revised economic assumptions reflected in the FY 1997 Supplemental Appropriation (-\$0.2 million).

Comparison of FY 1997 Financing as Reflected in the FY 1998 Budget
with FY 1997 Financing as Shown in FY 1999 Budget
(In Thousands of Dollars)

	FY 1997 Financing Per FY 1998 Budget	FY 1997 Financing Per FY 1999 Budget	Increase (+) Decrease (-)
Program Requirements (Total)	1,433,233	1,353,016	-80,217
Program Requirements (Direct)	(1,358,433)	(1,332,016)	(-26,417)
Program Requirements (Reimb)	(74,800)	(21,000)	(-53,800)
Less:			
Anticipated Reimbursements	-74,800	-21,000	-53,800
Add:			
Federal Funds (-):	-	-21,000	-21,000
Available to finance new budget plans	-	-16,000	-16,000
Reprogrammed from/to prior year budget plan:	-	-21,378	-21,378
Available to finance subsequent year budget:	-	6,726	+6,726
Unobligated balance expiring	-	21,378	+21,378
Appropriation Adjusted	1,358,433	1,322,742	-35,691
Budget Authority:			
FY 1997 DoD Appropriations Act	1,389,913	1,364,231	-25,682
Reduction pursuant to P.L. 104-208, 8037 (h)	-3,682	-	+3,682
Transferred from other accts	-	-	-
Transferred to other accounts	-27,798	-41,489	-13,691
Appropriation (Adjusted)	1,358,433	1,322,742	-35,691

Explanation of Changes in Financing

Primary changes in program financing are a result of reductions associated with revised economic assumptions reflected in the FY 1997 Supplemental Appropriation (-\$5.7 million), transfers to other accounts (-\$13.7 million), and funding reprogrammed for AEGIS Baseline Consolidation efforts (-\$6.7 million).

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: February 1998					
APPROPRIATION/BUDGET ACTIVITY WEAPONS PROCUREMENT, NAVY BA-4: OTHER WEAPONS								P-1 ITEM NOMENCLATURE/LINE ITEM # SMALL ARMS AND WEAPONS - BLI #412900 84E3					
Program Element for Code B Items:								OTHER RELATED PROGRM ELEMENTS					
	Prior Years	ID Code	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													0
EQUIPMENT COST (In Millions)	N/A				\$0.8	\$1.0	\$0.9	\$0.9	\$0.9	\$0.9	\$0.9		\$6.3
SPARES COST (In Millions)													0
PROGRAM DESCRIPTION/JUSTIFICATION:													
Quantities of weapons procured with the above funding are to meet small arms allowances and inventory objectives.													
This line item provides for initial issue procurement, modernization, standardization and stock replenishment procurement of a wide variety of small arms and weapons (caliber .50 and below), including required gun mounts and associated support components. The line also provides for procurement of sufficient types and quantities of weapons to support training, security afloat and shore missions of approximately 2,495 ship/ashore activities Navy-wide.													
			<u>FY 1997</u>	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>				
Funding Totals			\$849	\$970	\$874	\$895	\$919	\$942	\$971				

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: FEBRUARY 1998					
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA-4								P-1 ITEM NOMENCLATURE MK-15 CLOSE-IN WEAPON SYSTEM (CIWS) MODS-14DT					
Program Element for Code B Items: ITEM JUSTIFICATION SHEET								Other Related Program Elements					
	Prior Years	ID Code	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY		A											0
COST (In Millions)		A			\$20.0	\$24.4	\$2.8	\$3.0	\$1.0	\$0.5	\$0.0		\$51.7
<p>THIS LINE ITEM FUNDS PROCUREMENT OF BLOCK 1 UPGRADES (INCLUDING PHALANX SURFACE MODE (PSUM), HIGH ORDER LANGUAGE COMPUTER UPGRADE), BLOCK I ORDALTS, RELIABILITY AND MAINTAINABILITY (R&M) IMPROVEMENTS, AND UPGRADES TO THE 11G2 TRAINER. THE BLOCK 1 UPGRADE INCLUDES A FOURTEEN FOLD INCREASE IN SEARCH ELEVATION ANGLE, A 50% INCREASE IN ON-MOUNT AMMUNITION CAPACITY AND RATE OF FIRE, AND RELIABILITY AND MAINTAINABLE (R&M) IMPROVEMENTS. THIS UPGRADE IS ESSENTIAL TO MEET CURRENT AND PROJECTED ANTI-SHIP MISSILE (ASM) THREATS FOR WHICH THERE ARE NO OTHER MEANS OF SELF DEFENSE.</p> <p>THIS BUDGET FUNDS PLANNED INSTALLATIONS AND SUPPORTS CORE ENGINEERING (SYSTEM AND DESIGN ENGINEERING NECESSARY TO INVESTIGATE/RESOLVE FLEET/FACORY DESIGN AND ENGINEERING ISSUES SUCH AS ELECTRO-MAGNETIC INTERFERENCE (EMI), SAFETY, HIGH FAILURE RATE ITEMS, CORRECTIVE ACTION AND PARTS OBSOLESCENCE; SOFTWARE VALIDATION, MAINTENANCE AND CONFIGURATION CONTROL FOR PHALANX TACTICAL AND SUPPORT SOFTWARE (469E, HOLC, PASS, IDS, PIMS); PRODUCT ASSURANCE TO RESOLVE RM&A ISSUES FOR THE FLEET AND SUPPORT ACQUISITION REFORM INITIATIVES FOR FUTURE SPARES AND REPAIR EFFORTS; AND FIELD SERVICE EXPERTISE TO RESOLVE ISSUES OF EMERGENT CASUALTIES).</p>													
					FY97	FY98	FY99	FY00	FY01	FY02	FY03		
DT001 ORDALTS						15000							
DT002 ORMS					7699								
DT003 11G2 TRAINER					206								
DT801 PRODUCTION ENGR					3826								
DT802 PRODUCTION ENGR SUPPORT					1468	2976							
DT803 ENGR SUPPORT							2481						
DTINS INSTALLATION					6811	6434	297	3026	999	524			
TOTAL					20010	24410	2778	3026	999	524			

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: PHALANX CIWS BLOCK 0 TYPE MODIFICATION: UPGRADE MODIFICATION TITLE: BLOCK 1 ORDALTS

DESCRIPTION/JUSTIFICATION:

THE BLOCK 1 MODIFICATION PRIMARY CHARACTERISTICS INCLUDES A FOURTEEN FOLD INCREASE IN SEARCH ELEVATION AND, A 50% INCREASE IN ON-MOUNT AMMUNITION CAPACITY AND RATE OF FIRE AND RELIABILITY AND MAINTAINABILITY(R&M) IMPROVEMENTS. THIS UPGRADE IS ESSENTIAL TO MEET CURRENT AND PROJECTED ANTI-SHIP MISSILE (ASM) THREATS FOR WHICH THERE IS NO CURRENT MEANS OF SELF-DEFENSE.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 1994		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
FINANCIAL PLAN (IN MILLIONS)																									
<i>RD&E</i>		66850		23868		5499		4601																	100818
<i>PROCUREMENT</i>																									
INSTALLATION KITS																									0
INSTALLATION KITS NONRECURRING																									0
EQUIPMENT																									0
EQUIPMENT NONRECURRING																									0
ENGINEERING CHANGE ORDERS																									0
DATA																									0
TRAINING EQUIPMENT		3810		575		381		206																	4972
SUPPORT EQUIPMENT																									0
BLOCK 1 ORDALTS	218	238854	11	22422																				229	261276
-PSUM PROCUREMENT									12	15000														12	15000
ORMS	var	187252		14499		15340		7699																	224790
PRODUCTION ENGINEERING		7184		3572		6631		3826																	21213
PRODUCTION ENGINEERING SUPPORT		6946		2212		2077		1468		2976															15679
ENGINEERING SUPPORT											2481														2481
INSTALL COST		20572		5983		7021		6811		6434		297		3026		999		524							51667
TOTAL PROCUREMENT	218	464618	11	49263		31450		20010		24410		2778		3026		999		524					241	597078	

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: PHALANX CIWS BLOCK 0 MODIFICATION TITLE: PHALANX CIWS BLOCK I ORDALTS

INSTALLATION INFORMATION:
 METHOD OF IMPLEMENTATION: **BLOCK 1 CONVERSIONS WILL BE ACCOMPLISHED AT NSWC/LOUISVILLE AND THE PRIME CONTRACTOR FACILITY. CONVERSION WILL BE ACCOMPLISHED CONCURRENT WITH SCHEDULED OVERHAUL OF BLOCK 0 SYSTEMS.**

ADMINISTRATIVE LEAD-TIME: Months PRODUCTION LEADTIME: 24 Months
 CONTRACT DATES: FY 1997: _____ FY 1998: _____ FY 1999: _____
 DELIVERY DATE: FY 1997: _____ FY 1998: _____ FY 1999: _____

(\$ in Millions)

Cost:	Prior Years		FY 1995		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS	172	20572	5	5983	14	7021	11	6811	2	6434		297	1	2026	4	999	1	524			9		219	50667	
FY 1995 EQUIPMENT																						10		10	0
FY 1996 EQUIPMENT																									
FY 1997 EQUIPMENT																									
FY 1998 EQUIPMENT													4	1000								8	2000	8	3000
FY 1999 EQUIPMENT																									
FY 2000 EQUIPMENT																									
FY 2001 EQUIPMENT																									
FY 2002 EQUIPMENT																									
FY 2003 EQUIPMENT																									
TO COMPLETE																									

* Funding to be provided in FY01 for PHALANX Surface Mode (PSUM) installations through reprioritization.

INSTALLATION SCHEDULE: Input=Delivery to the Facility, Output=Facility providing to Fleet, ready for issue

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	191	2	5	2	2	0	0	2	0	0	0	0	0	0	3	2	0	0	2	1	1	0	0	0	1	0	0	0	0	27	241
Out	185	0	0	5	6	4	2	0	2	0	0	0	0	0	0	3	2	0	0	0	0	1	3	0	0	1	0	0	0	27	241

P-3A

BUDGET ITEM JUSTIFICATION SHEET P-40							DATE: February 1998					
APPROPRIATION/BUDGET ACTIVITY WEAPONS PROCUREMENT, NAVY BA-4 OTHER WEAPONS							P-1 ITEM NOMENCLATURE/LINE ITEM # BLI: 4210 5"/54 GUN MOUNT MODS / A4E5					
Program Element for Code B Items:							OTHER RELATED PROGRM ELEMENTS					
	Prior Years	ID Code	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY												
EQUIPMENT COST (In Millions)	\$132.1		\$2.5	\$2.8	\$10.0	\$0.9	\$1.5	\$1.5	\$1.9	\$2.0	\$19.6	\$174.8
SPARES COST (In Millions)												
PROGRAM DESCRIPTION/JUSTIFICATION:												
<p>E5006 SAFETY / SHOCK ORDALTS - THIS ELEMENT IS FOR PROCUREMENT OF GUN SAFETY AND SHOCK HARDENING ORDALTS FOR 5"/54 MK 45 GUN MOUNTS.</p> <p>E5006x 5"/62 MOD 4 - THIS ELEMENT IS FOR CONVERSION OF MK 45 MOD 2 TO MOD 4.</p>												

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5						Weapon System			DATE: February 1998					
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy BA-4 OTHER WEAPONS					ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD 5"/54 GUN MOUNT MODS / A4E5								
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
			FY 1996			FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
E5006	SAFETY SHOCK ORDALTS					13		2,794	97		9,996	12		909
TOTAL				0			2,794			9,996				909

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 TYPE MODIFICATION: ORDALT 09697 MODIFICATION TITLE: LOAD SELECT MOD - E5006a

DESCRIPTION/JUSTIFICATION:
 INCORPORATE CHANGES TO THE EP1 AND EP2 PANELS, AND THE HOIST TO PROVIDE ROUND SELECTIVITY AND MIXED LOADING CAPABILITY

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	FY 1995 & Prior		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL			
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
<i>RDT&E</i>																						0.00	0.00	
<i>PROCUREMENT</i>																								
INSTALLATION KITS	105	29.52	1	0.29	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	106.00	29.810
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	99	43.369	1	0.310	4	1.752	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	104	45.431
TOTAL PROCUREMENT		72.889		0.600		1.752		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		75.241

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 MODIFICATION TITLE: LOAD SELECT MOD - E5006a

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: FIELD ACTIVITY, SHIPYARD, AND CONTRACTORS

ADMINISTRATIVE LEADTIME: 6 Months

PRODUCTION LEADTIME: 18 Months

CONTRACT DATES: FY 1997: N/A

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

DELIVERY DATE: FY 1997: N/A

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

(\$ in Millions)

Cost:	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS	99	43.369	1	0.31	4	1.752															104	45.431
FY 1996 EQUIPMENT																						
FY 1997 EQUIPMENT																						
FY 1998 EQUIPMENT																						
FY 1999 EQUIPMENT																						
FY 2000 EQUIPMENT																						
FY 2001 EQUIPMENT																						
FY 2002 EQUIPMENT																						
FY 2003 EQUIPMENT																						
TO COMPLETE																						

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	100	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	104	
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 TYPE MODIFICATION: ORDALT 09710 MODIFICATION TITLE: LOWER HOIST SHOCK IMPROVEMENTS - E5006b

DESCRIPTION/JUSTIFICATION:

REDESIGN LOWER HOIST UNLOADING STATION DOOR LATCHES TO PREVENT THE SWINGING DOOR FROM BENDING AFFECTING WATERTIGHT REQUIREMENTS

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	FY 1995 & Prior		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC	TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
<i>RDT&E</i>																					0	0.0
<i>PROCUREMENT</i>																						
INSTALLATION KITS	128	0.426	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	128	0.426
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT																						0.0
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT																						0.0
SUPPORT EQUIPMENT																						0.0
OTHER																						0.0
OTHER																						0.0
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST	124	2.668	4	0.086	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	128	2.754
TOTAL PROCUREMENT		3.094		0.086		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		3.180

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: 5/54 CALIBER GUN SYSTEMS - MK 45 MODIFICATION TITLE: LOWER HOIST SHOCK IMPROVEMENTS - E5006b

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: FIELD ACTIVITY, SHIPYARD, AND CONTRACTORS

ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 12 Months

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

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

(\$ in Millions)

Cost:	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS	124	2.668	4	0.086			0	0.000											0	0.000	128	2.754
FY 1996 EQUIPMENT																						
FY 1997 EQUIPMENT																						
FY 1998 EQUIPMENT																						
FY 1999 EQUIPMENT																						
FY 2000 EQUIPMENT																						
FY 2001 EQUIPMENT																						
FY 2002 EQUIPMENT																						
FY 2003 EQUIPMENT																						
TO COMPLETE																						

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	128	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	128
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	

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 TYPE MODIFICATION: ORDALT 09887 MODIFICATION TITLE: LOAD SELECT MOD CONTROL SYS - E5006c

DESCRIPTION/JUSTIFICATION:

MODIFY THE EP2 CONTROL PANEL TO INCORPORATE A NEW CARD RACK WITH A WIRE WRAP BACKPLANE

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	FY 1995 & Prior		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC	TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
<i>RDT&E</i>																					0	0.0
<i>PROCUREMENT</i>																						
INSTALLATION KITS	106	7.049	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	106	7.049
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT																						0.0
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT																						0.0
SUPPORT EQUIPMENT																						0.0
OTHER																						0.0
OTHER																						0.0
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST	98	6.860	6	0.420	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	104	7.280
TOTAL PROCUREMENT		13.909		0.420		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		14.329

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 MODIFICATION TITLE: LOAD SELECT MOD CONTROL SYS - E5006c

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: FIELD ACTIVITY, SHIPYARD, AND CONTRACTORS

ADMINISTRATIVE LEADTIME: 6 Months

PRODUCTION LEADTIME: 18 Months

CONTRACT DATES: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

DELIVERY DATE: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS	98	6.86	6	0.420																	104	7.280
FY 1996 EQUIPMENT																						
FY 1997 EQUIPMENT																						
FY 1998 EQUIPMENT																						
FY 1999 EQUIPMENT																						
FY 2000 EQUIPMENT																						
FY 2001 EQUIPMENT																						
FY 2002 EQUIPMENT																						
FY 2003 EQUIPMENT																						
TO COMPLETE																						

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
In	104	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	104			
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 TYPE MODIFICATION: ORDALT 15170 MODIFICATION TITLE: TRAIN BEARING ASSY IMPROVEMENTS - E5006d

DESCRIPTION/JUSTIFICATION:

MAKE CHANGES TO THE TRAIN BEARING ASSEMBLY TO OBTAIN THE PROPER FIT OF ROLLER PATH

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	FY 1995 & Prior		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC	TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
<i>RDT&E</i>																					0	0.0
<i>PROCUREMENT</i>																						
INSTALLATION KITS	73	0.694	0	0.00	0	0.00	17	0.236	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	23	0.322	113	1.252
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT																						0.0
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT																						0.0
SUPPORT EQUIPMENT																						0.0
OTHER																						0.0
OTHER																						0.0
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST	58	1.222	4	0.080	0	0.000	3	0.084	4	0.105	4	0.112	0	0.000	0	0.000	0	0.000	23	0.644	96	2.247
TOTAL PROCUREMENT		1.916		0.080		0.000		0.320		0.105		0.112		0.000		0.000		0.000		0.966		3.499

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 MODIFICATION TITLE: TRAIN BEARING ASSY IMPROVEMENTS - E5006d

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: FIELD ACTIVITY, SHIPYARD, AND CONTRACTORS

ADMINISTRATIVE LEADTIME: 6 Months

PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

DELIVERY DATE: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS	58	1.222	4	0.080	0	0.000	3	0.084	4	0.105	4	0.112	0	0.000							73	1.603	
FY 1996 EQUIPMENT																							
FY 1997 EQUIPMENT																							
FY 1998 EQUIPMENT																							
FY 1999 EQUIPMENT																							
FY 2000 EQUIPMENT																							
FY 2001 EQUIPMENT																							
FY 2002 EQUIPMENT																							
FY 2003 EQUIPMENT																							
TO COMPLETE																				23	0.644	23	0.644

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
In	62	0	0	0	0	3	0	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	23	96			
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 TYPE MODIFICATION: ORDALT 15652 MODIFICATION TITLE: UPPER HOIST LATCH IMPROVEMENTS - E5006e

DESCRIPTION/JUSTIFICATION:

THE LATCH MECHANISM THAT SECURES THE UPPER HOIST LATCH PISTON REQUIRES STRENGTHENING.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	FY 1995 & Prior		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL			
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
<i>RDT&E</i>																						0	0.0	
<i>PROCUREMENT</i>																								
INSTALLATION KITS	100	0.521	10	0.05	10	0.052	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	120	0.623
INSTALLATION KITS NONRECURRING																								0.0
EQUIPMENT																								0.0
EQUIPMENT NONRECURRING																								0.0
ENGINEERING CHANGE ORDERS																								0.0
DATA																								0.0
TRAINING EQUIPMENT																								0.0
SUPPORT EQUIPMENT																								0.0
OTHER																								0.0
OTHER																								0.0
OTHER																								0.0
INTERIM CONTRACTOR SUPPORT																								0.0
INSTALL COST	100	1.931	8	0.120	10	0.193	0	0.000	2	0.037	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	120	2.281
TOTAL PROCUREMENT		2.452		0.170		0.245		0.000		0.037		0.000		0.000		0.000		0.000		0.000		0.000		2.904

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 MODIFICATION TITLE: UPPER HOIST LATCH IMPROVEMENTS - E5006e

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: FIELD ACTIVITY, SHIPYARD, AND CONTRACTORS

ADMINISTRATIVE LEADTIME: 6 Months

PRODUCTION LEADTIME: 18 Months

CONTRACT DATES: FY 1997: Oct-96

FY 1998: N/A

FY 1999: N/A

DELIVERY DATE: FY 1997: N/A

FY 1998: Apr-97

FY 1999: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS	100	1.931					0	0.000			0	0.000	0	0.000	0	0.000	0	0.000			100	1.931	
FY 1996 EQUIPMENT			8	0.12	2	0.039																10	0.159
FY 1997 EQUIPMENT					8	0.154			2	0.037												10	0.191
FY 1998 EQUIPMENT																							
FY 1999 EQUIPMENT																							
FY 2000 EQUIPMENT																							
FY 2001 EQUIPMENT																							
FY 2002 EQUIPMENT																							
FY 2003 EQUIPMENT																							
TO COMPLETE																							

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	108	4	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	120
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	

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: 5/74 CALIBER GUN SYSTEMS - MK 45 TYPE MODIFICATION: ORDALT 15694 MODIFICATION TITLE: CRADLE STRUCTURE IMPROVEMENT - E5006f

DESCRIPTION/JUSTIFICATION:
 REDESIGN CRADLE STRUCTURE AND CRADLE TUBE

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	FY 1995 & Prior		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<i>RDT&E</i>																						0	0.0
<i>PROCUREMENT</i>																							
INSTALLATION KITS	117	23.230	0	0.00	3	0.596	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	120	23.826	
INSTALLATION KITS NONRECURRING																							0.0
EQUIPMENT																							0.0
EQUIPMENT NONRECURRING																							0.0
ENGINEERING CHANGE ORDERS																							0.0
DATA																							0.0
TRAINING EQUIPMENT																							0.0
SUPPORT EQUIPMENT																							0.0
OTHER																							0.0
OTHER																							0.0
OTHER																							0.0
INTERIM CONTRACTOR SUPPORT																							0.0
INSTALL COST	101	2.499	14	0.357	0	0.000	5	0.527	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	120	3.383	
TOTAL PROCUREMENT		25.729		0.357		0.596		0.527		0.000		0.000		0.000		0.000		0.000		0.000		27.209	

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: 5/54 CALIBER GUN SYSTEMS - MK 45 MODIFICATION TITLE: CRADLE STRUCTURE IMPROVEMENT - E5006f

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: FIELD ACTIVITY, SHIPYARD, AND CONTRACTORS

ADMINISTRATIVE LEADTIME: 6 Months

PRODUCTION LEADTIME: 24 Months

CONTRACT DATES: FY 1997: Oct-96

FY 1998: N/A

FY 1999: N/A

DELIVERY DATE: FY 1997: N/A

FY 1998: N/A

FY 1999: Oct-98

(\$ in Millions)

Cost:	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS	101	2.499	14	0.357			2	0.211										0.000			117	3.067	
FY 1996 EQUIPMENT																						0	0.000
FY 1997 EQUIPMENT							3	0.316														3	0.316
FY 1998 EQUIPMENT																							
FY 1999 EQUIPMENT																							
FY 2000 EQUIPMENT																							
FY 2001 EQUIPMENT																							
FY 2002 EQUIPMENT																							
FY 2003 EQUIPMENT																							
TO COMPLETE																							

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	115	0	0	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	120
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	

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 TYPE MODIFICATION: ORDALT 15702 MODIFICATION TITLE: ELEVATION GEAR REDUCTION IMP - E5006g

DESCRIPTION/JUSTIFICATION:

PREVENTION OF GEAR BACKLASH AND FAILURE OF ELEVATION PINION

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	FY 1995 & Prior		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC	TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$		
<i>RD&E</i>																				0	0.0	
<i>PROCUREMENT</i>																						
INSTALLATION KITS	69	0.659	6	0.060	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	27	0.378	102	1.097
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT																						0.0
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT																						0.0
SUPPORT EQUIPMENT																						0.0
OTHER																						0.0
OTHER																						0.0
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST	37	0.519	4	0.053	0	0.000	20	0.375	4	0.069	0	0.000	0	0.000	0	0.000	0	0.000	31	0.580	96	1.596
TOTAL PROCUREMENT		1.178		0.113		0.000		0.375		0.069		0.000		0.000		0.000		0.000		0.958		2.693

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 MODIFICATION TITLE: ELEVATION GEAR REDUCTION IMP - E5006g

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: DEPOT LEVEL

ADMINISTRATIVE LEADTIME: 6 Months

PRODUCTION LEADTIME: 18 Months

CONTRACT DATES: FY 1997: Oct-96

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

DELIVERY DATE: FY 1997: N/A

FY 1998: Apr-97 FY 1999: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS	37	0.519	4	0.053			20	0.375	4	0.069	0	0.000	0	0.000	0	0.000	0	0.000	4	0.750	69	1.766
FY 1996 EQUIPMENT																			6	0.112	6	0.112
FY 1997 EQUIPMENT																						
FY 1998 EQUIPMENT																						
FY 1999 EQUIPMENT																						
FY 2000 EQUIPMENT																						
FY 2001 EQUIPMENT																						
FY 2002 EQUIPMENT																						
FY 2003 EQUIPMENT																						
TO COMPLETE																			21	0.393	21	0.393

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior				FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL	
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
In	41	0	0	0	0	5	5	5	5	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31	96
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 TYPE MODIFICATION: ORDALT 15704 MODIFICATION TITLE: LOADER DRUM ROUND RETAINERS - E5006h

DESCRIPTION/JUSTIFICATION:
 TO PREVENT THE PROJECTILES FROM JAMMING THE LOADER DRUM DURING SEVERE SHOCK OR SHIP MOTION

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	FY 1995 & Prior		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<i>RDT&E</i>																						0	0.0
<i>PROCUREMENT</i>																							
INSTALLATION KITS	120	0.046	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	120	0.046	
INSTALLATION KITS NONRECURRING																							0.0
EQUIPMENT																							0.0
EQUIPMENT NONRECURRING																							0.0
ENGINEERING CHANGE ORDERS																							0.0
DATA																							0.0
TRAINING EQUIPMENT																							0.0
SUPPORT EQUIPMENT																							0.0
OTHER																							0.0
OTHER																							0.0
OTHER																							0.0
INTERIM CONTRACTOR SUPPORT																							0.0
INSTALL COST	116	0.307	4	0.011	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	120	0.318	
TOTAL PROCUREMENT		0.353		0.011		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000			0.364

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 MODIFICATION TITLE: LOADER DRUM ROUND RETAINERS - E5006h

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: FIELD ACTIVITY, SHIPYARD, AND CONTRACTORS

ADMINISTRATIVE LEADTIME: 6 Months

PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

DELIVERY DATE: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS	116	0.307	4	0.011	0	0.000	0	0.000	0	0.000			0	0.000	0	0.000	0	0.000	0	0.000	120	0.318
FY 1996 EQUIPMENT																						
FY 1997 EQUIPMENT																						
FY 1998 EQUIPMENT																						
FY 1999 EQUIPMENT																						
FY 2000 EQUIPMENT																						
FY 2001 EQUIPMENT																						
FY 2002 EQUIPMENT																						
FY 2003 EQUIPMENT																						
TO COMPLETE																						

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior				FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	120
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: 5/54 CALIBER GUN SYSTEMS - MK 45 TYPE MODIFICATION: ORDALT 15707 MODIFICATION TITLE: LEAD REMOVAL - E5006i

DESCRIPTION/JUSTIFICATION:
 REMOVAL OF LEAD COUNTERBALANCE IN THE SLIDE

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	FY 1995 & Prior		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
<i>RDT&E</i>																					0	0.0
<i>PROCUREMENT</i>																						
INSTALLATION KITS	56	0.053	0	0.00	0	0.00	0	0.00	0	0.00	8	0.01	0	0.00	0	0.00	0	0.00	32	0.045	96	0.108
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT																						0.0
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT																						0.0
SUPPORT EQUIPMENT																						0.0
OTHER																						0.0
OTHER																						0.0
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST	51	1.493	0	0.000	0	0.000	1	0.025	4	0.098	4	0.100	0	0.000	0	0.000	0	0.000	36	0.990	96	2.706
TOTAL PROCUREMENT		1.546		0.000		0.000		0.025		0.098		0.110		0.000		0.000		0.000		1.035		2.814

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 MODIFICATION TITLE: LEAD REMOVAL - E5006i

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: FIELD ACTIVITY, SHIPYARD, AND CONTRACTORS

ADMINISTRATIVE LEADTIME: 6 Months

PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

DELIVERY DATE: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS	51	1.493					1	0.025	4	0.098			0	0.000	0	0.000	0	0.000			56	1.616	
FY 1996 EQUIPMENT																							
FY 1997 EQUIPMENT																							
FY 1998 EQUIPMENT																							
FY 1999 EQUIPMENT																							
FY 2000 EQUIPMENT																				8	0.210	08	0.210
FY 2001 EQUIPMENT																							
FY 2002 EQUIPMENT																							
FY 2003 EQUIPMENT																							
TO COMPLETE																				32	0.880	32	0.880

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
In	51	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	96			
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 TYPE MODIFICATION: ORDALT 15746 MODIFICATION TITLE: LOADER BASE IMPROVEMENT - E5006j

DESCRIPTION/JUSTIFICATION:
 STRENGTHENING OF MOTOR BASE TO PREVENT MISALIGNMENT BETWEEN UPPER AND LOWER SECTIONS OF THE GUN

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	FY 1995 & Prior		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
<i>RDT&E</i>																					0	0.0
<i>PROCUREMENT</i>																						
INSTALLATION KITS	49	3.956	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	6	0.689	41	4.879	96	9.524
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT																						0.0
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT																						0.0
SUPPORT EQUIPMENT																						0.0
OTHER																						0.0
OTHER																						0.0
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST	46	0.158	0	0.000	0	0.000	4	0.016	4	0.017	4	0.018	4	0.018	0	0.000	0	0.000	34	0.170	96	0.397
TOTAL PROCUREMENT		4.114		0.000		0.000		0.016		0.017		0.018		0.018		0.000		0.689		5.049		9.921

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 MODIFICATION TITLE: LOADER BASE IMPROVEMENT - E5006j

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: DEPOT LEVEL ONLY

ADMINISTRATIVE LEADTIME: 6 Months

PRODUCTION LEADTIME: 24 Months

CONTRACT DATES: FY 1997: Oct-96

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

DELIVERY DATE: FY 1997: N/A

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

(\$ in Millions)

Cost:	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS	46	0.158	0	0.000			3	0.012					0	0.000	0	0.000	0	0.000	0	0.000	49	0.170	
FY 1996 EQUIPMENT																							
FY 1997 EQUIPMENT																							
FY 1998 EQUIPMENT																							
FY 1999 EQUIPMENT																							
FY 2000 EQUIPMENT																							
FY 2001 EQUIPMENT																							
FY 2002 EQUIPMENT																							
FY 2003 EQUIPMENT							1	0.004	4	0.017	1	0.004									6	0.025	
TO COMPLETE											3	0.014	4	0.018						34	0.170	41	0.202

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior				FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
In	46	0	0	0	0	0	0	0	0	4	0	0	0	0	4	0	0	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	34	96
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 TYPE MODIFICATION: ORDALT 15827 MODIFICATION TITLE: MYP IMPROVEMENTS - E5006k

DESCRIPTION/JUSTIFICATION:

COMBINES ALL CLASS II ECPS IN THE MYP

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	FY 1995 & Prior		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
<i>RDT&E</i>																					0	0.0
<i>PROCUREMENT</i>																						
INSTALLATION KITS	120	1.367	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.000	120	1.367
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT																						0.0
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT																						0.0
SUPPORT EQUIPMENT																						0.0
OTHER																						0.0
OTHER																						0.0
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST	37	0.123	4	0.010	0	0.000	35	0.389	4	0.013	4	0.014	4	0.014	4	0.018	0	0.000	28	0.148	120	0.729
TOTAL PROCUREMENT		1.490		0.010		0.000		0.389		0.013		0.014		0.014		0.018		0.000		0.148		2.096

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 MODIFICATION TITLE: MYP IMPROVEMENTS - E5006k

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: FIELD ACTIVITY, SHIPYARD, AND CONTRACTORS

ADMINISTRATIVE LEADTIME: 6 Months

PRODUCTION LEADTIME: 18 Months

CONTRACT DATES: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

DELIVERY DATE: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS	37	0.123	4	0.010			35	0.389	4	0.013	4	0.014	4	0.014	4	0.018	0	0.000	28	0.148	120	0.729
FY 1996 EQUIPMENT																						
FY 1997 EQUIPMENT																						
FY 1998 EQUIPMENT																						
FY 1999 EQUIPMENT																						
FY 2000 EQUIPMENT																						
FY 2001 EQUIPMENT																						
FY 2002 EQUIPMENT																						
FY 2003 EQUIPMENT																						
TO COMPLETE																						

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL						
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4								
In	41	0	0	0	0	9	9	9	8	4	0	0	0	4	0	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	28	120
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: 5/54 CALIBER GUN SYSTEMS - MK 45 TYPE MODIFICATION: ORDALT 15828 MODIFICATION TITLE: JERKY HOIST IMPROVEMENTS - E50061

DESCRIPTION/JUSTIFICATION:

LOWER AMMUNITION HOIST OPERATES IN A JERKY MANNER WHEN DRIVEN BY THE LOWER ACCUMULATOR SYSTEM EMERGENCY PUMP

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	FY 1995 & Prior		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<i>RDT&E</i>																					0	0.0	
<i>PROCUREMENT</i>																							
INSTALLATION KITS	120	0.593	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.000	120	0.593	
INSTALLATION KITS NONRECURRING																							0.0
EQUIPMENT																							0.0
EQUIPMENT NONRECURRING																							0.0
ENGINEERING CHANGE ORDERS																							0.0
DATA																							0.0
TRAINING EQUIPMENT																							0.0
SUPPORT EQUIPMENT																							0.0
OTHER																							0.0
OTHER																							0.0
OTHER																							0.0
INTERIM CONTRACTOR SUPPORT																							0.0
INSTALL COST	104	0.560	14	0.076	0	0.000	0	0.000	2	0.032	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	120	0.668	
TOTAL PROCUREMENT		1.153		0.076		0.000		0.000		0.032		0.000		0.000		0.000		0.000		0.000		1.261	

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 MODIFICATION TITLE: JERKY HOIST IMPROVEMENTS - E5006I

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: FIELD ACTIVITY, SHIPYARD, AND CONTRACTORS

ADMINISTRATIVE LEADTIME: 6 Months

PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

DELIVERY DATE: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS	104	0.560	14	0.076			0	0.000	2	0.032			0	0.000	0	0.000	0	0.000			120	0.668
FY 1996 EQUIPMENT																						
FY 1997 EQUIPMENT																						
FY 1998 EQUIPMENT																						
FY 1999 EQUIPMENT																						
FY 2000 EQUIPMENT																						
FY 2001 EQUIPMENT																						
FY 2002 EQUIPMENT																						
FY 2003 EQUIPMENT																						
TO COMPLETE																						

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior				FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
In	118	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	120
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 TYPE MODIFICATION: ORDALT 15829 MODIFICATION TITLE: FASTENER IMPROVEMENTS - E5006m

DESCRIPTION/JUSTIFICATION:

FASTENERS TO SECURE MAJOR COMPONENTS OF GUN MOUNT DO NOT HAVE ADEQUATE THREAD ENGAGEMENT FOR OPTIMUM INSTALLATION TORQUE

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	FY 1995 & Prior		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
<i>RDT&E</i>																					0	0.0
<i>PROCUREMENT</i>																						
INSTALLATION KITS	120	0.120	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.000	120	0.120
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT																						0.0
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT																						0.0
SUPPORT EQUIPMENT																						0.0
OTHER																						0.0
OTHER																						0.0
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST	4	0.082	4	0.005	16	0.039	32	0.077	10	0.024	10	0.026	0	0.000	0	0.000	0	0.000	44	0.128	120	0.381
TOTAL PROCUREMENT		0.202		0.005		0.039		0.077		0.024		0.026		0.000		0.000		0.000		0.128		0.501

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 MODIFICATION TITLE: FASTENER IMPROVEMENTS - E5006m

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: FIELD ACTIVITY, SHIPYARD, AND CONTRACTORS

ADMINISTRATIVE LEADTIME: 6 Months

PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

DELIVERY DATE: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS	4	0.082	4	0.005	16	0.039	32	0.077	10	0.024	10	0.026	0	0.000	0	0.000	0	0.000	44	0.128	120	0.381
FY 1996 EQUIPMENT																						
FY 1997 EQUIPMENT																						
FY 1998 EQUIPMENT																						
FY 1999 EQUIPMENT																						
FY 2000 EQUIPMENT																						
FY 2001 EQUIPMENT																						
FY 2002 EQUIPMENT																						
FY 2003 EQUIPMENT																						
TO COMPLETE																						

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior				FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL	
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
In	8	4	4	4	4	8	8	8	8	4	4	2	0	4	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44	120
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 TYPE MODIFICATION: ORDALT 16042 MODIFICATION TITLE: LOWER HOIST SHUTTERS - E5006n

DESCRIPTION/JUSTIFICATION:

LOWER LOADING STATION SHUTTERS MOVE TO THE OPEN POSITION BY THE IMPACT OF THE PROJECTILE

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	FY 1995 & Prior		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<i>RDT&E</i>																					0	0.0	
<i>PROCUREMENT</i>																							
INSTALLATION KITS	133	0.145	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.000	133	0.145	
INSTALLATION KITS NONRECURRING																						0.0	
EQUIPMENT																						0.0	
EQUIPMENT NONRECURRING																						0.0	
ENGINEERING CHANGE ORDERS																						0.0	
DATA																						0.0	
TRAINING EQUIPMENT																						0.0	
SUPPORT EQUIPMENT																						0.0	
OTHER																						0.0	
OTHER																						0.0	
OTHER																						0.0	
INTERIM CONTRACTOR SUPPORT																						0.0	
INSTALL COST	0	0.000	4	0.012	8	0.024	34	0.136	5	0.020	0	0.000	0	0.000	0	0.000	0	0.000	82	0.328	133	0.520	
TOTAL PROCUREMENT		0.145		0.012		0.024		0.136		0.020		0.000		0.000		0.000		0.000		0.328		0.665	

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 MODIFICATION TITLE: LOWER HOIST SHUTTERS - E5006n

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: FIELD ACTIVITY, SHIPYARD, AND CONTRACTORS

ADMINISTRATIVE LEADTIME: 6 Months

PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

DELIVERY DATE: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS	0	0.000	4	0.012	8	0.024	34	0.136	5	0.020	0	0.000	0	0.000	0	0.000	0	0.000	82	0.328	133	0.520
FY 1996 EQUIPMENT																						
FY 1997 EQUIPMENT																						
FY 1998 EQUIPMENT																						
FY 1999 EQUIPMENT																						
FY 2000 EQUIPMENT																						
FY 2001 EQUIPMENT																						
FY 2002 EQUIPMENT																						
FY 2003 EQUIPMENT																						
TO COMPLETE																						

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior				FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL	
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
In	4	4	4	0	0	9	9	8	8	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	82	133
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**
 MODELS OF SYSTEM AFFECTED: 5/54 CALIBER GUN SYSTEMS - MK 45 TYPE MODIFICATION: ORDALT 16043 MODIFICATION TITLE: LOWER HOIST SHOCK IMPROVEMENTS - E50060

DESCRIPTION/JUSTIFICATION:
 REPLACES UNLOADING STATION DOOR LATCHES THAT FAILED SHOCK TEST

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	FY 1995 & Prior		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<i>RDT&E</i>																					0	0.0	
<i>PROCUREMENT</i>																							
INSTALLATION KITS	120	0.228	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.000	120	0.228	
INSTALLATION KITS NONRECURRING																							0.0
EQUIPMENT																							0.0
EQUIPMENT NONRECURRING																							0.0
ENGINEERING CHANGE ORDERS																							0.0
DATA																							0.0
TRAINING EQUIPMENT																							0.0
SUPPORT EQUIPMENT																							0.0
OTHER																							0.0
OTHER																							0.0
OTHER																							0.0
INTERIM CONTRACTOR SUPPORT																							0.0
INSTALL COST	2	0.004	0	0.000	10	0.020	34	0.095	5	0.014	10	0.029	0	0.000	0	0.000	0	0.000	59	0.200	120	0.362	
TOTAL PROCUREMENT		0.232		0.000		0.020		0.095		0.014		0.029		0.000		0.000		0.000		0.200		0.590	

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 MODIFICATION TITLE: LOWER HOIST SHOCK IMPROVEMENTS - E5006o

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: FIELD ACTIVITY, SHIPYARD, AND CONTRACTORS

ADMINISTRATIVE LEADTIME: 6 Months

PRODUCTION LEADTIME: 15 Months

CONTRACT DATES: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

DELIVERY DATE: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS	2	0.004	0	0.000	10	0.020	34	0.095	5	0.014	10	0.029	0	0.000	0	0.000	0	0.000	59	0.200	120	0.362
FY 1996 EQUIPMENT																						
FY 1997 EQUIPMENT																						
FY 1998 EQUIPMENT																						
FY 1999 EQUIPMENT																						
FY 2000 EQUIPMENT																						
FY 2001 EQUIPMENT																						
FY 2002 EQUIPMENT																						
FY 2003 EQUIPMENT																						
TO COMPLETE																						

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior				FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL	
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
In	2	4	4	2	0	9	9	8	8	5	0	0	0	3	3	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59	120
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: 5/54 CALIBER GUN SYSTEMS - MK 45 TYPE MODIFICATION: ORDALT 16044 MODIFICATION TITLE: EP3 PANEL SHOCK IMPROVEMENT - E5006p

DESCRIPTION/JUSTIFICATION:
 STABILIZE AND UPGRADE AMMUNITION HOIST CONTROL PANEL

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	FY 1995 & Prior		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<i>RDT&E</i>																					0	0.0	
<i>PROCUREMENT</i>																							
INSTALLATION KITS	20	0.076	0	0.00	0	0.000	24	0.610	0	0.00	2	0.018	2	0.019	14	0.135	0	0.00	98	1.015	160	1.873	
INSTALLATION KITS NONRECURRING																						0.0	
EQUIPMENT																						0.0	
EQUIPMENT NONRECURRING																						0.0	
ENGINEERING CHANGE ORDERS																						0.0	
DATA																						0.0	
TRAINING EQUIPMENT																						0.0	
SUPPORT EQUIPMENT																						0.0	
OTHER																						0.0	
OTHER																						0.0	
OTHER																						0.0	
INTERIM CONTRACTOR SUPPORT																						0.0	
INSTALL COST	0	0.000	0	0.000	0	0.000	4	0.003	4	0.003	10	0.010	10	0.012	10	0.010	0	0.000	122	0.108	160	0.146	
TOTAL PROCUREMENT		0.076		0.000		0.000		0.613		0.003		0.028		0.031		0.145		0.000		1.123		2.019	

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 MODIFICATION TITLE: EP3 PANEL SHOCK IMPROVEMENT - E5006p

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: FIELD ACTIVITY, SHIPYARD, AND CONTRACTORS

ADMINISTRATIVE LEADTIME: 6 Months

PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

DELIVERY DATE: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS	0	0.000	0	0.000	0	0.000	4	0.003	4	0.003	10	0.010	2	0.002	0	0.000	0	0.000	0	0.000	20	0.018	
FY 1996 EQUIPMENT																							
FY 1997 EQUIPMENT																							
FY 1998 EQUIPMENT													8	0.01	10	0.01				6	0.006	24	0.026
FY 1999 EQUIPMENT																							
FY 2000 EQUIPMENT																							
FY 2001 EQUIPMENT																							
FY 2002 EQUIPMENT																							
FY 2003 EQUIPMENT																							
TO COMPLETE																				116	0.102	116	0.102

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior				FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
In	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	4	4	2	0	4	4	2	0	4	4	2	0	0	0	0	0	0	0	0	122	160
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 TYPE MODIFICATION: ORDALT 16045 MODIFICATION TITLE: PANEL FOUNDATIONS - E5006q

DESCRIPTION/JUSTIFICATION:

CHANGE CONTROL PANEL FOUNDATIONS FROM CASTING TO WELDMENT

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	FY 1995 & Prior		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
<i>RDT&E</i>																					0	0.0
<i>PROCUREMENT</i>																						
INSTALLATION KITS	28	0.560	0	0.00	0	0.000	31	1.732	0	0.00	2	0.122	1	0.064	5	0.33	1	0.069	28	1.991	96	4.868
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT																						0.0
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT																						0.0
SUPPORT EQUIPMENT																						0.0
OTHER																						0.0
OTHER																						0.0
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST	0	0.000	0	0.000	0	0.000	4	0.006	4	0.007	10	0.020	10	0.020	10	0.020	0	0.000	58	0.116	96	0.189
TOTAL PROCUREMENT		0.560		0.000		0.000		1.738		0.007		0.142		0.084		0.350		0.069		2.107		5.057

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 MODIFICATION TITLE: PANEL FOUNDATIONS - E5006q

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: FIELD ACTIVITY AND SHIPYARD

ADMINISTRATIVE LEADTIME: 6 Months

PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 1997: N/A

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

DELIVERY DATE: FY 1997: N/A

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

(\$ in Millions)

Cost:	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS	0	0.000	0	0.000	0	0.000	4	0.006	4	0.007	10	0.020	10	0.020	0	0.000	0	0.000	0	0.000	28	0.053	
FY 1996 EQUIPMENT																							
FY 1997 EQUIPMENT																							
FY 1998 EQUIPMENT															10	0.02				21	0.042	31	0.062
FY 1999 EQUIPMENT																							
FY 2000 EQUIPMENT																							
FY 2001 EQUIPMENT																							
FY 2002 EQUIPMENT																							
FY 2003 EQUIPMENT																							
TO COMPLETE																				37	0.074	37	0.074

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior				FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	0	0	0	4	4	4	2	0	4	4	2	0	4	4	2	0	4	4	2	0	0	0	0	0	58	96
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 TYPE MODIFICATION: ORDALT 16055 MODIFICATION TITLE: CONTROL SYSTEM SHOCK IMP - E5006r

DESCRIPTION/JUSTIFICATION:

STRUCTURAL IMPROVEMENTS TO THE PANEL FOUNDATION

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	FY 1995 & Prior		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL	
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
<i>RDT&E</i>																					0	0.0
<i>PROCUREMENT</i>																						
INSTALLATION KITS	28	0.762	0	0.00	0	0.00	0	0.00	0	0.00	2	0.06	1	0.031	15	0.488	0	0.00	58	2.030	104	3.371
INSTALLATION KITS NONRECURRING																						0.0
EQUIPMENT																						0.0
EQUIPMENT NONRECURRING																						0.0
ENGINEERING CHANGE ORDERS																						0.0
DATA																						0.0
TRAINING EQUIPMENT																						0.0
SUPPORT EQUIPMENT																						0.0
OTHER																						0.0
OTHER																						0.0
OTHER																						0.0
INTERIM CONTRACTOR SUPPORT																						0.0
INSTALL COST	0	0.000	0	0.000	2	0.008	10	0.043	4	0.017	10	0.045	10	0.045	5	0.028	0	0.000	63	0.353	104	0.539
TOTAL PROCUREMENT		0.762		0.000		0.008		0.043		0.017		0.105		0.076		0.516		0.000		2.383		3.910

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 MODIFICATION TITLE: CONTROL SYSTEM SHOCK IMP - E5006r

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: FIELD ACTIVITY, SHIPYARD, AND CONTRACTORS

ADMINISTRATIVE LEADTIME: 6 Months

PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

DELIVERY DATE: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS	0	0.000	0	0.000	2	0.008	10	0.043	4	0.017	10	0.045	2	0.009					0	0.000	28	0.122	
FY 1996 EQUIPMENT																							
FY 1997 EQUIPMENT																							
FY 1998 EQUIPMENT																							
FY 1999 EQUIPMENT																							
FY 2000 EQUIPMENT													2	0.009							2	0.009	
FY 2001 EQUIPMENT													1	0.005							1	0.005	
FY 2002 EQUIPMENT													5	0.022	5	0.028				5	0.03	15	0.080
FY 2003 EQUIPMENT																							
TO COMPLETE																			58	0.350	58	0.350	

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior				FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL	
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4			
In	0	2	0	0	0	3	3	2	2	4	0	0	0	3	3	2	2	3	3	2	2	4	1	0	0	0	0	0	0	0	0	0	0	63	104
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**
 MODELS OF SYSTEM AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 TYPE MODIFICATION: ORDALT 16233/15131 MODIFICATION TITLE: EMPTY CASE EXTR RETR INTERLOCK - E5006s

DESCRIPTION/JUSTIFICATION:
 ADD INTERLOCK SWITCH TO PREVENT RAMMING A ROUND WHEN THE EXTRACTORS ARE EXTENDED

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	FY 1995 & Prior		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<i>RDT&E</i>																					0	0.0	
<i>PROCUREMENT</i>																							
INSTALLATION KITS	55	1.925	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	41	2.009	96	3.934	
INSTALLATION KITS NONRECURRING																						0.0	
EQUIPMENT																						0.0	
EQUIPMENT NONRECURRING																						0.0	
ENGINEERING CHANGE ORDERS																						0.0	
DATA																						0.0	
TRAINING EQUIPMENT																						0.0	
SUPPORT EQUIPMENT																						0.0	
OTHER																						0.0	
OTHER																						0.0	
OTHER																						0.0	
INTERIM CONTRACTOR SUPPORT																						0.0	
INSTALL COST	5	0.050	0	0.000	3	0.030	27	0.270	0	0.000	3	0.030	0	0.000	0	0.000	0	0.000	58	0.585	96	0.965	
TOTAL PROCUREMENT		1.975		0.000		0.030		0.270		0.000		0.030		0.000		0.000		0.000		2.594		4.899	

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 MODIFICATION TITLE: EMPTY CASE EXTR RETR INTERLOCK - E5006s

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: FIELD ACTIVITY, SHIPYARD, AND CONTRACTORS

ADMINISTRATIVE LEADTIME: 6 Months

PRODUCTION LEADTIME: 18 Months

CONTRACT DATES: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

DELIVERY DATE: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS	5	0.050	0	0.000	3	0.030	27	0.270	0	0.000	3	0.030	0	0.000	0	0.000	0	0.000	17	0.171	55	0.551
FY 1996 EQUIPMENT																						
FY 1997 EQUIPMENT																						
FY 1998 EQUIPMENT																						
FY 1999 EQUIPMENT																						
FY 2000 EQUIPMENT																						
FY 2001 EQUIPMENT																						
FY 2002 EQUIPMENT																						
FY 2003 EQUIPMENT																						
TO COMPLETE																			41	0.414	41	0.414

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	5	3	0	0	0	7	7	7	6	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	96
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 TYPE MODIFICATION: ORDALT 16234 MODIFICATION TITLE: MYP 1 IMPROVEMENTS - E5006t

DESCRIPTION/JUSTIFICATION:
 CONTAINS THE LESS DEVELOPED CLASS II ECPS

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	FY 1995 & Prior		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<i>RDT&E</i>																					0	0.0	
<i>PROCUREMENT</i>																							
INSTALLATION KITS	44	0.209	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	10	0.068	42	0.294	96	0.571	
INSTALLATION KITS NONRECURRING																						0.0	
EQUIPMENT																						0.0	
EQUIPMENT NONRECURRING																						0.0	
ENGINEERING CHANGE ORDERS																						0.0	
DATA																						0.0	
TRAINING EQUIPMENT																						0.0	
SUPPORT EQUIPMENT																						0.0	
OTHER																						0.0	
OTHER																						0.0	
OTHER																						0.0	
INTERIM CONTRACTOR SUPPORT																						0.0	
INSTALL COST	2	0.005	4	0.011	25	0.066	4	0.014	4	0.015	4	0.016	4	0.016	4	0.018	0	0.000	45	0.203	96	0.364	
TOTAL PROCUREMENT		0.214		0.011		0.066		0.014		0.015		0.016		0.016		0.018		0.068		0.497		0.935	

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 MODIFICATION TITLE: MYP 1 IMPROVEMENTS - E5006t

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: FIELD ACTIVITY, SHIPYARD, AND CONTRACTORS

ADMINISTRATIVE LEADTIME: 6 Months

PRODUCTION LEADTIME: 18 Months

CONTRACT DATES: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

DELIVERY DATE: FY 1997: N/A

FY 1998: N/A

FY 1999: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS	2	0.005	4	0.011	25	0.066	4	0.014	4	0.015	4	0.016	1	0.004			0	0.000			44	0.131
FY 1996 EQUIPMENT																						
FY 1997 EQUIPMENT																						
FY 1998 EQUIPMENT																						
FY 1999 EQUIPMENT																						
FY 2000 EQUIPMENT																						
FY 2001 EQUIPMENT																						
FY 2002 EQUIPMENT																						
FY 2003 EQUIPMENT													3	0.012	4	0.018			3	0.014	10	0.044
TO COMPLETE																			42	0.189	42	0.189

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	6	7	6	6	6	4	0	0	0	4	0	0	0	4	0	0	0	4	0	0	0	4	0	0	0	0	0	0	0	45	96
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	

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 TYPE MODIFICATION: ORDALT 16598 MODIFICATION TITLE: MECHANICAL SHOCK IMPROVEMENT - E5006u

DESCRIPTION/JUSTIFICATION:
 IMPROVE MECHANICAL COMPONENTS IN THE CABLE REEL, INTRUSION BARRIER, LATCH AND CRADLE LATCHES THAT FAILED SHOCK TESTS

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	FY 1995 & Prior		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<i>RD&E</i>																						0	0.0
<i>PROCUREMENT</i>																							
INSTALLATION KITS	50	0.337	37	0.263	0	0.00	25	0.45	6	0.114	10	0.198	9	0.186	0	0.000	0	0.000	16	0.370	153	1.922	
INSTALLATION KITS NONRECURRING																							0.0
EQUIPMENT																							0.0
EQUIPMENT NONRECURRING																							0.0
ENGINEERING CHANGE ORDERS																							0.0
DATA																							0.0
TRAINING EQUIPMENT																							0.0
SUPPORT EQUIPMENT																							0.0
OTHER																							0.0
OTHER																							0.0
OTHER																							0.0
INTERIM CONTRACTOR SUPPORT																							0.0
INSTALL COST	0	0.000	0	0.000	0	0.000	34	0.424	10	0.100	10	0.103	24	0.264	24	0.280	18	0.214	26	0.325	146	1.710	
TOTAL PROCUREMENT		0.337		0.263		0.000		0.878		0.214		0.301		0.450		0.280		0.214		0.695		3.632	

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 MODIFICATION TITLE: MECHANICAL SHOCK IMPROVEMENT - E5006u

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: FIELD ACTIVITY, SHIPYARD, AND CONTRACTORS

ADMINISTRATIVE LEADTIME: 6 Months

PRODUCTION LEADTIME: 18 Months

CONTRACT DATES: FY 1997: Oct-96

FY 1998: N/A FY 1999: Jun-99

DELIVERY DATE: FY 1997: N/A

FY 1998: Apr-98 FY 1999: Dec-00

(\$ in Millions)

Cost:	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
PRIOR YEARS					0	0.000	34	0.424	10	0.100	6	0.062	0	0.000	0	0.000	0	0.000	0	0.000	50	0.586	
FY 1996 EQUIPMENT											4	0.041	24	0.264	9	0.105			0	0.000	37	0.410	
FY 1997 EQUIPMENT																							
FY 1998 EQUIPMENT														15	0.175	10	0.119					25	0.294
FY 1999 EQUIPMENT																	6	0.071	0	0.000	06	0.071	
FY 2000 EQUIPMENT																	2	0.024	8	0.100	10	0.124	
FY 2001 EQUIPMENT																			9	0.112	09	0.112	
FY 2002 EQUIPMENT																							
FY 2003 EQUIPMENT																							
TO COMPLETE																			9	0.113	09	0.113	

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior				FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	0	0	0	0	0	0	0	9	9	8	8	3	3	2	2	3	3	2	2	6	6	6	6	6	6	6	6	5	5	4	4	26	146
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 TYPE MODIFICATION: ORDALT 16605 MODIFICATION TITLE: CORROSION PREVENTION - E5006v

DESCRIPTION/JUSTIFICATION:

SEAL AND PROTECT AREAS OF WATER INTRUSION

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	FY 1995 & Prior		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<i>RDT&E</i>																					0	0.0	
<i>PROCUREMENT</i>																							
INSTALLATION KITS	70	0.783	20	0.232	0	0.00	0	0.00	6	0.105	9	0.164	9	0.171	6	0.119	0	0.000	1	0.021	121	1.595	
INSTALLATION KITS NONRECURRING																						0.0	
EQUIPMENT																						0.0	
EQUIPMENT NONRECURRING																						0.0	
ENGINEERING CHANGE ORDERS																						0.0	
DATA																						0.0	
TRAINING EQUIPMENT																						0.0	
SUPPORT EQUIPMENT																						0.0	
OTHER																						0.0	
OTHER																						0.0	
OTHER																						0.0	
INTERIM CONTRACTOR SUPPORT																						0.0	
INSTALL COST	38	0.380	0	0.000	0	0.000	3	0.040	9	0.119	10	0.123	24	0.312	20	0.305	20	0.305	12	0.175	136	1.759	
TOTAL PROCUREMENT		1.163		0.232		0.000		0.040		0.224		0.287		0.483		0.424		0.305		0.196		3.354	

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45 MODIFICATION TITLE: CORROSION PREVENTION - E5006v

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: FIELD ACTIVITY, SHIPYARD, AND CONTRACTORS

ADMINISTRATIVE LEADTIME: 6 Months

PRODUCTION LEADTIME: 12 Months

CONTRACT DATES: FY 1997: Oct-96

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

DELIVERY DATE: FY 1997: N/A

FY 1998: Oct-97 FY 1999: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total			
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$		
PRIOR YEARS	38	0.380	0	0.000	0	0.000	3	0.040	9	0.119	10	0.123	10	0.130	0	0.000	0	0.000	0	0.000	70	0.792		
FY 1996 EQUIPMENT													14	0.182	6	0.091							20	0.273
FY 1997 EQUIPMENT																								
FY 1998 EQUIPMENT																								
FY 1999 EQUIPMENT															6	0.091							06	0.091
FY 2000 EQUIPMENT															8	0.122	1	0.015					09	0.137
FY 2001 EQUIPMENT																	9	0.137					09	0.137
FY 2002 EQUIPMENT																	6	0.092					06	0.092
FY 2003 EQUIPMENT																							00	0.000
TO COMPLETE																	4	0.061	12	0.175	16	0.236		

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior	FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	38	0	0	0	0	3	0	0	0	3	3	3	0	3	3	2	2	6	6	6	6	5	5	5	5	5	5	5	5	12	136
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	

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: 5/54 CALIBER GUN SYSTEMS - MK 45 TYPE MODIFICATION: ORDALT 16625 MODIFICATION TITLE: GUN BARREL HOUSING REDESIGN - E5006w

DESCRIPTION/JUSTIFICATION:
 UPGRADE BREECH MECHANISM TO SUPPORT BREECHBLOCK SHAFT AND LATERAL MOVEMENT OF BREECHLOCK CAM

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	FY 1995 & Prior		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<i>RDT&E</i>																					0	0.0	
<i>PROCUREMENT</i>																							
INSTALLATION KITS	50	0.523	0	0.00	0	0.000	0	0.00	0	0.00	9	0.200	8	0.185	0	0.000	22	0.549	34	0.881	123	2.338	
INSTALLATION KITS NONRECURRING																						0.0	
EQUIPMENT																						0.0	
EQUIPMENT NONRECURRING																						0.0	
ENGINEERING CHANGE ORDERS																						0.0	
DATA																						0.0	
TRAINING EQUIPMENT																						0.0	
SUPPORT EQUIPMENT																						0.0	
OTHER																						0.0	
OTHER																						0.0	
OTHER																						0.0	
INTERIM CONTRACTOR SUPPORT																						0.0	
INSTALL COST	0	0.000	0	0.000	2	0.010	8	0.040	0	0.000	10	0.051	24	0.131	24	0.162	14	0.083	54	0.324	136	0.801	
TOTAL PROCUREMENT		0.523		0.000		0.010		0.040		0.000		0.251		0.316		0.162		0.632		1.205		3.139	

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: 5"/54 CALIBER GUN SYSTEMS - MK 45

MODIFICATION TITLE: GUN BARREL HOUSING REDESIGN - E5006w

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: DEPOT LEVEL

ADMINISTRATIVE LEADTIME: 6 Months

PRODUCTION LEADTIME: 24 Months

CONTRACT DATES: FY 1997: Oct-96

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

DELIVERY DATE: FY 1997: N/A

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

(\$ in Millions)

Cost:	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS	0	0.000	0	0.000	2	0.010	8	0.040	0	0.000	10	0.051	24	0.131	6	0.041	0	0.000	0	0.000	50	0.273
FY 1996 EQUIPMENT																						
FY 1997 EQUIPMENT																					00	0.000
FY 1998 EQUIPMENT																						
FY 1999 EQUIPMENT																						
FY 2000 EQUIPMENT															9	0.061					09	0.061
FY 2001 EQUIPMENT															8	0.054			0	0.000	08	0.054
FY 2002 EQUIPMENT																					00	0.000
FY 2003 EQUIPMENT															1	0.006	14	0.083	7	0.042	22	0.131
TO COMPLETE																			47	0.282	47	0.282

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

	FY 1996 & Prior				FY 1997				FY 1998				FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				TC	TOTAL
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	2	0	0	0	2	2	2	2	0	0	0	0	3	3	2	2	6	6	6	6	6	6	6	6	4	4	3	3	54	136			
Out	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			

P-3A

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION**

MODELS OF SYSTEM AFFECTED: 5"/62 CALIBER GUN SYSTEM - MK 45 TYPE MODIFICATION: ORDALT MODIFICATION TITLE: GUN SYSTEM CONVERSION - E5006x

DESCRIPTION/JUSTIFICATION:
 CONVERSION OF 5"/54 CALIBER GUN SYSTEM TO 5"/62 CALIBER GUN SYSTEM

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN (IN MILLIONS)	FY 1995 & Prior		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		TC		TOTAL		
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	
<i>RDT&E</i>																					0	0.0	
<i>PROCUREMENT</i>																							
INSTALLATION KITS	0	0.000	0	0.00	0	0.000	1	4.10	0	0.00	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	4.10	
INSTALLATION KITS NONRECURRING																						0.0	
EQUIPMENT																						0.0	
EQUIPMENT NONRECURRING																						0.0	
ENGINEERING CHANGE ORDERS																						0.0	
DATA																						0.0	
TRAINING EQUIPMENT																						0.0	
SUPPORT EQUIPMENT																						0.0	
OTHER																						0.0	
OTHER																						0.0	
OTHER																						0.0	
INTERIM CONTRACTOR SUPPORT																						0.0	
INSTALL COST	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	
TOTAL PROCUREMENT		0.000		0.000		0.000		4.100		0.000		0.000		0.000		0.000		0.000		0.000		4.100	

P-1 SHOPPING LIST

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

P3A (Continued)

INDIVIDUAL MODIFICATION (Continued)

MODELS OF SYSTEMS AFFECTED: 5"/62 CALIBER GUN SYSTEM - MK 45 MODIFICATION TITLE: GUN SYSTEM CONVERSION - E5006x

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: DEPOT LEVEL

ADMINISTRATIVE LEADTIME: 6 Months

PRODUCTION LEADTIME: 24 Months

CONTRACT DATES: FY 1997: N/A

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

DELIVERY DATE: FY 1997: N/A

FY 1998: Sep-00 FY 1999: N/A

(\$ in Millions)

Cost:	Prior Years		FY 1996		FY 1997		FY 1998		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		To Complete		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PRIOR YEARS																						
FY 1996 EQUIPMENT																						
FY 1997 EQUIPMENT																						
FY 1998 EQUIPMENT							1	0.300													1	0.300
FY 1999 EQUIPMENT																						
FY 2000 EQUIPMENT																						
FY 2001 EQUIPMENT																						
FY 2002 EQUIPMENT																						
FY 2003 EQUIPMENT																						
TO COMPLETE																						

INSTALLATION SCHEDULE: SHIP AVAILABILITIES

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

P-3A

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40										DATE: FEBRUARY 1998			
APPROPRIATION/BUDGET ACTIVITY WEAPONS PROCUREMENT, NAVY/BA-4: Other Weapons								P-1 ITEM NOMENCLATURE/LINE ITEM # BLI: 4213 MK75/76MM GUN MOUNT MODS A4DU					
Program Element for Code B Items:								OTHER RELATED PROGRAM ELEMENTS					
	Prior Years	ID Code		FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003		To Complete	Total
QUANTITY													0
EQUIPMENT COST (In Millions)		A		\$0.7	\$0.0	\$2.0	\$2.0	\$2.1	\$2.1	\$2.2			\$11.1
SPARES COST (In Millions)													0
PROGRAM DESCRIPTION/JUSTIFICATION:													
<p>This funding will provide for the procurement of safety/shock ORDALT alterations for the MK 75 Gun Mounts.</p> <p>The ORDALTS will provide safety improvements for FFG 7, USCG WMEC 270, AND USCG WHEC 378.</p> <p>DUINS: Installation of Mod Equipment - FY96 and out are turn-key installations.</p>													
				<u>FY 97</u>	<u>FY 98</u>	<u>FY 99</u>	<u>FY 00</u>	<u>FY 01</u>	<u>FY 02</u>	<u>FY 03</u>			
Safety/Shock ORDALTS				\$672	\$ 0	\$1,951	\$2,002	\$2,056	\$2,105	\$2,163			

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40										DATE: FEBRUARY 1998			
APPROPRIATION/BUDGET ACTIVITY WEAPONS PROCUREMENT, NAVY/BA-4: Other Weapons								P-1 ITEM NOMENCLATURE/LINE ITEM # MODS UNDER \$2 MILLION A4E6					
Program Element for Code B Items:								OTHER RELATED PROGRAM ELEMENTS					
	Prior Years	ID Code		FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003		To Complete	Total
QUANTITY													0
EQUIPMENT COST (In Millions)		A		\$1.6	\$1.3	\$1.3	\$1.3	\$1.4	\$1.4	\$1.4			10
SPARES COST (In Millions)													0
PROGRAM DESCRIPTION/JUSTIFICATION:													
<p>This line provides for the procurement of ORDALTS and miscellaneous equipment for a wide variety of current and outdated minor caliber ordnance including 20MM through 40MM gun systems and 60MM and 81MM mortars.</p> <p>Cost Element E6001: This element procures ORDALTS required to improve safety and reliability for the 25MM MK 38 Machine Gun System and all other minor caliber ordnance much of which is outdated and difficult to support. It provides initial fill kits and replacment of surveyed and outdated minor caliber ordnance for active ships. This element also procures MK 11 Saluting Mounts and related components.</p>													
				<u>FY 97</u>	<u>FY 98</u>	<u>FY 99</u>	<u>FY 00</u>	<u>FY 01</u>	<u>FY 02</u>	<u>FY 03</u>			
Minor Caliber ORDALTS				\$1,571	\$1,288	\$1,279	\$1,333	\$1,359	\$1,385	\$1,418			

CLASSIFICATION:

UNCLASSIFIED

WEAPON SYSTEM COST ANALYSES P-5										DATE: FEBRUARY 1998	
APPROPRIATION/BUDGET ACTIVITY WEAPONS PROCUREMENT, NAVY BA-4: OTHER WEAPONS					P-1 ITEM NOMENCLATURE MODS UNDER \$2,000,000					SUBHEAD 84E6	
COST CODE	ELEMENT OF COST	IDENT CODE			FY 1997		FY 1998		FY 1999		
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	
E6001	MINOR CALIBER ORDNANCE					1,571		1,288		1,279	
	Total					1,571		1,288		1,279	

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: February 1998					
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy								P-1 ITEM NOMENCLATURE Pioneer UAV Defense Airborne Reconnaissance Program (DARP) - J4PN					
Program Element for Code B Items:								Other Related Program Elements					
	Prior Years	ID Code	FY 1995	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													
COST (In Millions)				*	**	\$48.4	\$19.4	\$10.7	\$7.8	\$7.7	\$0.0		\$94.0
<p>The Pioneer UAV system provides near-real-time reconnaissance, surveillance, target acquisition (RSTA) and combat assessment (CA) within line-of-sight of a ground control station, both day and night. The Pioneer UAV provides high quality video imagery to ground processing stations via datalink. Nine Pioneer systems are fielded. Five system support U.S. Navy operations, including current testing/evaluations and deployment aboard three configured LPD ships; three system support U.S. Marine Corps land based operations and the remaining system supports training requirements. The Pioneer funding provides: replenishment spares needed to improve reliability and maintainability to achieve 85% readiness and replenish Unit Support Kits (USKs); readiness impact items that are required to maintain systems safety changes or correct critical system deficiencies resulting from emerging obsolescence; ability to maintain the readiness posture of operationally deployed systems; and improvements to meet requirements generated from Desert Storm, Somalia, and Bosnia operations lessons learned. In FY1998 funds are requested for air vehicles, payloads and ECPs that provide better weather resistance, flotation and locator transmitter, further engine improvements or replacement engine procurement, circuit board ECPs, intelligence bay ECP and obsolescence ECPs. Also, \$3M in FY1998 is for the acquisition of material and establishment of contractor sustaining engineering and logistics efforts needed to support the initial fielding of UAV CARS into the DoD's tactical UAV fleet. FY1999-FY2002 procurement funds will buy support and equipment to maintain the Pioneer system. This profile supports the present TUAV transition schedule that effectively extends Pioneer through FY2003.</p> <p>*Prior to FY1997 the Pioneer program was budgeted in the Procurement, Defense-Wide appropriation.</p> <p>**FY1997 Pioneer is budgeted in the Other Procurement, Navy (OPN) appropriation.</p>													

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

B. APPROPRIATION/BUDGET ACTIVITY					C. P-1 ITEM NOMENCLATURE			A. DATE		
Weapons Procurement, Navy					Pioneer UAV Defense Airborne Reconnaissance Program (DARP)			February 1998		
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	IF YES WHEN AVAILABLE
<u>Pioneer UAV</u>										
FY1998 - Payloads	20	170	PEO(CU) - UAV JPO		SS/FFP	Pioneer UAV, Inc. Hunt Valley, MD	Feb 98	Jun 98	Yes	
FY1999 - Payloads	20	170	PEO(CU) - UAV JPO		SS/FFP	Pioneer UAV, Inc. Hunt Valley, MD	Nov 98	Apr 99	Yes	
FY1998 - Air Vehicles	15	660	PEO(CU) - UAV JPO		SS/FFP	Pioneer UAV, Inc. Hunt Valley, MD	Jun 98	Jun 99	Yes	
D. REMARKS										

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40										DATE: February 1998			
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy / BA 4 Other Weapons								P-1 ITEM NOMENCLATURE BLI # 4500 CANCELLED ACCOUNT ADJUSTMENT FY86 AND PRIOR					
Program Element for Code B Items:								Other Related Program Elements					
	Prior Years	ID Code			FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													
COST (In Millions)					\$0.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	N/A	
THIS LINE ITEM PROVIDES REPROGRAMMED FUNDS TO COVER COSTS ASSOCIATED WITH PROGRAM IN CANCELLED FISCAL YEARS 1986 AND PRIOR.													

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS P-5							Weapon System			DATE: February 1998					
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy / BA: 4 Other Weapons						ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD Cancelled Account Adjustment FY86 & Prior							C/Y 4PY	
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
						FY 1997			FY 1998			FY 1999			
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	
	FY86 & Prior PEO-USW Cancelled FY86 & Prior PEO-CU Cancelled							126			0			0	
	-							3							
	-														
	-														
TOTAL					0			129			0			0	

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40										DATE: February 1998			
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy / BA 4 Other Weapons							P-1 ITEM NOMENCLATURE 4501 CANCELLED ACCOUNT ADJUSTMENT FY87						
Program Element for Code B Items:							Other Related Program Elements						
	Prior Years	ID Code			FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													
COST (In Millions)					\$0.0 *	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	N/A	
<p>* LESS THAN \$100K THIS LINE ITEM PROVIDES REPROGRAMMED FUNDS TO COVER COSTS ASSOCIATED WITH PROGRAM IN CANCELLED FISCAL YEAR 1987.</p>													

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

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

APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy / BA: 4 Other Weapons	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD Cancelled Account Adjustment FY87	8/1 4P7
--	---------	--	---------

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS													
						FY 1997			FY 1998			FY 1999				
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST		
	FY87 NAVSEA Cancelled FY87 PEO-TAD Cancelled							1			0				0	
	-															
	-															
	-															
TOTAL					0			11			0				0	

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40										DATE: February 1998			
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy / BA 4 Other Weapons							P-1 ITEM NOMENCLATURE 4502 CANCELLED ACCOUNT ADJUSTMENT FY88						
Program Element for Code B Items:							Other Related Program Elements						
	Prior Years	ID Code			FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													
COST (In Millions)					\$1.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	N/A	
THIS LINE ITEM PROVIDES REPROGRAMMED FUNDS TO COVER COSTS ASSOCIATED WITH PROGRAM IN CANCELLED FISCAL YEAR 1988.													

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

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

APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy / BA: 4 Other Weapons	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD Cancelled Account Adjustment FY88	14P8
--	---------	--	------

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
						FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	FY88 PEO-TAD Cancelled							1,132			0			0
	-													
	-													
	-													
TOTAL					0			1,132			0			0

CLASSIFICATION:

UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40										DATE: February 1998			
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy / BA 4 Other Weapons							P-1 ITEM NOMENCLATURE 4610 JUDGMENT FUND						
Program Element for Code B Items:							Other Related Program Elements						
	Prior Years	ID Code			FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total
QUANTITY													
COST (In Millions)					\$9.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	N/A	
THIS LINE ITEM PROVIDES REPROGRAMMED FUNDS TO COVER COSTS ASSOCIATED WITH REIMBURSEMENT THE DEPARTMENT OF THE TREASURY'S JUDGMENT FUND.													

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5						Weapon System			DATE: February 1998					
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy / BA: 4 Other Weapons						ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD Judgment Fund			C4PJ				
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS											
						FY 1997			FY 1998			FY 1999		
			QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST
	MK-48 ADCAP ADR ASBCA No. 49872							9,468			0			0
	-													
	-													
	-													
TOTAL					0			9,468			0			0