# DEPARTMENT OF THE NAVY FY 1998/1999 BUDGET ESTIMATES



## JUSTIFICATION OF ESTIMATES

WEAPONS PROCUREMENT, NAVY

FEBRUARY 1997

## Weapons Procurement, Navy Errata Sheet

The Trident II program P-1 full funding and advance procurement funding levels in this Justification of Estimates and the Procurement Programs (P-1) exhibits are in error. The correct full funding and advance procurement funding profiles are reflected in the attached budget exhibits. Subsequent P-1 exhibits will be adjusted to reflect the correct funding levels.

EXHIBIT P-1

DEPARTMENT OF THE NAVY

FY 1998/1999 PROCUREMENT PROGRAM

APROPRIATION: 1507N Weapons Procurement, Navy

DATE: 02/04/97

		DOLLARS							ILLIONS OF E	
LINE NO ITEM NOMENCLATURE	IDENT	FY1998	FY 19	996	FY 19	997	FY 19	998	FY 19	999
	CODE	UNIT COST	QUANTITY	COST	QUANTITY	COST	QUANTITY	COST	QUANTITY	COST
BUDGET ACTIVITY 01: Ballistic Missiles										
Ballistic Missiles										
1 1150 Trident II	Α	44161429	6	380.6	7	449.7	7	309.1	7	318.3 U
Less: Advance Procurement (PY)				-60.5	i	-193.4		-16.9	)	-19.9
				320.0	ı	256.3		292.2	<u>!</u>	298.4
2 1150 Trident II	Α									
Advance Procurement (CY)				186.6	i	57.9		47.0	)	19.1
(FY 1996 for 1997) (MEMO)				186.6	i	-		-		-
(FY 1997 for 1998) (MEMO)				-		10.3		-		-
(FY 1997 for 1999) (MEMO)				-		2.0	1	-		-
(FY 1997 for 2000) (MEMO)				-		3.4		-		-
(FY 1997 for 2001) (MEMO)				-		3.4	•	-		-
(FY 1997 for 2002) (MEMO)				-		1.1		-		-
(FY 1997 for 2004) (MEMO)				-		37.7		-		-
(FY 1998 for 1999) (MEMO)				-		-		11.1		-
(FY 1998 for 2002) (MEMO)				-		-		2.3	3	-
(FY 1998 for 2003) (MEMO)				-		-		3.6	3	-
(FY 1998 for 2004) (MEMO)				-		-		30.0	)	-
(FY 1999 for 2000) (MEMO)				-		-		-		19.1
Support Equipment And Facilities										
3 1350 Missile Industrial Facilities	Α			2.2		2.1		2.1		2.2 U
TOTAL Ballistic Missiles				508.8		316.3		341.4		319.7

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

Budget Plan (amounts for PROCUREMENT actions programed) \_\_\_\_\_ 1996 actual 1997 est. 1998 est. 1999 est. Identification code 17-1507-0-1-051 \_\_\_\_\_\_ Program by activities: Direct program: 00.0101 Ballistic missiles 508,776 316,332 341,412 319,657 00.0201 Other missiles 802,532 844,202 612,993 910,722 125,607 120,594 95,715 126,284 41,615 30,815 59,230 26,648 00.0301 Torpedoes and related equipment 00.0401 Other weapons 00.0501 Other Ordnance 00.0601 Spares and repair parts 62,167 46,490 26,943 52,429 \_\_\_\_\_ \_\_\_\_\_ 00.9101 Total direct program 1,540,697 1,358,433 1,136,293 1,435,740 01.0101 Reimbursable program 641 74,800 74,800 74,800 \_\_\_\_\_ \_\_\_\_ 10.0001 1,541,338 1,433,233 1,211,093 1,510,540 Total Financing: Offsetting collections from: 11.0001 Federal funds(-) -541 -74,800 -74,800 -74,800 14.0001 Non-Federal sources(-) -100 17.0001 Recovery of prior year obligations Unobligated balance available, start of year: 21.4002 For completion of prior year budget plans 21.4003 Available to finance new budget plans -68,963 21.4009 Reprograming from/to prior year budget plans -19,781 22.1001 Unobligated balance transferred to other accounts 2,500 Unobligated balance available, end of year: 24.4002 For completion of prior year budget plans 25.0001 Unobligated balance expiring 9,093 1,463,546 1,358,433 1,136,293 1,435,740 39.0001 Budget authority \_\_\_\_\_\_ Budget authority: 1,641,505 1,389,913 1,136,293 1,435,740 40.0001 Appropriation 40.3601 Appropriation rescinded (unob bal) -14,600 40.7501 Reduction pursuant to P.L. 104-208 (-), 8037(h) -3,682 41.0001 Transferred to other accounts (-) -193,177 -27,798 42.0001 Transferred from other accounts 43.0001 Appropriation (adjusted) 1,463,546 1,358,433 1,136,293 1,435,740

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

			Obligations	3	
Identifi	cation code 17-1507-0-1-051	1996 actual	1997 est.	1998 est.	1999 est.
P	Program by activities:				
	Direct program:				
00.0101	Ballistic missiles	542,059	358,595 889,447	327,492	
00.0201	Other missiles	954,331	889,447	602,197	
00.0301	Torpedoes and related equipment	125,800	121,852	116,946	121,301
00.0401	Other weapons		29,431	50,823	31,828
00.0501	Other Ordnance	13,358			
00.0601	Spares and repair parts	58,629	47,853	48,022	48,191
00.9101	Total direct program	1,742,395	1,447,178	1,145,480	1,385,411
01.0101	Reimbursable program	663	74,925	74,800	74,800
10.0001	Total	1,743,058	1,522,103	1,220,280	1,460,211
F	Financing:				
	Offsetting collections from:				
11.0001	Federal funds(-)	303	-74,800	-74,800	-74,800
14.0001	Non-Federal sources(-)	14,344			
17.0001	Recovery of prior year obligations	-3,074			
	Unobligated balance available, start of year:				
21.4002	For completion of prior year budget plans	-698,539	-464,823	-375,953	-366,766
21.4003	Available to finance new budget plans	-68,963			
21.4009	Reprograming from/to prior year budget plans				
22.1001	9	2,500			
	Unobligated balance available, end of year:				
24.4002	For completion of prior year budget plans		375,953	366,766	417,095
25.0001	Unobligated balance expiring	9,093			
39.0001	Budget authority	1,463,546	1,358,433	1,136,293	1,435,740
	Budget authority:				
40.0001	Appropriation	1,641,505	1,389,913	1,136,293	1,435,740
40.3601	Appropriation rescinded (unob bal)	-14,600			
40.7501	Reduction pursuant to P.L. 104-208 (-), 8037(h)		-3,682		
41.0001	Transferred to other accounts (-)	-193,177	-27,798		
42.0001	Transferred from other accounts	29,818			
43.0001	Appropriation (adjusted)	1,463,546	1,358,433	1,136,293	1,435,740

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

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		Obligation	S	
Identification code 17-1507-0-1-051	 1996 actual	1997 est.	1998 est.	1999 est.
Relation of obligations to outlays:				
71.0001 Obligations incurred	1,757,705	1,447,303	1,145,480	1,385,411
72.1001 Orders on hand, SOY	-80,181	-37,434	-37,434	-37,434
72.4001 Obligated balance, start of year	4,183,692	3,286,784	2,668,165	2,198,465
74.1001 Orders on hand, EOY	37,434	37,434	37,434	37,434
74.4001 Obligated balance, end of year	-3,286,784	-2,668,165	-2,198,465	-2,141,609
77.0001 Adjustments in expired accounts (net)	12,874			
78.0001 Adjustments in unexpired accounts	-3,074			
90.0001 Outlays (net)	2,621,666	2,065,922	1,615,180	1,442,267

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

Identification code 17-1507-0-1-051	1996 actual	1997 est.	1998 est.	1999 est.
Direct obligations:				
125.101 Advisory and assistance services	35,154	26,777	22,185	25,915
Purchases goods/services (inter/intra) Fed accounts				
125.303 Purchases from revolving funds	105,464	90,331	76,554	87,745
126.001 Supplies and materials	72,491	95,265	61,702	94,453
131.001 Equipment	1,529,286	1,234,805	985,039	1,177,298
199.001 Total Direct obligations	1,742,395	1,447,178	1,145,480	1,385,411
Reimbursable obligations:				
226.001 Supplies and materials		20,768	21,262	21,900
231.001 Equipment	663	54,157	53,538	52,900
299.001 Total Reimbursable obligations	663	74,925	74,800	74,800
999.901 Total obligations	1,743,058	1,522,103	1,220,280	1,460,211

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

	FY 1997 Total Program Requirements Per FY 1997 Budget	FY 1997 Program Requirements Per FY 1998 Budget	Increase (+) or Decrease (-)
Ballistic Missiles	323,149	316,322	-6,817
Other Missiles	738,239	844,202	+105,963
Torpedoes and Related Equipment	110,682	120,594	+9,912
Other Weapons	31,467	30,815	-652
Ammunition	149,355	0*	-149,355
Spares and Repair Parts	47,471	46,490	-981
Subtotal Direct Program	1,400,363	1,358,433	-41,930
Reimbursable	74,800	74,800	-
Total Fiscal Year	1,475,163	1,433,233	-41,930

<sup>\*</sup>Funding appropriated in the Procurement Ammunition, Navy & Marine Corps appropriation.

### Explanation of Changes in FY 1997 Program Requirements

- 1. Ballistic Missiles (-\$6.8 million)
  - Decrease reflects undistributed Congressional reductions.
- 2. Other Missiles (+\$106.0 million)

The overall funding increase reflects the net of undistributed Congressional reductions (-\$19.9 million) and reduced funding for Ordnance Support Equipment (-\$4.6M) offset by Congressional increases for additional Standard Missiles (+\$22.5 million), Tomahawk (+\$11.5 million), AMRAAM (+\$21.9 million), JSOW (+\$15.6 million, Penguin (+\$7 million), Drones and Decoys (+\$17.5 million), Tomahawk modifications (+\$14.4 million), and Harpoon/SLAM (+\$20.1 million).

3. Torpedoes and Related Equipment (+\$9.9 million)

Changes include Congressional undistributed reductions (-\$3.1 million) and additional funding provided by Congress for the Vertical Launch ASROC program (+\$13 million).

4. Other Weapons (-\$0.7 million)

Changes reflect adjustments for Congressional undistributed reductions.

5. Ammunition (-149.4 million)

The FY 1997 President's Budget reflected \$149.355 million for Navy ammunition procurement in the Weapons Procurement, Navy (WPN) appropriation. The Congress transferred this amount to the Procurement of Ammunition, Navy & Marine Corps (PANMC) appropriation. FY 1998 and out funding is now reflected in this appropriation.

6. Spares & Repair Parts (\$-1.0 million)

This funding reduction is due to an undistributed Congressional reduction.

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

	FY 1997 Financing Per FY 1997 Budget	FY 1997 Financing Per FY 1998 Budget	Increase (+) Decrease (-)
Program Requirements (Total) Program Requirements (Direct) Program Requirements (Re imb)		1,433,233 (1,358,433) (74,800)	-41,930 (-41,930) -
Less: Anticipated Reimbursements	74,800	74,800	-
Add:  Unob bal avail, start of year to finance new budget plans Unob bal avail, end of year to finance subseq yr budget pl Reprog, prior year budget	ans		
Appropriation Adjusted	1,400,363	1,358,433	-41,930
Budget Authority: FY 1997 DoD Appropriations Act Appropriation rescinded Reduct Pursuant to P. L. 104-2 Transferred to other accounts		1,389,913 -3,682 -27,798	-10,450 -3,682 -27,798
Appropriation (Adjusted)	1,400,363	1,358,433	-41,930

### Explanation of Changes in Financing

The FY 1997 Weapons Procurement, Navy appropriation financing (\$1,358.4 million for direct and \$74.8 million for reimbursable) was subsumed within the WPN appropriations' Programming and Financing exhibits. The \$41.9 million change in program requirements is the result of Congressional reductions (-\$10.5 million), and Sect. 8037(h) (-\$2,376 thousand), and Sect. 8120 (-\$27,798 thousand) and Sect. 8138 (-\$1,306 thousand) adjustments.

# Comparison of FY 1996 Program Requirements as Reflected in the FY 1997 Budget with FY 1996 Program Requirements as Shown in FY 1998 Budget (In Thousands of Dollars)

	FY 1996 Total Program Requirements Per FY 1997 Budget	FY 1996 Total Progr Requirements Per FY 1998 Budget	or
Ballistic Missiles	505,431	508,776	+3,345
Other Missiles	814,857	802,532	-12,325
Torpedoes and Related Equipment	124,934	125,607	+673
Other Weapons	42,155	41,615	-540
Ammunition	*	*	_
Spares and Repair Parts	61,323	62,167	+844
Subtotal Direct Program	1,548,700	1,540,697	-8,003
Reimbursable	74,800	641	-73,159
Total Fiscal Year	1,623,500	1,541,338	-82,162

<sup>\*</sup>Funding appropriated in the Procurement Ammunition, Navy and Marine Corps appropriation.

### Explanation of Changes in FY 1996 Program Requirements

1. Ballistic Missiles (+\$3.3 million)

Increase reflects minor year of execution adjustments.

2. Other Missiles (-\$12.3 million)

Decrease reflects minor programmatic execution adjustments (-\$11.5 million) and Omnibus Reprogramming action (-\$.8 million).

- 3. Torpedoes and Related Equipment (+\$0.7 million)
  Change reflects minor funding updates.
- 4. Other Weapons (-\$0.5 million)
  Change reflects minor year of execution adjustments.
- 5. Ammunition

Funding realigned to the Procurement Ammunition, Navy & Marine Corps appropriation.

6. Spares & Repair Parts (+\$0.8 million)
Change reflects min or adjustments to reflect year of execution issues.

# Comparison of FY 1996 Financing as Reflected in the FY 1997 Budget with FY 1996 Financing as Shown in FY 1998 Budget (In Thousands of Dollars)

	FY 1996 Financing Per FY 1997 Budget	FY 1996 Financing Per FY 1998 Budget	Increase (+) Decrease (-)
Program Requirements (Total) Program Requirements (Direct) Program Requirements (Reimb)	1,623,500 (1,548,700) (74,800)	1,541,338 (1,540,697) (641)	-82,162 (-8,003) (-73,159)
Less: Anticipated Reimbursements	74,800	641	-73,159
Add: Unob bal avail, start of year to finance new budget plans:	-64,963	-68,963	-4,000
Unob bal transf to other accts Reprogramming from/to prior year budget plans	2,500	2,500 -19,781	-19,781
Appropriation Adjusted	1,486,237	1,463,546	-22,691
Budget Authority: FY 1996 DoD Appropriations Act Appropriation rescinded Transferred from other accts Transferred to other accounts	1,656,193 -14,600 29,818 -185,174	1,641,505 -14,600 29,818 -193,177	-14,688 - - -8,003
Appropriation (Adjusted)	1,486,237	1,463,546	-22,691

## Explanation of Changes in Financing

The -\$22.7 million change in program financing is the result of the actual FY 1996 Congressional appropriation (-\$14.7 million) and transfers to other accounts (-\$8.0 million).

#### DATE **BUDGET ITEM JUSTIFICATION SHEET** FEBRUARY 1997 APPROPRIATION/BUDGET ACTIVITY P-1 ITEM NOMENCLATURE WEAPONS PROCUREMENT, NAVY / BUDGET ACTIVITY 1 BALLISTIC MISSILES TRIDENT II MISSILE UGM-133A (D-5) Prior Years FY 97 FY 98 FY 99 FY 00 FY 01 FY 02 FY 03 To Complete FY 96 Total Program QUANTITY 337 12 12 12 12 434 \$287.1 \$479.7 \$478.3 \$527.8 \$10.561.2 \$321.2 \$256.3 \$281.8 \$499.7 \$1.259.8 \$14,952.9 Cost (in millions) Initial Spares \$3.5 \$3.4 \$2.7 \$7.6 \$11.0 \$5.2 \$6.4 \$6.8 \$191.8 \$259.1 \$20.7 Total (in Millions) \$10,581.9 \$324.7 \$259.7 \$284.5 \$294.7 \$490.7 \$483.5 \$506.1 \$534.6 \$1,451.6 \$15,212.0 Unit Cost (in Millions) 1/ \$31.4 \$54.1 \$37.1 \$40.6 \$42.1 \$40.9 \$40.3 \$42.2 \$44.6 \$66.0 \$35.1

The TRIDENT II missile is carried on OHIO CLASS Fleet Ballistic Missile Submarines, ensuring that the United Stated 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 to which the following key program milestones apply:

- o TRIDENT II missile Initial Operational Capability (IOC) March 1990
- o First Performance Evaluation Missile (PEM) flight test March 1989
- o Began PEM missile processing at Strategic Weapons Facility, Atlantic (SWFLANT) July 1988
- o Began SWFLANT installation, test, checkout and equipment/facility integration FY 1987

The FY 1998 full funding request of \$281.8 million will provide for the acquisition of hardware required to support the production of 7 TRIDENT II missiles with associated guidance systems, procurement of reentry system hardware, and support required to maintain SWFLANT'S TRIDENT II missile processing capability. The FY 1999 full funding request of \$287.1 million will support the production of 7 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.

1/ Total procurement unit cost, including guidance systems, warhead components, flight test instrumentation, arms control and recurring production support cost. Exhibit P-5 contains flyaway airframe and motor unit costs (\$22.5M in FY 1998 and \$23.6M in FY 1999).

NOTE: The full funding costs displayed on this exhibit properly reflect the DoD input for the FY 1998/FY 1999 President's Budget. The controls shown on the P-1 Exhibit at the front of the Backup Book do not properly reflect the DoD budget request for TRIDENT II Missile (full funding).

DD FORM 2454, JUL 88 P-1 SHOPPING LIST

ITEM NO PAGE NO

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

WEAPON SYSTEM COST ANALYSIS			A. WEAPONS P	ROCUREMENT, N	AVY	B. UGM-133A			C. LOCKHEED	MARTIN MISSILE	s	D. FEBRUARY 19	97
EXHIBIT (P-5)			BUDGET ACTIV	TTY 1		TRIDENT II (E	0-5) MISSILE (31DL	.)	AND SPACE CO	. SUNNYVALE, CA	L		
WEAPON SYSTEM	ldent.	FY 96		TOTAL	FY 97		TOTAL	FY 98		TOTAL	FY 99		TOTAL
COST ELEMENTS	Code	Unit cost	Qty	COST	Unit cost	Qty	COST	Unit cost	Qty	COST	Unit cost	Qty	COST
MISSILE H/W - RECURRING  1 AIRFRAME & MOTOR 2 WARHEAD (SHELL/AF&F) 3 OTHER (GUIDANCE)  TOTAL MISSILE FLYAWAY		20,600 9,655	6	123,600 24,180 38,620 186,400	21,030 9,866	7	147,210 23,500 39,464	22,500 10,080	7	157,500 20,200 40,320	23,600 10,311	7	165,200 19,400 41,244
SUPPORT COSTS 4 SPECIAL PURPOSE INSTR.				11,035			210,174 10,470			218,020 10,200			11,000
5 SPECIAL PURP. TOOL & TEST EQPT. 6 INF TREATY SUPPORT 7 ARMS CONTROL 8 CONTAINERS 9 SYSTEM INTEG. & PLANNING				28,970 6,984 7,687 40 12,140			22,470 7,140 7,700 40 11,400			14,000 7,300 15,200 40 11,600			14,800 7,500 11,500 40 11,900
10 SWFLANT PRODUCTION SUPPORT 11 GUIDANCE SUPPORTABILITY MODS 12 ANNUALIZED PRODUCTION COSTS 13 GUIDANCE PARTS PROCUREMENT 14 SWFPAC PRODUCTION SUPPORT				22,964 5,722 55,264 0 0			15,859 7,280 0 0 0			12,800 14,059 0 0			14,200 15,120 0 6,100 4,000
SUBTOTAL SUPPORT COSTS				150,806			82,359			85,199			96,160
GROSS P-1 END COST LESS: PRIOR YEAR ADV. PROC.				337,206 15,960			292,533 36,190			303,219 21,450			322,004 34,950
NET P-1 FULL FUNDING COST ADVANCE PROCUREMENT CY				321,246 185,379			256,343 57,934			281,769 57,500			287,054 30,400
NET TRIDENT II COST				506,625			314,277			339,269			317,454
MISSILE SPARE PARTS				3,520			3,368			2,684			7,602
TOTAL PROGRAM COST				510,145			317,645			341,953			325,056

P-1 Shopping List Item No.

Page No.

1

2

#### DATE: **BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)** FEBRUARY 1997 B. WEAPONS PROCUREMENT NAVY P-1 ITEM NOMENCLATURE: TRIDENT II MISSILE UGM-133A (D-5) **BUDGET ACTIVITY 1** CONTRACT DATE OF SPECS SPEC IF YES, COST ELEMENT/ CONTRACTOR METHOD CONTRACTED AWARD FIRST QUANTITY UNIT AVAILABLE WHEN REV FISCAL YEAR AND LOCATION & TYPE BY DATE DELIVERY COST NOW REQ'D AVAILABLE 1. TRIDENT II MSL. FY 1996 LOCKHEED MARTIN SS/CPIF STRATEGIC 10/95 10/97 6 20,600 YES NO MISSILES AND SYSTEMS SPACE CO. (LMMS) PROGRAMS (SSP) SUNNYVALE, CA LMMS SS/CPIF SSP 7 YES FY 1997 10/96 10/98 21,030 NO FY 1998 LMMS SS/CPIF SSP 22,500 YES 10/97 10/99 7 NO FY 1999 LMMS SS/CPIF SSP 10/98 10/00 23,600 YES NO D. REMARKS

P-1 Shopping List Item No. Page No.

FY 98/99 BUDGET PRODUCTION	N SCHEDUL	.E								TURE: GM - 1	33A (E	)-5)												DATE	:	FEBR	UARY	1997	
								FISC	AL YE	AR 1	996									FISC	AL YE	AR	1997						L
	S		ACCEP.	BALANCE	-			1				CALE	NDAE	R YEAR	D 10	26						CALI	-NDVI	VENI	R 199	7			A T
ITEM/MANUFACTURER PROCUREMENT YEAR	E R V	PROC QTY	PRIOR TO 1 OCT	DUE AS OF 1 OCT	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		E R
TRIDENT II MISSILE FY 1994		24		24	2	2	2	2	2	2	2	2	2	2	2	2													C
FY 1995		18	-	18													2	1	2	1	2	1	2	1	2	1	2	1	C
FY 1996		6	-	6																									6
FY 1997		7	-	7																									7
FY 1998		7	-	7																									7
FY 1999		7	-	7																									7
FY 2000		12	-	12																									12
FY 2001		12	-	12																									12
FY 2002		12	-	12																									12
FY 2003	#VALUE!	12	-	12																									12
					-	-																							
TOTAL		117	0	117	0 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	0 C T	1 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	75
	PRODUC	TION RATES	•									ON LE	AD TI	ME			•	•						REMA	ARKS				
MANUFACTURER'S NAME AND LOCATION	MINIMUM SUST.	1-8-5	MAXIMUM	REACHED D+								N LEA R					MANU FACT TIME	URIN	3		TOTA AFTE 1 OC	R							
LOCKHEED MARTIN MISSILES AND SPACE COMPANY, SUNNYVALE, CA	12 PER YR	24 PER YR	24 PER YR			AL 19					31 MG			5 MO	1		30 MC				35 M 24 M								
DD FORM 2445, JUL 87					P-1 S	SHOP	PING L	IST			3 IVIO						∠4 IVI						CTION						

ITEM NO. PAGE NO. EXHIBIT P-21 PRODUCTION SCHEDULE 1 4 UNCLASSIFIED

FY 98/99 BUDGET PRODUCTION	I SCH	IEDU	ILE												OMEN		'URE: 3M - 1:	33A (E	D-5)						DATE	:		FEBF	UARY	′ 1997							
				FISC	AL YE	AR 1	998									FISC	AL YE	AR 1										FISC									L A
									NDAF	YEA	₹ 19									CALE	NDAF	YEAR	1999								NDAF		R 200	J			Т
ITEM/MANUFACTURER PROCUREMENT YEAR	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	J J	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	N N	JUL	A U G	S E P	O C T	N 0 V	D E C	J A N	F E B	M A R	A P R	M A Y	N N	T N	A U G		E R
TRIDENT II MISSILE FY 1996	1		1		1		1		1		1																										0
FY 1997 1/													1	1	1	1	1	1	1															匸			0
FY 1998 1/																									1	1	1	1	1	1	1			上			0
FY 1999 1/																																		二			7
FY 2000																																		二			12
FY 2001																																		上			12
FY 2002																																		上			12
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REMARKS
1/ The Navy's budget estimates for D-5 missile procurement and deliveries assume U.K. participation in FY 1997 - FY 1999.

P-1 SHOPPING LIST ITEM NO. PAGE NO. DD FORM 2445, JUL 87 EXHIBIT P-21 PRODUCTION SCHEDULE 1

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REMARKS

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

P-1 SHOPPING LIST ITEM NO. PAG DD FORM 2445, JUL 87 PAGE NO. EXHIBIT P-21 PRODUCTION SCHEDULE

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							P-1 ITEM NOMENCLATURE:																														
FY 98/99 BUDGET PRODUCTION	I SCH	IEDU	LE										TRIDENT II MISSILE UGM - 133A (D-5)						DATE	:		FEBR	RUAR	Y 1997													
	FIGURE VEAD COOK								FISCAL YEAR 2005																												
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P-1 SHOPPING LIST
ITEM NO. PAGE NO. EXHIBIT P-21 PRODUCTION SCHEDULE

1 7

INCLASSIFIED													
									DATE				
BUDGET ITEM JUSTIFICATION SHEET										FEBRUARY 1997			
APPROPRIATION/BUDGET ACTIVITY P-1 ITEM NOMENCLATURE													
WEAPONS PROCUREMENT, NAVY / BUDGET ACTIVITY 1 BALLISTIC MISSILES 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)	\$2,066.2	\$185.4	\$57.9	\$57.5	\$30.4	\$19.2	\$20.4	\$20.4	\$20.4	\$18.0	\$2,495.8		
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)	\$2,066.2	\$185.4	\$57.9	\$57.5	\$30.4	\$19.2	\$20.4	\$20.4	\$20.4	\$18.0	\$2,495.8		
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 1998 request of \$57.5 million will provide \$11.2 million for the advance procurement of long lead items required to support the FY 1999 full funded manufacture of D-5 missiles and \$46.3 million for advance procurement of rocket motors and critical components required to maintain D-5 missile component production lines at the lowest sustaining rate consistent with quality, reliability, safety and cost.

The FY 1999 request of \$30.4 million will provide \$19.2 million for the advance procurement of long lead items required to support the FY 2000 full funded manufacture of D-5 missiles and \$11.2 million for advance procurement of critical components required to maintain D-5 missile component production lines at the lowest sustaining rate consistent with quality, reliability, safety and cost.

NOTE: The advance procurement costs displayed on this exhibit properly reflect the DoD input for the FY 1998/FY 1999 President's Budget. The controls shown on the P-1 Exhibit at the front of the Backup Book do not properly reflect the DoD budget request for TRIDENT II Advance Procurement.

DD FORM 2454, JUL 88 P-1 SHOPPING LIST

ITEM NO PAGE NO

2

1

#### **WEAPON SYSTEM ADVANCE PROCUREMENT EXHIBIT (P-10)** FY 1996 FOR FY 1997 (PROCUREMENT OF ADVANCE DESIGN AND MATERIAL) DATE: FEBRUARY 1997 (TOA, Dollars in tenths of Millions) Weapon System Type -First System Award Date First System Completion Date Interval Between System Completions UGM 133A TRIDENT II MISSILE FY 1989 FY 1987 Date **Delivery Date of Production Lead** Advance Procurement/Advance Funding **Contract Award** First Equipment **Time in Months Unit Cost Total Cost** Quantity Items Planned/Required Required (Adm/Prod)-Total 1. CFE AIRFRAME AND MOTOR LONG LEAD 7 10/96 10/98 9/24 0.2 1.5 AIRFRAME AND MOTOR PRODUCTION CONTINUITY 183.9 TOTAL 185.4

#### **Narrative Description**

Long Lead funding will allow for the delivery of TRIDENT II missiles in 2 versus 3 years.

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-1 Shopping List Item No.

Page No.

2

#### **WEAPON SYSTEM ADVANCE PROCUREMENT EXHIBIT (P-10)** FY 1997 FOR FY 1998 (PROCUREMENT OF ADVANCE DESIGN AND MATERIAL) (TOA, Dollars in tenths of Millions) DATE: FEBRUARY 1997 Weapon System Type - UGM 133A TRIDENT II MIssile First System Completion Date Interval Between First System Award Date System Completions FY 1989 UGM 133A TRIDENT II MISSILE FY 1987 Date **Delivery Date of Production Lead** Advance Procurement/Advance Funding **Contract Award** First Equipment **Time in Months Unit Cost Total Cost** Quantity Planned/Required Required (Adm/Prod)-Total Items 1. CFE AIRFRAME AND MOTOR LONG LEAD 7 10/97 10/99 9/24 1.5 10.5 AIRFRAME AND MOTOR 47.4 PRODUCTION CONTINUITY 57.9 TOTAL

#### **Narrative Description**

Long Lead funding will allow for the delivery of TRIDENT II missiles in 2 versus 3 years.

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-1 Shopping List Page No. Item No.

#### **WEAPON SYSTEM ADVANCE PROCUREMENT EXHIBIT (P-10)** FY 1998 FOR FY 1999 (PROCUREMENT OF ADVANCE DESIGN AND MATERIAL) DATE: FEBRUARY 1997 (TOA, Dollars in tenths of Millions) Weapon System Type -First System Completion Date Interval Between First System Award Date System Completions FY 1987 UGM 133A TRIDENT II MISSILE FY 1989 Date **Delivery Date of Production Lead** Advance Procurement/Advance Funding **Contract Award** First Equipment **Time in Months Unit Cost Total Cost** Quantity Planned/Required Required (Adm/Prod)-Total Items 1. CFE AIRFRAME AND MOTOR LONG LEAD 7 10/98 10/00 9/24 11.2 1.6 AIRFRAME AND MOTOR PRODUCTION CONTINUITY 46.3 TOTAL 57.5

#### **Narrative Description**

Long Lead funding will allow for the delivery of TRIDENT II missiles in 2 versus 3 years.

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-1 Shopping List Page No. Item No.

#### **WEAPON SYSTEM ADVANCE PROCUREMENT EXHIBIT (P-10)** FY 1999 FOR FY 2000 (PROCUREMENT OF ADVANCE DESIGN AND MATERIAL) (TOA, Dollars in tenths of Millions) DATE: FEBRUARY 1997 Weapon System Type - UGM 133A TRIDENT II MIssile First System Completion Date Interval Between First System Award Date System Completions FY 1989 UGM 133A TRIDENT II MISSILE FY 1987 Date **Delivery Date of Production Lead** Advance Procurement/Advance Funding **Contract Award** First Equipment Time in Months **Unit Cost Total Cost** Quantity Planned/Required Required (Adm/Prod)-Total Items 1. CFE AIRFRAME AND MOTOR LONG LEAD 12 10/99 10/01 9/24 19.2 1.6 AIRFRAME AND MOTOR PRODUCTION CONTINUITY 11.2 30.4 TOTAL

#### **Narrative Description**

Long Lead funding will allow for the delivery of TRIDENT II missiles in 2 versus 3 years.

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-1 Shopping List Page No. Item No.
2 5

#### DATE **BUDGET ITEM JUSTIFICATION SHEET** FEBRUARY 1997 APPROPRIATION/BUDGET ACTIVITY P-1 ITEM NOMENCLATURE WEAPONS PROCUREMENT, NAVY / BUDGET ACTIVITY 1 BALLISTIC MISSILES 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 \$2.2 \$2.1 \$2.1 \$2.2 \$2.3 \$2.3 \$2.4 \$2.4 N/A N/A Cost (in millions) Initial Spares N/A Total (in Millions) N/A \$2.2 \$2.1 \$2.1 \$2.2 \$2.3 \$2.3 \$2.4 \$2.4 N/A N/A N/A N/A N/A Unit Cost (in Millions) 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 Ordinance Plants (NIROPS) at Sunnyvale and Santa Cruz, Califorinia, 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.

DD FORM 2454, JUL 88 P-1 SHOPPING LIST
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**EXHIBIT P-40 BUDGET ITEM JUSTIFICATION SHEET** 

WEAPON SYSTEM COST ANALYSIS			. WELDONG DE	OCUREMENT, N	UNCLASSIFI		ON COMPANY TO COMP	THE CARE	a reassure	MARTIN MISSILES		FEBRUARY 199	
EXHIBIT (P-5)			A. WEAPONS PE BUDGET ACTIV		AVY	B. MISSILE INI	DUSTRIAL FACILI	TIES (SIDG)		O. SUNNYVALE, CA		FEBRUARY 199	/
	144				EV 07		TOTAL	EV 00					TOTAL
WEAPON SYSTEM	Ident.	FY 96		TOTAL	FY 97		TOTAL	FY 98		TOTAL	FY 99		TOTAL
COST ELEMENTS	Code	Unit cost	Qty	COST	Unit cost	Qty	COST	Unit cost	Qty	COST	Unit cost	Qty	COST
CAPITAL MAINTENANCE				#REF!			#REF!			#REF!			#REF!
TOTAL MISSILE INDUSTRIAL FACILITIES				#REF!			#REF!			#REF!			#REF!

P-1 Shopping List Item No.

Page No.

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## Weapons Procurement, Navy Errata Sheet

The FY 1997 Joint Stand-Off Weapon (JSOW) Navy procurement quantity listed on page N-11 of the Procurement Programs (P-1) exhibit is in error. The correct quantity is 100 as displayed in this Justification of Estimates exhibit. Subsequent P-1 exhibits will reflect the correct procurement quantity.

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

Budget Plan (amounts for PROCUREMENT actions programed) \_\_\_\_\_ 1996 actual 1997 est. 1998 est. 1999 est. Identification code 17-1507-0-1-051 \_\_\_\_\_\_ Program by activities: Direct program: 00.0101 Ballistic missiles 508,776 316,332 341,412 319,657 00.0201 Other missiles 802,532 844,202 612,993 910,722 125,607 120,594 95,715 126,284 41,615 30,815 59,230 26,648 00.0301 Torpedoes and related equipment 00.0401 Other weapons 00.0501 Other Ordnance 00.0601 Spares and repair parts 62,167 46,490 26,943 52,429 \_\_\_\_\_ \_\_\_\_\_ 00.9101 Total direct program 1,540,697 1,358,433 1,136,293 1,435,740 01.0101 Reimbursable program 641 74,800 74,800 74,800 \_\_\_\_\_ \_\_\_\_ 10.0001 1,541,338 1,433,233 1,211,093 1,510,540 Total Financing: Offsetting collections from: 11.0001 Federal funds(-) -541 -74,800 -74,800 -74,800 14.0001 Non-Federal sources(-) -100 17.0001 Recovery of prior year obligations Unobligated balance available, start of year: 21.4002 For completion of prior year budget plans 21.4003 Available to finance new budget plans -68,963 21.4009 Reprograming from/to prior year budget plans -19,781 22.1001 Unobligated balance transferred to other accounts 2,500 Unobligated balance available, end of year: 24.4002 For completion of prior year budget plans 25.0001 Unobligated balance expiring 9,093 1,463,546 1,358,433 1,136,293 1,435,740 39.0001 Budget authority \_\_\_\_\_\_ Budget authority: 1,641,505 1,389,913 1,136,293 1,435,740 40.0001 Appropriation 40.3601 Appropriation rescinded (unob bal) -14,600 40.7501 Reduction pursuant to P.L. 104-208 (-), 8037(h) -3,682 41.0001 Transferred to other accounts (-) -193,177 -27,798 42.0001 Transferred from other accounts 43.0001 Appropriation (adjusted) 1,463,546 1,358,433 1,136,293 1,435,740

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

			Obligations	3	
Identifi	cation code 17-1507-0-1-051	1996 actual	1997 est.	1998 est.	1999 est.
P	Program by activities:				
	Direct program:				
00.0101	Ballistic missiles	542,059	358,595 889,447	327,492	
00.0201	Other missiles	954,331	889,447	602,197	
00.0301	Torpedoes and related equipment	125,800	121,852	116,946	121,301
00.0401	Other weapons		29,431	50,823	31,828
00.0501	Other Ordnance	13,358			
00.0601	Spares and repair parts	58,629	47,853	48,022	48,191
00.9101	Total direct program	1,742,395	1,447,178	1,145,480	1,385,411
01.0101	Reimbursable program	663	74,925	74,800	74,800
10.0001	Total	1,743,058	1,522,103	1,220,280	1,460,211
F	Financing:				
	Offsetting collections from:				
11.0001	Federal funds(-)	303	-74,800	-74,800	-74,800
14.0001	Non-Federal sources(-)	14,344			
17.0001	Recovery of prior year obligations	-3,074			
	Unobligated balance available, start of year:				
21.4002	For completion of prior year budget plans	-698,539	-464,823	-375,953	-366,766
21.4003	Available to finance new budget plans	-68,963			
21.4009	Reprograming from/to prior year budget plans				
22.1001		2,500			
	Unobligated balance available, end of year:				
24.4002	For completion of prior year budget plans		375,953	366,766	417,095
25.0001	Unobligated balance expiring	9,093			
39.0001	Budget authority	1,463,546	1,358,433	1,136,293	1,435,740
	Budget authority:				
40.0001	Appropriation	1,641,505	1,389,913	1,136,293	1,435,740
40.3601	Appropriation rescinded (unob bal)	-14,600			
40.7501	Reduction pursuant to P.L. 104-208 (-), 8037(h)		-3,682		
41.0001	Transferred to other accounts (-)	-193,177	-27,798		
42.0001	Transferred from other accounts	29,818			
43.0001	Appropriation (adjusted)	1,463,546	1,358,433	1,136,293	1,435,740

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

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		Obligation	S	
Identification code 17-1507-0-1-051	 1996 actual	1997 est.	1998 est.	1999 est.
Relation of obligations to outlays:				
71.0001 Obligations incurred	1,757,705	1,447,303	1,145,480	1,385,411
72.1001 Orders on hand, SOY	-80,181	-37,434	-37,434	-37,434
72.4001 Obligated balance, start of year	4,183,692	3,286,784	2,668,165	2,198,465
74.1001 Orders on hand, EOY	37,434	37,434	37,434	37,434
74.4001 Obligated balance, end of year	-3,286,784	-2,668,165	-2,198,465	-2,141,609
77.0001 Adjustments in expired accounts (net)	12,874			
78.0001 Adjustments in unexpired accounts	-3,074			
90.0001 Outlays (net)	2,621,666	2,065,922	1,615,180	1,442,267

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

Identification code 17-1507-0-1-051	1996 actual	1997 est.	1998 est.	1999 est.
Direct obligations:				
125.101 Advisory and assistance services	35,154	26,777	22,185	25,915
Purchases goods/services (inter/intra) Fed accounts				
125.303 Purchases from revolving funds	105,464	90,331	76,554	87,745
126.001 Supplies and materials	72,491	95,265	61,702	94,453
131.001 Equipment	1,529,286	1,234,805	985,039	1,177,298
199.001 Total Direct obligations	1,742,395	1,447,178	1,145,480	1,385,411
Reimbursable obligations:				
226.001 Supplies and materials		20,768	21,262	21,900
231.001 Equipment	663	54,157	53,538	52,900
299.001 Total Reimbursable obligations	663	74,925	74,800	74,800
999.901 Total obligations	1,743,058	1,522,103	1,220,280	1,460,211

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

	FY 1997 Total Program Requirements Per FY 1997 Budget	FY 1997 Program Requirements Per FY 1998 Budget	Increase (+) or Decrease (-)
Ballistic Missiles	323,149	316,322	-6,817
Other Missiles	738,239	844,202	+105,963
Torpedoes and Related Equipment	110,682	120,594	+9,912
Other Weapons	31,467	30,815	-652
Ammunition	149,355	0*	-149,355
Spares and Repair Parts	47,471	46,490	-981
Subtotal Direct Program	1,400,363	1,358,433	-41,930
Reimbursable	74,800	74,800	-
Total Fiscal Year	1,475,163	1,433,233	-41,930

<sup>\*</sup>Funding appropriated in the Procurement Ammunition, Navy & Marine Corps appropriation.

### Explanation of Changes in FY 1997 Program Requirements

- 1. Ballistic Missiles (-\$6.8 million)
  - Decrease reflects undistributed Congressional reductions.
- 2. Other Missiles (+\$106.0 million)

The overall funding increase reflects the net of undistributed Congressional reductions (-\$19.9 million) and reduced funding for Ordnance Support Equipment (-\$4.6M) offset by Congressional increases for additional Standard Missiles (+\$22.5 million), Tomahawk (+\$11.5 million), AMRAAM (+\$21.9 million), JSOW (+\$15.6 million, Penguin (+\$7 million), Drones and Decoys (+\$17.5 million), Tomahawk modifications (+\$14.4 million), and Harpoon/SLAM (+\$20.1 million).

3. Torpedoes and Related Equipment (+\$9.9 million)

Changes include Congressional undistributed reductions (-\$3.1 million) and additional funding provided by Congress for the Vertical Launch ASROC program (+\$13 million).

4. Other Weapons (-\$0.7 million)

Changes reflect adjustments for Congressional undistributed reductions.

5. Ammunition (-149.4 million)

The FY 1997 President's Budget reflected \$149.355 million for Navy ammunition procurement in the Weapons Procurement, Navy (WPN) appropriation. The Congress transferred this amount to the Procurement of Ammunition, Navy & Marine Corps (PANMC) appropriation. FY 1998 and out funding is now reflected in this appropriation.

6. Spares & Repair Parts (\$-1.0 million)

This funding reduction is due to an undistributed Congressional reduction.

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

	FY 1997 Financing Per FY 1997 Budget	FY 1997 Financing Per FY 1998 Budget	Increase (+) Decrease (-)
Program Requirements (Total) Program Requirements (Direct) Program Requirements (Re imb)		1,433,233 (1,358,433) (74,800)	-41,930 (-41,930) -
Less: Anticipated Reimbursements	74,800	74,800	-
Add:  Unob bal avail, start of year to finance new budget plans Unob bal avail, end of year to finance subseq yr budget pl Reprog, prior year budget	ans		
Appropriation Adjusted	1,400,363	1,358,433	-41,930
Budget Authority: FY 1997 DoD Appropriations Act Appropriation rescinded Reduct Pursuant to P. L. 104-2 Transferred to other accounts		1,389,913 -3,682 -27,798	-10,450 -3,682 -27,798
Appropriation (Adjusted)	1,400,363	1,358,433	-41,930

### Explanation of Changes in Financing

The FY 1997 Weapons Procurement, Navy appropriation financing (\$1,358.4 million for direct and \$74.8 million for reimbursable) was subsumed within the WPN appropriations' Programming and Financing exhibits. The \$41.9 million change in program requirements is the result of Congressional reductions (-\$10.5 million), and Sect. 8037(h) (-\$2,376 thousand), and Sect. 8120 (-\$27,798 thousand) and Sect. 8138 (-\$1,306 thousand) adjustments.

# Comparison of FY 1996 Program Requirements as Reflected in the FY 1997 Budget with FY 1996 Program Requirements as Shown in FY 1998 Budget (In Thousands of Dollars)

	FY 1996 Total Program Requirements Per FY 1997 Budget	FY 1996 Total Progr Requirements Per FY 1998 Budget	or
Ballistic Missiles	505,431	508,776	+3,345
Other Missiles	814,857	802,532	-12,325
Torpedoes and Related Equipment	124,934	125,607	+673
Other Weapons	42,155	41,615	-540
Ammunition	*	*	_
Spares and Repair Parts	61,323	62,167	+844
Subtotal Direct Program	1,548,700	1,540,697	-8,003
Reimbursable	74,800	641	-73,159
Total Fiscal Year	1,623,500	1,541,338	-82,162

<sup>\*</sup>Funding appropriated in the Procurement Ammunition, Navy and Marine Corps appropriation.

### Explanation of Changes in FY 1996 Program Requirements

1. Ballistic Missiles (+\$3.3 million)

Increase reflects minor year of execution adjustments.

2. Other Missiles (-\$12.3 million)

Decrease reflects minor programmatic execution adjustments (-\$11.5 million) and Omnibus Reprogramming action (-\$.8 million).

- 3. Torpedoes and Related Equipment (+\$0.7 million)
  Change reflects minor funding updates.
- 4. Other Weapons (-\$0.5 million)
  Change reflects minor year of execution adjustments.
- 5. Ammunition

Funding realigned to the Procurement Ammunition, Navy & Marine Corps appropriation.

6. Spares & Repair Parts (+\$0.8 million)
Change reflects min or adjustments to reflect year of execution issues.

# Comparison of FY 1996 Financing as Reflected in the FY 1997 Budget with FY 1996 Financing as Shown in FY 1998 Budget (In Thousands of Dollars)

	FY 1996 Financing Per FY 1997 Budget	FY 1996 Financing Per FY 1998 Budget	Increase (+) Decrease (-)
Program Requirements (Total) Program Requirements (Direct) Program Requirements (Reimb)	1,623,500 (1,548,700) (74,800)	1,541,338 (1,540,697) (641)	-82,162 (-8,003) (-73,159)
Less: Anticipated Reimbursements	74,800	641	-73,159
Add: Unob bal avail, start of year to finance new budget plans:	-64,963	-68,963	-4,000
Unob bal transf to other accts Reprogramming from/to prior year budget plans	2,500	2,500 -19,781	-19,781
Appropriation Adjusted	1,486,237	1,463,546	-22,691
Budget Authority: FY 1996 DoD Appropriations Act Appropriation rescinded Transferred from other accts Transferred to other accounts	1,656,193 -14,600 29,818 -185,174	1,641,505 -14,600 29,818 -193,177	-14,688 - - -8,003
Appropriation (Adjusted)	1,486,237	1,463,546	-22,691

### Explanation of Changes in Financing

The -\$22.7 million change in program financing is the result of the actual FY 1996 Congressional appropriation (-\$14.7 million) and transfers to other accounts (-\$8.0 million).

EXHIBIT P-1
DEPARTMENT OF THE NAVY

FY 1998/1999 PROCUREMENT PROGRAM

APROPRIATION: 1507N Weapons Procurement, Navy

DATE: 02/04/97

		DOLLARS						M	ILLIONS OF [	OOLLARS
LINE NO ITEM NOMENCLATURE	IDENT	FY1998	FY 19		FY 19	-	FY 19	998	FY 19	999
	CODE	UNIT COST	QUANTITY	COST	QUANTITY	COST	QUANTITY	COST	QUANTITY	COST
BUDGET ACTIVITY 02: Other Missiles										
Other Missiles										
4 2307 ESSM				-		-		15.5	35	36.5 U
Strategic Missiles										
5 2101 Tomahawk	Α	797231	107	112.1	155	103.4	65	51.8	3	136.6 U
Tactical Missiles										
6 2206 AMRAAM	Α	570660	115	68.8	3 100	56.4	100	57.1	100	66.0 U
7 2224 Harpoon	Α		75	83.5	5	-		-		- U
8 2230 JSOW	В	519159	)	25.5	5 150	78.2	113	58.7	324	130.2 U
9 2234 Standard Missile	Α	1547181	22	127.8	3 127	215.0	127	196.5	109	277.9 U
10 2242 RAM	Α	440820	210	61.3	3 135	47.6	100	44.1	145	57.0 U
11 2260 Penguin	Α			-		6.9	)	-		- U
12 2280 Aerial Targets	Α			70.0	)	71.3		72.9		82.0 U
13 2285 Drones and Decoys	Α			-		17.1		0.3		0.3 U
14 2290 Other Missile Support	Α			12.3	3	17.7	•	18.3	3	18.8 U
Modification Of Missiles										
15 2301 Tomahawk Mods	Α			48.1		8.1		-		3.2 U
16 2304 Sparrow Mods	Α			1.3		2.5		-		- U
17 2315 Sidewinder Mods	Α			16.1		1.3		0.3		- U
18 2326 Harpoon Mods	Α			2.6		42.1		21.7	,	36.3 U
19 2328 Other Missile Mods				0.4		-		-		- U
20 2356 Standard Missiles Mods	Α			33.4	ļ	18.2		35.6	6	46.4 U
Support Equipment And Facilities										
21 2420 Weapons Industrial Facilities	Α			41.8		33.5		34.9	)	10.7 U
22 2430 Fleet Satellite Comm (MYP) (S	Α			87.9	)	110.6	•	-		- U
Ordnance Support Equipment										
23 2500 Ordnance Support Equipment	Α			9.7		14.2		5.3		8.7 U
TOTAL Other Missiles				802.5	5	844.2	!	613.0	)	910.7

		DGET ITE	ΞM	JUSTIFICA	TION SHEE			DATE February 1997							
APPROPRIATION/BUDGET ACT	TIVITY					P-1 ITEM NOMENCLATURE									
WEAPONS PROCUREM	S PROCUREMENT NAVY/BA-2 OTHER MISSILES  EVOLVED SEASPARROW MISSILE (ESSM) (12ES) #														
	FY 1996	FY 1997		FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003						
QUANTITY					35	150	177	176	245						
COST (In Millions)		2.5	1]	\$15.5	\$36.5	\$83.5	\$95.1	\$85.5	\$116.4						

#### ITEM DESCRIPTION/JUSTIFICATION:

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.

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.

ESSM is a cooperative effort among ten NATO Seasparrow nations (Australia, Canada, Denmark, Germany, Greece, Netherlands, Norway, Spain, Turkey, and the U.S.). An addendum to the NATO Seasparrow Sufrace Missile System Memorandum of Understanding, covering the Engineering and Manufacturing Development (EMD) phase of the ESSM was signed in June 1995. Negotiations are on-going for a cooperative agreement for the ESSM Production phase scheduled to be signed in early January 1997. agreement for the ESSM Production phase scheduled to be signed in early January 1997.

ESSM is a Code "B" Item. Planned date of approval for service use is July 1999

ESSM RDT&E funding is included in program element 0604755N, Project U0173.

1] \$2.5M for ESSM Transistion to Production is included in the SPARROW Modification line P1-14.

**EXHIBIT P-40** 

WEAPON SYSTEM COST ANAL	YSIS		A. Appropriatio	on/Budget Activity	Title/No.	B. WEAPON MO	DEL/SERIES/POP	PULAR NAME		C. MANUFACTU	RER NAME/PLAI	NT LOCATION	D. DATE
EXHIBIT (P-5)			WPN/0	Other Missiles/I	BA-2	Evolved S	easparrow Mis	ssile (ESSM) (	(12ES)	Hughes Missile	e Systems Co	., Tucson, AZ	February 1997
Weapon System	ldent.		FY 1996			FY 1997			FY 1998			FY 1999	
Cost Elements	Code	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost
1. Propulsion	ES001										35	118	4,130
2. Guidance & Control 1/	ES002										35	249	8,715
3. Warhead	ES003										35	34	1,190
4. Transition Section	ES004										35	125	4,375
5. Aero Surfaces	ES005										35	55	1,925
6. S-Band Uplink/Downlink	ES006												
7. Thrust Vector Control	ES007												
8. Warhead Compatible Telemeter	ES008										3	125	375
9. Integration, Assembly & Test	ES009										35	24	840
SUBTOTAL MISSILE HARDWARE													21,550
10. Tooling and Test Equipment	ES950									11,565			7,593
11. Shipping Container	ES960										35	5	175
12. Production Engineering	ES830						2,478			2,409			4,669
TOTAL MISSILE FLYAWAY							2,478			13,974			33,987
13. Launch Adapter Kit - MK29/MK48	ES980										35	11	385
14. Launch Adapter Kit - MK41	ES981												
SUBTOTAL COMMAND AND LAUNCH													385
15. Support Equipment	ES940									1,555			785
16. Integrated Logistics Support	ES970												1,329
SUBTOTAL SUPPORT										1,555			2,114
TOTAL							2,478			15,529			36,486

<sup>1]</sup> Assumes a 7P front end is provided as GFE.

#### CLASSIFICATION:

### **UNCLASSIFIED**

	ON/BUDGET ACTIVITY  S PROCUREMENT, NAVY/BA-2 OTHER	RMISSILES			P-1 ITEM NOMEN	CLATURE EASPARROV	W MISSILE (E	SSM) - (12E	ES) #230700		
COST	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
ES001	Propulsion FY 1999	HMSC, Tucson, AZ	SS/FP	NAVSEA	Nov-98	May-00	35	118	No	No	N/A
ES002	Guidance & Control Modification FY 1999	HMSC, Tucson, AZ	SS/FP	NAVSEA	Nov-98	May-00	35	249	No	No	N/A
ES003	Warhead FY 1999	HMSC, Tucson, AZ	SS/FP	NAVSEA	Nov-98	May-00	35	34	No	No	N/A
ES004	Transition Section FY 1999	HMSC, Tucson, AZ	SS/FP	NAVSEA	Nov-98	May-00	35	125	No	No	N/A
ES005	Aero Surfaces FY 1999	HMSC, Tucson, AZ	SS/FP	NAVSEA	Nov-98	May-00	35	55	No	No	N/A
ES008	Warhead Compatible Telemeter FY 1999	HMSC, Tucson, AZ	SS/FP	NAVSEA	Nov-98	May-00	3	125	No	No	N/A
ES009	Integration, Assembly & Test FY 1999	HMSC, Tucson, AZ	SS/FP	NAVSEA	Nov-98	May-00	35	24	No	No	N/A
ES960	Shipping Containers FY 1999	HMSC, Tucson, AZ	SS/FP	NAVSEA	Nov-98	May-00	35	5	No	No	N/A
ES980	Launch Adapter Kit - MK28/MK48 FY 1999	HMSC, Tucson, AZ	SS/FP	NAVSEA	Nov-98	May-00	35	11	No	No	N/A

P-1 SHOPPING LIST

ITEM NO.

PAGE NO.

CLASSIFICATION:

4

P-21

APPROPRIATION/BUDGET WEAPONS PROCU OTHER MISSIL	REMENT, NAVY BA-2						NOMENC		RROW N	MISSILE	(ESSI	M) #2:	30700																	SUBHEAD		12ES				DATE:		Febru	uary 199	17		
COST	ITEM/MANUFACTURER/	S E	PROC	ACCEPT PRIOR	BAL					FISCAL Y				1999								FISCAL Y				2000								FISCAL Y				2001				L A
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ITEM NO. PAGE NO. 4

CLASSIFICATION: UNCLASSIFIED

P-21

APPROPRIATION/BUDGET	T ACTIVITY					P-1 ITEM	NOMENCLATURE COMMENCE AT THE COMMENT AND THE C								UBHEAD:						DATE:																					
WEAPONS PROCU OTHER MISSIL	JREMENT, NAVY BA-2 LES					EVOL	VED SE	ASPAR	ROW M	ISSILI	E (ESSN	1) #23(	0700																		1	2ES						Febr	ruary 19	97		
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NAVMAT FORM 7110/4 (REVISED 11/77)

P-1 SHOPPING LIST

**UNCLASSIFIED** 

ITEM NO. PAGE NO.

#### UNCLASSIFIED **CLASSIFICATION:**

		BUDGE	T ITEM .	JUSTIFIC	CATION	SHEET				DATE:	
				P-40						Februa	ry 1997
APPROPRIATION/BU	JDGET AC	TIVITY				P-1 ITEM	NOMENCL	_ATURE		•	
<b>Weapons Procu</b>	rement,	Navy				TOMA	HAWK (	J2EL)(P	EO(CU))	(BLI: 21	0100)
<b>BA2/Other Miss</b>	iles	-									
	Prior	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	То	Total
	Years									Complete	Program
QUANTITY	3,974	107	155	65	0	0	0	0	0	-	4,301
COST (\$M)	\$7,262.5	\$112.1	\$103.4	\$51.8	\$136.6	\$141.3	\$142.3	\$109.3	\$190.0	-	\$8,249.3
Initial Spares (\$M)	\$287.2	\$5.7	\$7.3	\$2.4	\$4.3	\$1.0	\$1.1	\$1.3	\$1.4	-	\$311.7
Total (\$M)	\$7,549.7	\$117.8	\$110.7	\$54.2	\$140.9	\$142.3	\$143.4	\$110.6	\$191.4	-	\$8,561.0
Unit Cost (\$M)	1.900	1.101	0.714	0.834	-	-	-	-	-	-	1.990

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 FY98 program will procure 65 new production Block III RGM/UGM-109C, Land Attack Conventional missiles. The FY99 program will procure a total of 145 remanufactured missiles; 15 in the Block III configuration and 130 in the Block IV/1 configuration.

Characterstics and dimensions (approximate)

Systems Company

Weight (with booster and capsule) (UGM-109): 4,300 pounds Weight (with booster and canister) (RGM-109): 4,000 pounds

P-1 SHOPPING LIST

CLASSIFICATION:

**Contractor**: Hughes Missiles

DD Form 2454, JUN 86 ITEM NO 5

AGE NO 1

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

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

Cost Elements	FY 1996 Quantity		Total Cost	FY 1997 Quantity	Quantity Unit Cost		FY 1998 Quantity		FY 1999 Quantity	Quantity Unit Cost	Total Cost
<u>Missile Hardware</u> All-Up-Round Total Hardware	107 107	667 667	71,333 71,333	155 155	553 553	85,683 85,683		32,900 32,900		0	0
Procurement Support Product Improvement Systems Engineering Integra Production Engineering Total Procurement Supp			11,876 3,805 21,585 37,266			3,849 3,354 6,863 14,066		5,225 4,025 15,386 24,636			10,662 4,652 18,869 34,183
Total Flyaway Cost			108,599			99,749		57,536			34,183
Remanufacture (Block III) Remanufacture (Block IV/1)	0		0	0	0	0		0		327 709	4,900 92,200
Fleet Support Theater Mission Planning Ce Support Equipment Documentation Total Fleet Support	enter		2,129 974 376 3,479			2,830 287 530 3,647		2,867 783 434 4,084		-	3,787 956 547 5,290
Gross Weapons System Less GFE Credi Total Procurement Cos	t		112,078 (0) 112,078			103,396 (0) 103,396		61,620 (9,800) 51,820			136,573 (0) 136,573
Modifications Initial Spares			48,139 5,691			8,100 7,287		0 2,397			3,247 4,339
Total Program Cost			165,908			118,783		54,217			144,159

P-1 SHOPPING LIST ITEM NO 5 'AGE NO 2

**CLASSIFICATION:** 

Date: February 1997

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

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

Cost Elements	FY 2000 Quantity		Total Cost	FY 2001 Quantity	Quantity Unit Cost		FY 2002 Quantity			FY 2003 Quantity	Quantity Unit Cost	Total Cost
<u>Missile Hardware</u> All-Up-Round Total Hardware	0	0	0	0	0	0					0	
Procurement Support Product Improvement Systems Engineering Integration Production Engineering Total Procurement Support			10,227 3,625 17,242 31,094			8,944 3,561 13,792 26,297	-		7,589 3,266 13,356 24,211	-		7,761 3,634 13,402 24,797
Total Flyaway Cost			31,094			26,297			24,211			24,797
Remanufacture (Block III) Remanufacture (Block IV/1)	32 136	338 679	10,800 92,300	32 136	344 679	11,000 92,320	32 88	350 689	11,200 60,600	27 198	359 697	9,700 138,081
Fleet Support Theater Mission Planning Cente Support Equipment Documentation Total Fleet Support	er		3,762 2,537 758 7,057			6,636 4,699 1,337 12,672	-		6,939 4,987 1,398 13,324	_		9,073 6,525 1,828 17,426
Gross Weapons System Less GFE Credit Total Procurement Cost			141,251 (0) 141,251			142,289 (0) 142,289			109,335 (0) 109,335			190,004 (0) 190,004
Modifications Initial Spares			0 950			0 1,148			0 1,313			0 1,388
Total Program Cost			142,201			143,437			110,648			191,392

P-1 SHOPPING LIST ITEM NO 5 'AGE NO 2a

**CLASSIFICATION:** 

Date: February 1997

#### CLASSIFICATION:

# **UNCLASSIFIED**

. APPROPRIATION/ Veapons Procu BA2/Other Miss	ırement, Navy			Tomal	hawk (F 210100)			SUBHEAD	J2	EL
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
III-Up-Round 1000/FY96 1000/FY97 1000/FY97 1000/FY98	ughes Missiles System C Tucson, AZ	SS/Option SS/Option SS/Option SS/Option	NAVAIR NAVAIR NAVAIR	Jan 96 Jan 97 Jan 98 Jan 98	Oct 97 Oct 98 Oct 99 Oct 99	107 120 35 65	667 569 506 506	Yes Yes Yes Yes	No No No	

DD Form 2446-1, JUL 87 ITEM NO. 5 PAGE NC 3 CLASSIFICATION:

1998/99 BUDGET PRO	DUC	TIO	N SCH	IEDU	P-1	ITEM	NOM	IENC	LATU	RE										DA	ГЕ		Fe	bru	ary	19	97		
						TO	MΑ	HΑ	Wk	(J	2EL	.)(P	EO	(Cl	J))	(BLI	l: 2	101	00)						•				
ITEM / MANUFACTURER/			ACCEP.	BAL.					FI	SCA	L YE	AR	1997							F	FISC	AL Y	EAR	199	8				
PROCUREMENT YEAR	S	PROC	PRIOR	DUE		199	6				CA	LEN	DAR	YEA	AR 1	997					(	CALE	ENDA	AR Y	EAR	1998	8		L
	E R V	QTY	TO 1 OCT	AS OF 1 OC	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	JUN	J U L	A U G	S E P	A T E R
Hughes Missile Systems Company	<u>'</u> _																												
R/UGM-109C (Land Attack Conventional)/FY94		216	216	0																									0
R/UGM-109C (Land Attack Conventional)/FY95		217	0	217	18	18	18	18	18	18	18	18	18	18	18	19													0
R/UGM-109C (Land Attack Conventional)/FY95 (FY95 funded units of FY96 procurement)		57	0	57													4	4	4	4	5	5	5	5	5	5	5	6	0
R/UGM-109C (Land Attack Conventional)/FY96		37	O	31													7	7	4	1	J	3		J	3	3	J	U	
(FY96 funded units of FY96 procurement)		107	0	107													9	9	9	9	9	9	9	9	9	9	9	8	0
R/UGM-109C (Land Attack Conventional)/FY97																													
(FY97 funded units of FY97 proc.) (FY97 funded units of FY98 proc.)	-	120 35	0	120 35				Α												Α									120 35
R/UGM-109C (Land Attack Conventional)/FY98		65	0	65																Α									65
TOTAL	0	817	216	601	18	18	18	18	18	18	18	18	18	18	18	19	13	13	13	13	14	14	14	14	14	14	14	14	220
					O C	N O	Е	J A	F E	M A	A P	M A	J	J	A U	S E	0 C	N O	D E	J A	F E	M A	A P	M A	J	J	A U	S E	
					Т	V	С	Ν	В	R	R	Υ	N	L	G	Р	Т	٧	С	Ν	В	R	R	Υ	Ν	L	G	Р	
		UCTIO	N RATES	L KCII						F	PROC					TIME							REN	MARI	KS				
NUFACTURER'S NAME AND LOCATION	UM SUST.	1-8-5	MAXIMUM	D +								F	IIMDA IMIT		EAD			IAM	-		TOT	ΓAL							
Hughes Missiles System Company	<u>'</u>												IOR		AF1		F	ACTU			AFTE						comp		
Tucson AZ	N/A	20	50								1	OC	Т	_	1 00	CT		TIME			1 OC	Т	deli	verie	s to tl	he go	overn	men	t.
					INITI	AL						6			3			21			24								
					REO	RDER	(Provis		urco)																				
					11501	VDEK	(LIEAL	Jua 30	uice)																				

Previous editions are obsolete

P-1 SHOPPING LIST

<b>FY 1998/99 BUDGE</b>	TI	PR	10	)U(	СТ	10	N S	SC	HE	DI	JL	Е	P-1	ITEM	NON	ΛENC	CLAT	URE										DAT	E								
														тоі	MAH	IAW	K (J	2EL	)(PE	O(C	U))	(BLI	l: 21	010	0)					Fe	br	ua	ry	19	97		
					FISC	CAL	YEA	R 1	999							F	ISC	AL Y	EAR	20	00						•	FI	SCA	L YE	AR	200	)1				
ITEM/MANUFACTURER/		1998	В				CAL	END	DAR	YEA	R 1	999							CAL	END	DAR	YEA	R 2	000					CA	\LEI	NDA	R YE	EAR	200	1		L
PROCUREMENT YEAR	O C T	0	D E C	J A N	F E B	M A R	A P R	M A Y	JUZ	JUL	A U G		O C T	N O V	D E C	JAN	F E B	M A R	A P R	M A Y	JUN	JUL	A U G	SEP	O C T	N O V	D E C	JAN	F E B	M A R	A P R	M A Y	JUN	JUL	U	S E P	A T E R
R/UGM-109C (Land Attack Conventional)/FY97 (FY97 funded units of FY97 pr (FY97 funded units of FY98 pr		10	10	10	10	10	10	10	10	10	10	10	3	3	3	3	3	3	3	3	3	3	3	2													0
R/UGM-109C (Land Attack Conventional)/FY98													6	6	6	6	6	5	5	5	5	5	5	5													0
TOTAL	10	10	10	10	10	10	10	10	10	10	10	10	9	9	9	9	9	8	8	8	8	8	8	7	0	0	0	0	0	0	0	0	0	0	0	0	0
	0 C T	0	D E C	J A N	F E B	M A R		M A Y	JUZ		A U G	S E P	O C T	N O V	DEC	J A N	F E B	M A R	A P R	M A Y	NOL	JUL	A U G	SEP	O C T	N O V	DEC	J A N	F E B	M A R	A P R	M A Y	J U N	JUL	U	S E P	

DD Form 2445, JUL 87 Previous editions are obsolete P-1 SHOPPING LIST ITEM NO 5 PAGE NO. 4a

311/244 4-70 Exhibit P-21 Production Schedule

### CLASSIFICATION: UNCLASSIFIED

		BUD	GET ITEM	<b>JUSTIFIC</b>	ATION SH	EET				DATE:					
				P-40						Februa	ry 1997				
APPROPRIATION/BUI	OGET ACTIVIT	Υ				P-1 ITEM N	OMENCLAT	URE			-				
<b>Weapons Procure</b>	ment, Navy								<b>AMRAAM</b>						
BA 2 - Other Missi	- Other Missiles														
	Prior	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	То	Total				
	Years									Complete	Program				
QUANTITY	948	115	100	100	100	100	100	100	100	656	2,419				
COST (\$M)	\$788.8	\$68.8	\$56.4	\$57.1	\$66.0	\$66.9	\$67.7	\$68.3	\$71.5	\$553.5	\$1,865.0				
Initial Spares (\$M)	\$20.7	\$1.2	\$2.3	\$0.4	\$0.7	\$1.0	\$0.8	\$1.3	\$1.6	\$12.4	\$42.4				
Total (\$M)	\$809.5	\$70.0	\$58.7	\$57.5	\$66.7	\$67.9	\$68.5	\$69.6	\$73.1	\$565.9	\$1,907.4				
Unit Cost (\$M)	\$0.854	\$0.609	\$0.587	\$0.575	\$0.667	\$0.679	\$0.685	\$0.696	\$0.731	\$0.863	\$0.788				

#### MISSION AND DESCRIPTION:

DD Form 2454, JUN 86

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.

#### FY1998-1999 PROGRAM JUSTIFICATION:

100 missiles will be procured in both FY 1998 and 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.

Qty Summary:	<u>FY 1996</u>	<u>FY 1997</u>	FY 1998	<u>FY 1999</u>	FY 2000	FY 2001	FY 2002	FY 2003
Navv	115	100	100	100	100	100	100	100
Air Force	291	133	173	196	267	293	254	316
FMS/Other	<u>891</u>	<u>585</u>	<u>700</u>	<u>600</u>	<u>600</u>	<u>600</u>	<u>600</u>	<u>600</u>
Total	1297	818	973	896	967	993	954	1016

P-1 SHOPPING LIST

ITEM NO 6 PAGE NO 1

CLASSIFICATION:

# WEAPONS PROCUREMENT, NAVY FY 1998/99 PRESIDENT'S BUDGET MISSILE COST ANALYSIS EXHIBIT P-5 (Dollars in Millions)

Missile Nomenclature & Popular Name:	AMR	AAM								Date:	February 19	<u>97</u>
Cost Elements	FY 1996 Quantity	Quantity Unit Cost	115 Total Cost	FY 1997 Quantity	Quantity Unit Cost	100 Total Cost	FY 1998 Quantity	Quantity Unit Cost	100 Total Cost	FY 1999 Quantity	Quantity Unit Cost	100 Total Cost
Missile Hardware												
Guidance & Control	115	0.256	29.456	100	0.329	32.926	100	0.285	28.530	100	0.301	30.127
Propulsion	115	0.023	2.618	100	0.029	2.927	100	0.025	2.536	100	0.027	2.678
Warhead	115	0.006	0.655	100	0.007	0.732	100	0.006	0.634	100	0.007	0.669
ECO			2.293			0.747			1.558			1.647
Total Hardware	115	0.305	35.021	100	0.373	37.331	100	0.333	33.258	100	0.351	35.121
Procurement Support												
Production Tech Support			17.289			12.446			9.248			15.420
ST&TE			0.000			0.000			0.700			0.600
Containers			0.000			0.116			0.000			0.000
Production Test			7.634			2.972			5.400			7.183
Total Procurement Support			24.923			15.534			15.348			23.203
Total Flyaway Cost	115	0.521	59.944	100	0.529	52.865	100	0.486	48.606	100	0.583	58.324
Fleet Support												
Test Equipment			3.914			0.328			2.810			2.180
Handling Equipment			0.160			0.190			0.100			0.120
Training Equipment			0.000			0.155			1.300			1.200
ILS			4.592			2.708			4.100			4.000
Data & Pubs			0.146			0.180			0.150			0.200
Total Fleet Support			8.813			3.560			8.460			7.700
Weapon System Cost	115	0.598	68.757	100	0.564	56.425	100	0.571	57.066	100	0.660	66.024
Modifications			,			ایتیا			,			
Initial Spares			1.165			2.305			0.378			0.696
Total Program Cost	115	0.608	69.922	100	0.587	58.730	100	0.574	57.444	100	0.667	66.720

P-1 SHOPPING LIST ITEM NO. 6 PAGE NO

2

Exhibit P-5 Weapon System Cost Analysis

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

Missile Nomenclature & Popular Name: **AMRAAM** Date: February 1997 FY 2002 **FY 2000** Quantity 100 FY 2001 Quantity 100 Quantity 100 FY 2003 Quantity 100 Cost Elements **Total Cost** Unit Cost Quantity Unit Cost Quantity Unit Cost **Total Cost** Quantity **Total Cost** Quantity Unit Cost Total Cost Missile Hardware Guidance & Control 100 0.299 29.923 100 0.301 30.091 100 0.309 30.930 100 0.308 30.846 100 0.027 2.660 100 0.027 2.675 0.027 0.027 2.742 Propulsion 100 2.749 100 Warhead 100 0.007 0.665 100 0.007 0.669 100 0.007 0.687 100 0.007 0.685 **ECO** 1.632 1.650 1.712 1.708 100 0.349 34.880 100 0.351 35.084 100 0.361 36.079 100 0.360 35.981 Total Hardware Procurement Support **Production Tech Support** 17.247 17.493 15.385 17.185 ST&TE 0.100 0.200 3.200 0.600 Containers 0.300 0.000 0.000 0.000 **Production Test** 7.214 8.121 7.521 11.030 25.814 26.106 28.815 **Total Procurement Support** 24.861 **Total Flyaway Cost** 100 0.597 59.741 100 0.609 60.898 100 0.622 62.185 100 0.648 64.795 Fleet Support Test Equipment 1.500 1.400 0.900 0.899 Handling Equipment 0.100 0.100 0.100 0.101 Training Equipment 1.200 1.400 1.400 1.600 ILS 4.200 3.700 3.800 3.600 Data & Pubs 0.200 0.200 0.100 0.300 **Total Fleet Support** 7.200 6.800 6.700 6.100 0.669 Weapon System Cost 100 66.941 100 0.677 67.698 100 0.683 68.285 100 0.715 71.495 Modifications 0.976 0.784 1.333 1.623 **Initial Spares Total Program Cost** 100 0.679 67.917 100 0.685 68.482 100 0.696 69.618 100 0.731 73.118

P-1 SHOPPING LIST ITEM NO. 6 PAGE NO

3

Exhibit P-5 Weapon System Cost Analysis

	BUDGET PROCUREM	MENT HISTO	RY AND PLAN						A. DATE Febru	ary 1997
PPROPRIATION/BUDG POORS Procurem 2 - Other Missile	nent, Navy			C. P-1 ITE	AMRAA			SUBHEAD	Y2GB	
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 AVAILABI
FY 1996	Lot X Hughes, Tucson AZ Raytheon, Lowell MA	C/FP C/FP	ASC/AFMC ASC/AFMC	1/29/96 1/29/96	12/97 12/97	60 55	268 275	YES YES	NO NO	
FY 1997	Lot XI TBD	C/FP	ASC/AFMC	1/31/97	12/98	100	373	YES	NO	
FY 1998	Lot XII TBD	C/FP	ASC/AFMC	1/31/98	10/99	100	333	YES	NO	
FY 1999	Lot XIII TBD	C/FP	ASC/AFMC	1/31/99	8/00	100	351	YES	NO	

DD Form 2446-1, JUL 87 ITEM NO. 6 PAGE NO. 4 CLASSIFICATION:

FY 1998/99 BUDGET PF	RODUC	CTION	SCHE	DULE	JLE P-1 ITEM NOMENCLATURE  AMRAAM							DATE		Feb	ruar	y 199	7												
													Αľ	MRA.	AM														
ITEM / MANUFACTURER/			ACCEP.	BAL.				FISC	AL YE	AR 19	97										FIS	SCAL Y	'EAR '	1998					
PROCUREMENT YEAR	s	PROC.	PRIOR	DUE		1996						CALE	NDAR	YEAR	1997		_					С	ALENI	DAR YE	AR 19	98			L
	E R V	QTY	TO 1 OCT	AS OF 1 OCT	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	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	A U G	S E P	A T E R
AMRAAM FY 1994		1,282	827	455													1												
HUGHES	AF	403	327	76	44	32																						T -	ľ
HUGHES	N	30	30	0																									
RAYTHEON	AF	604	234	370	38	47	47	55	59	25	23	25	20	19	12														
RAYTHEON	N	45	42	3	3																								
HUGHES	FMS	80	80	0																									
RAYTHEON	FMS	120	114	6	6																								
AMRAAM FY 1995		963	0	963																									l
HUGHES	AF	197	0	197			15	15	14	14	13	13	15	19	16	14	25	24										T -	ľ
HUGHES	N	46	0	46			4	4	5	5	5	5	4	4	4	4	1	1										T -	l
RAYTHEON	AF	264	0	264							4	3	2	6	2	11	26	31	56	66	57								l
RAYTHEON	N	60	0	60							2	2	2	11	12	15	15	1										T -	l
HUGHES *	FMS	161	0	161	5	7	10	10	13	15	16	16	15	11	14	15	7	7										T -	l
RAYTHEON *	FMS	211	0	211						45	34	30	30	15	22	19	8	8										T -	ľ
HUGHES **	F-18	10	0	10			1	1	1	1	1	1	1	1	1	1												T -	l
RAYTHEON **	F-18	14	0	14							2	2	2	2	2	2	1	1											
																												<u> </u>	
AMRAAM FY 1996		1,297	0	1,297																									
HUGHES	AF	150	0	150															34	27	34	55						<u> </u>	0
HUGHES	N	60	0	60															20	20	20								0
RAYTHEON	AF	141	0	141															35	34	37	35						<u> </u>	0
RAYTHEON	N	55	0	55															12	13	13	17							0
HUGHES	FMS	461	0	461																4			56	58	58	58	58	57	112
RAYTHEON	FMS	424	0	424																3			56	58	56	22	58	58	113
HUGHES	AV8	3	0	3																3								<u> </u>	0
RAYTHEON	AV8	3	0	3															3										0
TOTAL					96	86	77	85	92	105	100	97	91	88	85	81	83	73	160	170	161	107	112	116	114	80	116	115	225
					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	JU	A U G	S E P	O C T	N 0 V	D E C	J A N	F E B	M A R	A P R	M A Y	N N	JU	A U G	Вπ	
	PRO	ODUCTION	NRATES	RCH'D	Ė		Ŭ							NT LE	AD TIM				Ŭ					ARKS				<u> </u>	
MANUFACTURER'S NAME AND LOCATION	MINIMU TRUS M	2-8-5	MAXIMUM	D +								ΑD	MIN L	EAD TI	ME			MANU	-		TOTAL		* Do	oes not	include	e 169 i	missiles	for	
HUGHES TUCSON AZ	30	60	75									PRI	OR		AFT	ER	FA	ACTURI	ING		AFTER	₹	as	ssisted	direct o	comme	ercial sa	ıles.	
RAYTHEON CO LOWELL MA	30	60	75		l							1 OC	Γ		1 OCT	Г		TIME			1 OCT	ī	** F-	-18 mis	siles pr	ocure	d with		
	-				INITIAL							4 MO			2 MO			21 MC	)		23 MC	)	R	&D P.E	. 0204	136N			
	I	I			REORE	DER (Previ	ious Sourc	ce)				4 MO			4 MO			22 MC	)		26 MC	)							

311 / 244

Previous editions are obsolete

P-1 SHOPPING LIST

ITEM NO 6 PAGE 5 Exhibit P-21 Production Schedule

FY 1998/99 BUDGET PR	ODUC	CTION	SCHE	DULE	P-1 IT	EM NON	MENCL	ATURE												DATE		Feb	ruar	y 199	7				
													Αľ	ΛRΑ	AM														
ITEM / MANUFACTURER/			ACCEP.	BAL.				FISC	AL YE	AR 19	99										FIS	SCAL Y	'EAR 2	2000					
PROCUREMENT YEAR	S	PROC.	PRIOR	DUE		1998						CALE	NDAR	YEAR	1999		_					C	ALENI	DAR YE	EAR 20	00			L
	E	QTY	TO 1	AS OF	0	N	D	J	F	М	Α	М	J	J	Α	S	0	N	D	J	F	М	Α	М	J	J	Α	S	A T
	R V		OCT	1 OCT	C T	0 V	E C	A N	E B	A R	P R	A Y	U N	U	U G	E P	C T	0 V	E C	A N	E B	A R	P R	A Y	U	U	U G	E P	E R
AMRAAM FY 1996		1,297	1,071	226																									<u> </u>
HUGHES	AF	150	150	0																									
HUGHES	N	60	60	0																									
RAYTHEON	AF	141	141	0																									
RAYTHEON	N	55	55	0																									
HUGHES	FMS	461	349	112	56	56																							<b></b>
RAYTHEON	FMS	424	310	114	57	57																							
HUGHES ***	AV8	3	3	0																									
RAYTHEON ***	AV8	3	3	0																									
AMRAAM FY 1997		2,764	0	2,764																									
CONTRACTOR TBD	AF	133	0	133			13	13	13	13	13	13	13	14	14	14													
CONTRACTOR TBD	N	100	0	100			10	10	10	10	10	10	10	10	10	10													
CONTRACTOR TBD	FMS	585	0	585			58	58	58	58	58	59	59	59	59	59													
AMRAAM FY 1998		973	0	973																									
CONTRACTOR TBD	AF	173	0	173													17	17	17	17	17	17	17	18	18	18			
CONTRACTOR TBD	N	100	0	100													10	10	10	10	10	10	10	10	10	10			
CONTRACTOR TBD	FMS	700	0	700													70	70	70	70	70	70	70	70	70	70			
AMRAAM FY 1999		896	0	896																									
CONTRACTOR TBD	AF	196	0	196																							16	16	164
CONTRACTOR TBD	N	100	0	100																							8	8	84
CONTRACTOR TBD	FMS	600	0	600																							50	50	500
TOTAL					113	113	81	81	81	81	81	82	82	83	83	83	97	97	97	97	97	97	97	98	98	98	74	74	748
					0 C	N O	D E	J A	F E	M A	A P	M A	J	Ŋ	A U	S E	0 C	N O	D E	J A	F E	M A	A P	M A	C C	Ŋ	A U	SE	
					Т	V	С	N	В	R	R	Υ	N	L	G	Р	Т	V	С	N	В	R	R	Y	N	L	G	Р	
		DUCTION	RATES	RCH'D								PROCL	JREME	NT LE	AD TIN	ΛE							KEIVI	ARKS					
MANUFACTURER'S NAME AND LOCATIO	ON MINIMU M SUST.	2-8-5	MAXIMUM	D +								AD	MIN L	EAD TI	ME			MANU			TOTAL	L	*** 6	Missile	es proc	ured w	ith AV-	BB	
HUGHES TUCSON AZ	30	60	75									PRI	OR		AFT	ΓER	FA	ACTURI	NG		AFTER	₹	pro	ogram f	unds.				
RAYTHEON CO LOWELL MA	30	60	75									1 OC	Γ		1 OC	Т		TIME			1 OCT	Γ	ļ						
					INITIAL							4 MO			2 MO	)		21 MC	)		23 MC	<b>)</b>							
	1				- INITIAL							4 IVIO			Z IVIO	,		Z I IVIC	,		20 IVIC	,							
					REORD	ER (Previ	ious Sour	ce)				4 MO			4 MO	)		22 MC	)		26 MC	)	1						

Previous editions are obsolete

P-1 SHOPPING LIST

311 / 244 ITEM NO 6 PAGE 6 Exhibit P-21 Production Schedule

FY 1998/99 BUDGET PR	ODUC	CTION	SCHE	DULE	P-1 ITI	EM NON	IENCLA	ATURE					A۱	ЛRА	ΑM					DATE		Feb	ruar	/ 199	)7				
ITEM / MANUFACTURER/			ACCEP.	BAL.							FISCA	L YEA	R 200	1							FIS	SCAL Y	ÆAR 2	2002					П
PROCUREMENT YEAR	S	PROC.	PRIOR	DUE	2	2000						CALE	NDAR	YEAR	2001							C	CALENI	DAR YE	AR 20	02			١,
	Е	QTY	TO 1	AS OF	0	N	D	J	F	М	Α	М	.1	.1	Δ	S	0	N	D	J	F	М	Α	М	J	J	Α	S	A
	R V		OCT	1 OCT	C T	0 V	E	A N	E B	A R	P R	A Y	U N	Ü	U G	E P	C T	0 V	E C	A N	E B	A R	P R	A Y	U N	Ü	U G	E P	E R
AMRAAM FY 1999		896	148	748																									
CONTRACTOR TBD	AF	196	32	164	16	16	16	16	16	16	17	17	17	17															
CONTRACTOR TBD	N	100	16	84	8	8	8	8	8	8	9	9	9	9															
CONTRACTOR TBD	FMS	600	100	500	50	50	50	50	50	50	50	50	50	50															
AMRAAM FY 2000		967	0	967																									
CONTRACTOR TBD	AF	267	0	267											22	22	22	22	22	22	22	22	22	23	23	23			
CONTRACTOR TBD	N	100	0	100											8	8	8	8	8	8	8	8	9	9	9	9			
CONTRACTOR TBD	FMS	600	0	600											50	50	50	50	50	50	50	50	50	50	50	50			
AMRAAM FY 2001		993	0	993																			l						
CONTRACTOR TBD	AF	293	0	293																							24	24	245
CONTRACTOR TBD	N	100	0	100																							8	8	84
CONTRACTOR TBD	FMS	600	0	600																							50	50	500
																													-
TOTAL					74	74	74	74	74	74	76	76	76	76	80	80	80	80	80	80	80	80	81	82	82	82	82	82	829
TOTAL					0	N	D	J	F	М	Α	М	J	J U	Α	S	0	N	D	J	F	М	Α	М	J	J	Α	S	028
					C T	O V	E C	A N	E B	A R	P R	A Y	U N	L	U G	E P	C T	0 V	E C	A N	E B	A R	P R	A Y	U N	U L	U G	E P	
	PRO	DUCTION	RATES	RCH'D							F	PROCU	REME	NT LEA	AD TIM	ΙE							REMA	ARKS					
MANUFACTURER'S NAME AND LOCATIO	MINIMU N <sub>M</sub> SUST.	2-8-5	MAXIMUM	D +								AD	MIN L	EAD TII	ME			MANU-			TOTAL								
HUGHES TUCSON AZ	30	60	75									PRI	OR		AFT	ER	FA	CTURI	NG		AFTER	₹							
RAYTHEON CO LOWELL MA	30	60	75									1 OCT	ī		1 OCT	Г		TIME			1 OCT	Г							
	1				INITIAL							4 MO			2 MO			21 MC	)		23 MC	)							
	-				DECE:	ED (D	6					4 MO			4 MO			22 MC	<u> </u>		26 MC	`							
					REORD	ER (Previ	ous Sourc	ce)				4 IVIO			4 IVIO			ZZ IVIC	,		∠b MC	,							

Previous editions are obsolete

P-1 SHOPPING LIST

311 / 244 ITEM NO 6 PAGE 7 Exhibit P-21 Production Schedule

FY 1998/99 BUDGET PI	RODUC	CTION	SCHE	DULE	P-1 ITI	EM NO	MENCL	ATURE												DATE		Feb	ruar	y 199	97				
													A۱	/IRA/	٩M														
ITEM / MANUFACTURER/			ACCEP.	BAL.				FISC	AL YE	AR 20	03										FIS	SCAL Y	EAR 2	2004					
PROCUREMENT YEAR	S	PROC.	PRIOR	DUE	2	2002						CALE	NDAR	YEAR	2003		_					С	ALENI	DAR YE	EAR 20	04			L
	E R V	QTY	TO 1 OCT	AS OF 1 OCT	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	A T E R
AMRAAM FY 2001		993	164	829																								<u> </u>	<u> </u>
CONTRACTOR TBD	AF	293	48	245	24	24	24	24	24	25	25	25	25	25															
CONTRACTOR TBD	N	100	16	84	8	8	8	8	8	8	9	9	9	9															<u> </u>
CONTRACTOR TBD	FMS	600	100	500	50	50	50	50	50	50	50	50	50	50															<u> </u>
AMRAAM FY 2002		954	0	954																									
CONTRACTOR TBD	AF	254	0	254											21	21	21	21	21	21	21	21	21	21	22	22			
CONTRACTOR TBD	N	100	0	100											8	8	8	8	8	8	8	8	9	9	9	9			
CONTRACTOR TBD	FMS	600	0	600											50	50	50	50	50	50	50	50	50	50	50	50			
AMRAAM FY 2003		1,016	0	1,016																									
CONTRACTOR TBD	AF	316	0	316																							26	26	264
CONTRACTOR TBD	N	100	0	100																							8	8	84
CONTRACTOR TBD	FMS	600	0	600																							50	50	500
																													-
																													<u> </u>
																													-
																												-	
TOTAL					82	82	82	82	82	83	84	84	84	84	79	79	79	79	79	79	79	79	80		81	81	84	84	848
					0	N O	D E	A	F E	A	A P	M A	U	J U	A U	S E	O C T	N O V	D E	J A	F E	A	A P	M A	U	J U	A U	S E P	
	PRO	DDUCTION	RATES	RCH'D	Т	V	С	N	В	R	R	Y PROCL	N IREME	NT LE	G AD TIM	P 1E		V	С	N	В	R	R REM	Y ARKS	N	L	G	Р	
MANUFACTURER'S NAME AND LOCATI	MINIMU M SUST.	2-8-5	MAXIMUM	D +								AD	MIN L	EAD TII	ME			MANU	-		TOTAL	_							
HUGHES TUCSON AZ	30	60	75									PRI	OR		AFT	ΓER	FA	ACTURI	NG		AFTER	3							
RAYTHEON CO LOWELL MA	30	60	75									1 OC	Γ		1 OC	Т		TIME			1 OCT								
					INITIAL							4 MO			2 MO	)		21 MC	)		23 MC	)							
												4110			4.10			00.115			00.110								
					REORD	ER (Prev	ious Sour	ce)				4 MO			4 MO	)		22 MC	)		26 MC	)							

Previous editions are obsolete

P-1 SHOPPING LIST

311/244 ITEM NO 6 PAGE 8 Exhibit P-21 Production Schedule

## CLASSIFICATION: UNCLASSIFIED

		BUDG	ET ITEM	JUSTIFI	CATION	SHEET				DATE:					
				P-40						Februa	ry 1997				
APPROPRIATION/	BUDGET A	ACTIVITY				P-1 ITEM I		_							
Weapons Proc	urement	t, Navy				Н	<b>ARPOO</b>	N (J2EH)	(PEO(C	U) (2224	)				
BA2 - Other Mi	Other Missiles														
	Prior	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	То	Total				
	Years									Complete	Program				
QUANTITY	3,986	<b>75</b>	0	0	0	0	0	0	0	0	4,061				
COST (\$M)	\$3,520.8	\$83.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$3,604.3				
Initial Spares (\$M)	\$180.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$180.4				
Total (\$M)	\$3,701.2	\$83.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$3,784.7				
Unit Cost (\$M)	\$0.929	\$1.113	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.932				

HARPOON provides a ship, air and submarine-launched all weather anti-ship cruise missile capability effective against enemy destroyers, light cruisers, surfaced submarines, partrol craft, and other (e.g., merchant, surveillance, etc.) enemy shipping. The Standoff Land Attack Missile (SLAM) variant is effective against fixed targets and ships in harbor.

HARPOON uses attitude reference mid-course guidance with an active or passive seeker for target acquisition and terminal guidance. The missile may be launched from the following platforms:

Ship-Launch Platforms: FFTT (formerly FF-1052), DDG and DD963, CG, CGN, and FFG-7 Class Ships

Air-Launch Platforms: P-3, A-6, F/A-18, B-52G/H, S-3B

Sub-Launch Platforms: 594, 637, 688 Classes

DD Form 2454, JUN 86

Funding in 1996 of 83.5 million will procure 75 SLAM ER All-Up-Round missiles for the U.S. Navy.

The SLAM ER is an upgrade to the SLAM. This missile is a day-night, adverse-weather capable weapon which can be deployed aboard aircraft carriers and launched from existing AGM (Air-to-Ground) equipped/Walleye data link equipped A-6E SWIP (Systems Weapon Integration

Program) and F/A-18 aircraft. Simultaneous production of FMS Harpoon and USN SLAM is synergistic for maintaining

reasonable unit pricing. FY 1996 represents the final procurement of All-Up-Round missiles for the U.S. Navy.

This production profile will allow for a smooth transition to SLAM-ER modification in FY 1997.

P-1 SHOPPING LIST

ITEM NO 7 'AGE NO 1

CLASSIFICATION:

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

Missile Nomenclature & Popula	HARPO	ON / SLA	M						Date:	Feb 1997	
Cost Elements		Quantity Unit Cost	Total Cost		Quantity Unit Cost	Total Cost	FY 1998 Quantity			Quantity Unit Cost Total Cos	<u>t</u>
				-					-		_
Missile Hardware HMB/SYS ENGR/DATA	7.5	0.475	05.050								
ECO	75 75	0.475 0.027	35.656 2.012								
SLAM UNIQUE	75 75		25.395								
ENGINE	75 75	0.089	6.699								
WARHEAD	75 75	0.038	2.823								
WINGS & FINS	75 75	0.036	1.637								
Total Hardware	75 75	0.022	74.222								
Total Haldware	75	0.330	14.222								
Procurement Support											
GOVT IN-HOUSE			4.473								
Total Procurement Support			4.473								
Total Flyaway Cost	75	1.049	78.695								
Fleet Support											
<del></del>											
TRAINING			0.250								
ILS SERVICES			4.552								
Total Fleet Support			4.802								
Weapon System Cost	75	1.113	83.497								
-											
Modifications			2.606			42.101		21.694		36.314	
Initial Spares			0.000			0.000	)	0.000	)	0.000	J
Total Program Cost	75	1.148	86.103			42.101		21.694		36.314	4

ITEM NO 7 'AGE NO 2

	BUDGET PROCU		HISTORY A	ND PLA	ANNING	EXHIB	IT (P-5/		A. D.	ATE ary 1997
	TION/BUDGET AC ement, Navy/BA2		ssiles			NOMEN GM-8 H		SUBHE N 		2EH
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
ALL-UP-ROUND										
FY1995	MCDONNELL DOUGLAS CORPORATION ST. LOUIS, MO	SS/FFP	NAVAIR	Aug 95	Jan 97	58	0.981	YES	NO	
FY1996	MCDONNELL DOUGLAS CORPORATION ST. LOUIS, MO	SS/FFP	NAVAIR	Aug 96	Jan 98	75	0.990	YES	NO	
D. REMARKS										

DD Form 2446-1, JUL 87 ITEM NO. 7 PAGE NO 3 CLASSIFICATION:

FY 1998/99 BUDGET PR	ODL	<b>ICTI</b>	ON SO	CHED	P-1 l	TEM	NOM	ENC	LATU	JRE										DAT	Έ								
									on		.AN	1 M	iss	ile	Sys	ste	ms						Fe	br	ua	ry	<b>19</b>	<b>97</b>	
ITEM / MANUFACTURER/			ACCEP.	BAL.				•				AR 1								F	ISC/	AL Y	EAR	199	8			$\Box$	
PROCUREMENT YEAR	s	PROC.	PRIOR	DUE		199	6					LEN			R 19	997					(	CALE	END	AR Y	EAR	1998	 3		
	Е	QTY	TO 1	AS OF	0	N	D	J	F	М	Α	М	J	J	Α	s	0	N	D	J	F	М	Α	М	J	J	Α	S	A
	R		OCT	1 OCT	C	0	Е	Α	Е	Α	Р	Α	Ü	Ü	U	Е	С	0	Е	A	Е	Α	Р	Α	U	Ü	U	Е	T E
	V		1996		Т	V	С	Ν	В	R	R	Υ	Ν	L	G	Р	Т	٧	С	Ν	В	R	R	Υ	N	L	G	Р	R
Harpoon/SLAM																													
McDonnell Douglas																													
Corporation																													
FY1994 (See Note 1)	USN	75	56	19	8	8	3																				-	$\vdash$	
1 1 1004 (OCC 1401C 1)	FMS	56	52	4	4	-	,																						-
																													-
FY1995	USN	58	0	58				6	6	6	6	4	6	5	6	4	3	4	2										
	FMS	93	0	93				2	5	9	9	11	8	8	7	9	10	7	8										
EVACOC	LICN	75	0	7.5																_	_	_	_	_	0		_		4.4
FY1996	USN FMS	75 50	0	75 50																5	5 4	5	5	5		9	9	9	14
	FIVIO	30	U	30																4	4	4	+	4	4	4	-	-	14
Note 1: FY-94 schedules have																													-
been adjusted for actual USN/FMS																													
deliveries through September 1996.																													-
TOTAL	0	407	108	299	12	8	3	8	11	15	15	15	14	13	13	13	13	11	10	9	9	9	9	9	13	13	13	13	28
					0	N	D	J	F	М	Α	М	J	J	Α	S	0	N	D	J	F	М	Α	М		J	Α	S	
					С	0 V	E	A N	E	A	P	A	U N	U	U	E	С	O V	E C	A N	E B	A R	P R	A Y	U	U	U	E	
	PROD	UCTIO	N RATES	RCH'D		V	U	IN	В	F		URE		NT LI	_			V	U	IN	D	I		MARI	KS		G		$\neg$
IANUFACTURER'S NAME AND LOCATION	UM	1-8-5	MAXIMUM	D +								MIN			IME			MANU-	-		TOT	AL							
McDonnell Douglas	0001.										PR	IOR			AFT	FR	FAC	CTURI	NG	4	AFTEI	R							
Corp., St. Charles, MO	9		55								1 10	1 00	T:	1	OC			TIME			OC.								
Corp., On Chanco, WO	Ĭ		- 55											H	50	•					. 50	•							
					INITIA	\L																							
	1																												
	1				REOR	DER	(Previo	ous So	urce)			12			10			17			27								

Y 1998/99 BUDG	EI	PF	२०	DU	JC.	TIC	ON	SC	СН	IEC	U	LE		irpo					Mis	ssi	le S	Svs	ste	ms				DAT				Fe	ebr	uaı	v 1	99
	1			CAI	ENI	٦٨Þ	YEA	D 1	000				_	p						R 20		,							SC AI	. VE	AR			-	,	_
ITEM/MANUFACTURER/		1998	R	CAL	LLINI	JAN		.END			AP 1	1000				'	130/	~L I		LEN		) VE	AP 1	2000				1 1						200	1	
PROCUREMENT YEAR	O C T	N O V	D E C	J A N	F E B	M A R	A P	M A Y	J U N	J U	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	A U G	S E P	0	N O V	D E C	J A N	F E B	M A R	A P	M A Y	J U N	J U L	A U	S E P
1996 USN	_		1																																	
*FMS	5																														<u> </u>					
- 1.11.0	ľ	Ť																													ı					
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TOTAL	9	10	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	0	0	0
	0	N O	D E		F E	M A		M A	J	J	A U	S	0 C	N O	D E C	J A	F E	M A	A	M A	Ŋ	J	A U	S E		N O	D E	J A	F E	M A		M A	J	J		S E
	C T	V	C	N	В	R	R	Y	N	L	G	E P	Т	٧	C	N	В	R	P R	Y	N	L	G	Р	Т	<b>V</b>	С	N	В	R	R	Y	N	L		P

DD Form 2445, JUL 87 Previous editions are obsolete P-1 SHOPPING LIST ITEM NO 7 PAGE NO. 5

#### **CLASSIFICATION:**

## **UNCLASSIFIED**

I	BUDGET	ITEM JU	STIFICA	TION S	HEET					DATE:	
			P-40							Feb	<b>-97</b>
APPROPRIATION/BUDGET ACTIVITY						P-1 ITEM	NOMENCI	_ATURE		•	
Weapons Procurement, Navy											
BA-2 Other Missiles						Joint St	andoff \	<b>Neapon</b>	(JSOW)	#223000	)
	Prior	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	То	Total
	Years			*						Complete	Program
QUANTITY	0	0	100	113	324	748	866	1,026	1,075	13,548	17,800
COST (\$M)	\$0.0	\$25.5	\$78.2	\$58.7	\$130.2	\$222.3	\$321.8	\$368.6	\$380.1	5092.7	\$6,678.1
Initial Spares (\$M)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.4	\$0.6	\$1.2	\$1.0	\$0.0	156.5	\$159.6
Total (\$M)	\$0.0	\$25.5	\$78.2	\$58.7	\$130.6	\$222.9	\$323.0	\$369.6	\$380.1	5249.2	\$6,837.7
Unit Cost (\$M)	N/A	N/A	.782	.589	.403	.298	.373	.360	.354	.387	.384

JSOW is a joint USN/USAF program with the USN as the lead service. The Joint Standoff Weapon System (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-16 C/D and B-1B aircraft. JSOW Baseline (AGM 154A) Limited Rate Initial Procurement (LRIP) commences in 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 provides for the procurement of 113 Baseline variants for the Navy. The FY99 budget request provides for 324 Baseline variants.

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

QUANTITIES	FY-97	FY-98	FY-99	FY-00	<u>FY-01</u>	FY-02	FY-03	
USN (Baseline)	100	113	324	560	497	524	584	
USN (BLU-108)	0	0	0	188	251	335	282	
USN (Unitary)	0	0	0	0	118	167	209	
USAF (Baseline)	0	0	78	121	171	65	53	
USAF (BLU-108)	<u>0</u>	<u>0</u>	<u>61</u>	<u>144</u>	<u>206</u>	<u>227</u>	<u>314</u>	
TOTAL FY Qty	100	113	463	1,013	1,243	1,318	1,442	

P-1 SHOPPING LIST

ITEM NO 8 PAGE NO 1

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:		JSOW	-							Date:	Feb-97	
Cost Elements		Quantity Unit Cost	Total Cost		Quantity Unit Cost		FY 1998 Quantity		Total Cost	FY 1999 Quantity	Quantity Unit Cost	Total Cost
Missile Hardware												
All Up Round (AUR) Contractor (Warranty/ECO/Data)	0.000		0.000 0.000	100		46.910 1.586		*	51.037 2.018	324		85.317 5.119
Total Hardware	0.000	0.000	0.000	100	0.485	48.496	113	0.470	53.055	324	0.279	90.436
Procurement Support LC GEU/Control Gov't In-house/Prod Supt Special Tools and Test Equip Containers Telemetry Command & Launch/ST&E/Mssion/SW Total Procurement Support  Total Flyaway Cost			0.000 0.000 25.458 0.000 0.000 0.000 25.458			7.084 2.182 0.000 1.462 1.989 0.000 12.717			3.181 5.543 5.556 1.589 2.028 0.000 17.897 70.952			0.000 5.004 27.011 3.739 1.949 0.000 37.703
Fleet Support												
ILS/Support			0.000			1.445			3.287			2.075
Total Fleet Support			0.000			1.445			3.287			2.075
Weapon System Cost			25.458			62.658			74.239			130.214
FY 97 Congressional Add Adjustment Net P-1 Cost						<u>15.574</u> 78.232			<u>-15.574</u> 58.665			
Modifications Initial Spares			0.000 0.000			0.000 0.000			0.000 0.000			0.000 0.351
Total Program Cost			25.458			78.232			58.665			130.565

<sup>\*</sup>FY 97 Congressional plus-up of \$15.6M will be executed with the FY 98 procurement.

ITEM NO 8 PAGE NO 2

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

Missile Nomenclature & Popular	Name:		JSOW							Date:	Feb-97	
Cost Elements	FY 2000 Quantity	,		FY 2001 Quantity	Quantity Unit Cost	Total Cost	FY 2002 Quantity	,	Total Cost	FY 2003 Quantity	Quantity Unit Cost	Total Cost
Missile Hardware												
All Up Round (AUR) Contractor (Warranty/ECO/Data)	748		183.880 11.033	866		277.537 15.268	1,026		317.543 17.582			303.916 18.234
Total Hardware	748	0.261	194.913	866	0.338	292.805	1,026	0.327	335.125	1,075	0.300	322.150
Procurement Support												
Gov't In-house/Prod Supt Special Tools and Test Equip Containers Telemetry Command & Launch/ST&E/Mssi Total Procurement Support Total Flyaway Cost Fleet Support	on/SW		3.930 9.534 7.708 3.742 0.000 24.914 219.827			6.280 4.619 8.435 5.427 0.331 25.092 317.897			7.001 4.596 9.811 5.361 0.000 26.769 361.894			6.436 25.077 10.188 5.370 0.000 47.071 369.221
ILS/Support			2.436			3.871			6.699			10.922
Total Fleet Support			2.436			3.871			6.699			10.922
Weapon System Cost			222.263			321.768			368.593			380.143
Modifications Initial Spares			0.000 0.645			0.000 1.195			0.000 1.020			0.000 0.000
Total Program Cost			222.908			322.963	ITE	M NO 8	369.613 PAG	SENO 3		380.143

#### CLASSIFICATION:

# **UNCLASSIFIED**

	BUDGET PROCU	REMENT	HISTORY A	ND PL	ANNING	<b>EXHIB</b>	IT (P-5/	<b>A)</b>	A. DATE	<b>E</b>
							_			Feb-97
B. APPROPRIATION/BUDGET AC Weapons Procurement,				C. P-1 I	TEM NOME <b>#2230</b> 0	NCLATUR	E	SUBHEAD	Y2JS	
B.A. 2- Other Missiles	Navy			Joint		ff Weap	ons		1200	
Cost Element/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD	DATE OF	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
Special Tools/ <u>Test Equipment</u> FY - 96	TEXAS INSTRUMEN (Lewisville, TX)	CPIF (option on E&MD)	NAVAIR	Mar 96	Dec 96	Lot	N/A	N/A	No	
<u>LRIP</u> FY - 97	TEXAS INSTRUMEN (Lewisville, TX)	CPIF (option on E&MD)	NAVAIR	Feb 97	Jun 98	100	0.485	N/A	No	
FY - 98	TEXAS INSTRUMEN (Lewisville, TX)	FPIF	NAVAIR	Dec 97	Feb 99	113*	0.470	N/A	No	
FY - 99	TEXAS INSTRUMEN (Lewisville, TX)	FPIF	NAVAIR	Nov 98	Jan 00	324	0.279	N/A	No	

D. REMARKS

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

DD Form 2446-1, JUL 87 ITEM NO. 8 PAGE NO.4 CLASSIFICATION:

998/99 BUDGET PRO	DUC	CTIO	N SCI	HED	P-1	I ITI	ΕM	NO	ME	NC	LA	TUF	RΕ							DA	ΓΕ								
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ITEM / MANUFACTURER/			ACCEP.	BAL.					FI	ISCA	L YE	AR	1997							F	ISC	AL Y	EAR	199	8				
PROCUREMENT YEAR	S	PROC		DUE		1996	6				CA	LEN	DAR	YEA	R 19	97						CALI	END	AR Y	EAR	1998	3		
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JSOW/Texas Instruments																													
FY 1997	USN	100		100					Α										Α						3	8	12	14	63
FY 1998	USN	113		113																									113
E)/ 4000	HON	004		004																									004
FY 1999	USN USAF			324 139																									324 139
	UUAI	133		133																									133
FY 2000	USN			748																									748
	USAF	265		265																									265
FY 2001	USN	866		866																									866
1 1 2001	USAF			377																									377
FY 2002	USN			1026																									1026
	USAF	292		292																									292
FY 2003	USN	1075		1075																									1075
	USAF	367		367																									367
TOTAL	0	5692	0	5692		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0		0	3			14	5655
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Lewisville,TX	12	12	.00								<u> </u>		•	l '	- 55				_		. 00		1						
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Previous editions are obsolete

P-1 SHOPPING LIST

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ITEM/MANUFACTURER/		1998	3				CAL	ENE	DAR	YEA	AR 1	999							CAL	ENE	DAR	YEA	R 2	000					C	ALEI	NDA	R Y	EAR	2001		
PROCUREMENT YEAR	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	U	A U G	S E P	O C T	N O V		J A N	F E B	M A R	A P R	M A Y	J U V	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	JUN	U	A S J E G P	T
JSOW/Texas Instruments																																				
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FY 1998 USN					10	10	10	10	10	10	10	10	11	11	11																					
FY 1999 USN	1	Α														20	25	25	25	25	25	25	30	30	30	30	34									
USAF																5	10	10	12	12	12	12	12	12	14	14	14									
FY 2000 USN USAF														Α														40 22	53 22	60 22	65 22	65 22	65 22	65 6 22 2		205
FY 2001 USN USAF																										Α										866
FY 2002 USN USAF																																				1026 292
FY 2003 USN USAF																																				1075
TOTAL	15	16	16	16	10	10	10	10	10	10	10	10	11	11	11	25	35	35	37	37	37	37	42	42	44	44	48	62	75	82	87	87	87	87 8	7 87	4275
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DD Form 2445, JUL 87 Page of Pages Previous editions are obsolete ITEM NO 8 PAGE NO. 6 P-1 SHOPPING LIST Exhibit P-21 Production Schedule 311/244 4-70

1998/99 BUDGET PR	ODUC	CTIO	N SCI	HED	P-	1 IT	ΕМ	NOI	MEN	CLA	TUI	RE								DAT	E								
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PROCUREMENT YEAR	S	PROC		DUE		200	1					CALE	NDAR	YEAF	R 2002	2						CA	LEND	AR YI	EAR 2	003			
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JSOW/Texas Instruments_																													
FY 2000	USN		543																										
	USAF	265	198	67	22	22	23																						
FY 2001	USN	866		866				72	72	72	72	72	72	72	72	72	72	72	74										
	USAF			377				31	31	31				31			31	33	34										
FY 2002	USN	1026		1026		Α														80	85	85	85	85	85	85	85	85	266
F 1 2002	USAF			292		^														24	24		24	24	24	24	24	24	76
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TOTAL	0	5393	741	4652	87	92	93	103	103	103	103	103	103	103	103	103	103	105	108	104	109	109	109	109	109	109	109	109	1784
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DD Form 2445, JUL 87

Previous editions are obsolete

P-1 SHOPPING LIST ITEM NO 8 PAGE 7

		BUDGI P-40	ET ITEM JU	JSTIFICATI	ON SHEET				DATE:FE	BRUARY 19	97	
APPROPRIATION WEAPONS PRO BA-2 OTHER M	CUREMENT										URE (SM-2 MR/ER	) 12FE
	PRIOR YEARS	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	TO COMPLETE	TOTAL PROGRAM	
QUANTITY	10,033	22	139	127	109	135	184	241	267	1,901	13,158	
COST (In Millions)	\$6,109.6	\$128.	\$215.0	\$196.5	\$278.	\$338.5	\$386.	\$462.2	\$486.2	\$2,693.3	\$11,293.3	
Initial Spares (in Millions)	\$136.1	\$7.8	\$4.5	\$4.	\$14.1	\$6.2	\$6.	\$6.3	\$6.	\$99.8	\$290.8	
Total (in Millions)	\$6,245.7	\$135.8	\$219.5	\$200.5	\$292.1	\$344.7	\$392.	\$468.5	\$492.2	\$2,793.1	\$11,584.1	
Unit Cost (in Millions)	\$.6	\$6.2	\$1.6	\$1.6	\$2.7	\$2.6	\$2.1	\$1.9	\$1.8	\$1.5	\$.9	

## 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 currently deloyed.

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 destoyers 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.

Note: Procurement funding for the SM-2 Block IVA was moved into this line from the Defense Wide Procurement Appropriation (Ballistic Missile Defense Organization Navy Area Theater Ballistic Missile Defense Program) as follows: FY98,\$14.5M;FY99, \$44.3M;FY00,\$129.2M FY01,\$160.0M;FY02,\$234.8M; and FY03,\$224.5M.

P-1 SHOPPING LIST CLASSIFICATION:

**UNCLASSIFIED** 

DD FORM 2454, JUN 86 ITEM NO. 9 PAGE NO. 1

MISSILE SYSTE Classification: UNCLASSIFIED	EM CO	OST ANALY	/SIS								Date: FEBRU	ARY 1997
Missile: STANDARD SM-2 (12FE)		FY 1996			FY 1997			FY 1998			FY 1999	
		UNITS	22		UNITS	139		UNITS	127		UNITS	109
FLYAWAY COSTS	QTY	COST	TOT COST	QTY	COST	TOT COST	QTY	COST	TOT COST	QTY	COST	TOT COST
FLIGHT HARDWARE	22	\$2,265.5	\$49,841	139	\$974.	\$135,382	127	\$1,017.5	\$129,226	109	\$1,774.1	\$193,373
G,C&A/MK72 BOOSTER(FE001)		·										
AEGIS BLK IIIA												
AEGIS BLK IIIB				80	\$527.5	\$42,197	83	\$536.1	\$44,496	75	\$569.7	\$42,724
AEGIS BLK IV	22	\$2,004.7	\$44,103	59	\$1,296.3	\$76,482	44	\$1,234.7	\$54,325			
AEGIS BLK IVA										34	\$2,687.5	\$91,374
SM AEGIS IMPROV									\$15,431			\$44,346
Request for Equitable Adjustment (REA)			\$3,048									
PROPULSION												
MK 104 DTRM (FE009)	22	\$48.2	\$1,060	139	\$48.7	\$6,764	127	\$49.6	\$6,294	109	\$58.6	\$6,383
Request for Equitable Adjustment (REA)			\$172									
ORDNANCE												
MK 54 S&A DEVICE (FE003)	22	\$7.0	\$154	139	\$8.3	\$1,158	127	\$8.2	\$1,044	109	\$8.3	\$910
MK 45 TDD MOD 9/10 (FE005)	22	\$44.2	\$972	139	\$44.1	\$6,134	127	\$41.3	\$5,250	109	\$51.	\$5,557
WARHEAD												
MK 125 (FE006)	22	\$15.1	\$332	139	\$19.	\$2,647	127	\$18.8	\$2,387	109	\$19.1	\$2,080
PROCUREMENT SUPPORT			\$44,598			\$42,283			\$42,389			\$49,956
CONTRACTOR ENGINEERING (FE830)			\$15,961			\$10,044			\$11,049			\$17,603
GOVERNMENT IN-HOUSE ENGINEERING (FE830)			\$4,363			\$4,748			\$4,783			\$5,531
QUALITY ASSURANCE (FE840)			\$2,094			\$2,459			\$2,383			\$2,509
DOCUMENTATION (FE954)			\$1,451			\$1,078			\$1,028			\$1,628
PRODUCTION PROOF (FE955)			\$5,431			\$5,588			\$5,648			\$5,890
EVAL SERV & MATL (FE860)			\$15,298			\$18,366			\$17,498			\$16,795
TOTAL RECURRING FLYAWAY	22	\$4,292.7	\$94,439	139	\$1,278.2	\$177,665	127	\$1,351.3	\$171,615	109	\$2,232.4	\$243,329
CONTAINERS (FE957)			\$1,136			\$1,106			\$992			\$1,024
TOOLS AND TEST EQUIP (FE950)			\$16,276			\$6,826			\$4,925			\$10,345
COMPONENT IMPROVEMENTS (FE850)			\$5,971			\$5,198			\$3,898			\$5,623
TOTAL NONRECUR FLYAWAY COSTS			\$23,383			\$13,130			\$9,815			\$16,992
TOTAL FLYAWAY COSTS	22	\$5,355.6	\$117,822	139	\$1,372.6	\$190,795	127	\$1,428.6	\$181,430	109	\$2,388.3	\$260,321
GROUND EQUIP/FLEET SUPT			\$9,994			\$24,239			\$15,062			\$17,609
INSTAL & CHECKOUT EQUIP (FE970)			\$5,283			\$11,732			\$6,983			\$6,471
SPECIAL HANDLING EQUIP (FE971)			\$502			\$502			\$502			\$550
TRNG MTLEXP & NON-EXP (FE972)			\$1,909			\$9,460			\$4,982			\$7,993
FLEET DOCUMENTATION (FE973)			\$800			\$1,368			\$1,468			\$1,468
ILS (FE980)			\$1,500			\$1,177			\$1,127			\$1,127
TOTAL MISSILE COSTS	22	\$5,809.8	\$127,816	139	\$1,547.	\$215,034		\$1,547.2	\$196,492	1	\$2,549.8	\$277,930
INITIAL SPARES			\$7,768			\$4,516			\$3,441			\$14,137
MODIFICATION			\$33,356			\$18,153			\$35,601			\$46,433
TOTAL PROGRAM COST	22	\$7,679.1	\$168,940		\$1,710.1	\$237,703	1	\$1,854.6	\$235,534	_	\$3,105.5	\$338,500

Classification: UNCLASSIFIED	1										Date: FEBRU	ARY 1997
Missile: STANDARD SM-2 (12FE)		FY 2000			FY 2001			FY 2002			FY 2003	
		UNITS	135		UNITS	184		UNITS	241		UNITS	267
FLYAWAY COSTS	QTY	COST	TOT COST	QTY	COST	TOT COST	QTY	COST	TOT COST	QTY	COST	TOT COST
FLIGHT HARDWARE	135	\$1,936.5	\$261,432	184	\$1,744.3	\$320,955	241	\$1,668.6	\$402,130	267	\$1,593.5	\$425,473
G,C&A/MK72 BOOSTER(FE001)												
AEGIS BLK IIIA												
AEGIS BLK IIIB	77	\$544.5	\$41,928	91	\$502.2	\$45,699	91	\$476.3	\$43,343	92	\$471.8	\$43,409
AEGIS BLK IV												
AEGIS BLK IVA	58	\$2,294.6	\$133,084	93	\$1,783.3	\$165,845	150	\$1,645.4	\$246,806	175	\$1,569.2	\$274,612
SM AEGIS IMPROV			\$68,6650			\$86,7480			\$83,492			\$76,275
Request for Equitable Adjustment (REA)												
PROPULSION												
MK 104 DTRM (FE009)	135	\$56.	\$7,564	184	\$53.	\$9,748	241	\$50.7	\$12,228	267	\$50.4	\$13,454
Request for Equitable Adjustment (REA)												
ORDNANCE												
MK 54 S&A DEVICE (FE003)	135	\$8.2	\$1,109	184	\$8.	\$1,481	241	\$8.	\$1,920	267	\$8.	\$2,123
MK 45 TDD MOD 9/10 (FE005)	135	\$48.5	\$6,542	184	\$43.7	\$8,047	241	\$41.3	\$9,951	267	\$40.2	\$10,745
WARHEAD		·			·						·	
MK 125 (FE006)	135	\$18.8	\$2,537	184	\$18.4	\$3,386	241	\$18.2	\$4,390	267	\$18.2	\$4,855
PROCUREMENT SUPPORT		·	\$47,116		·	\$45,007			\$42,379			\$42,488
CONTRACTOR ENGINEERING (FE830)			\$17,045			\$14,790			\$14,438			\$14,359
GOVERNMENT IN-HOUSE ENGINEERING (FE830)			\$7,346			\$6,649			\$5,830			\$5,840
QUALITY ASSURANCE (FE840)			\$2,209			\$2,250			\$2,094			\$2,328
DOCUMENTATION (FE954)			\$920			\$851			\$714			\$726
PRODUCTION PROOF (FE955)			\$5,273			\$5,288			\$4,965			\$4,834
EVAL SERV & MATL (FE860)			\$14,323			\$15,179			\$14,338			\$14,401
TOTAL RECURRING FLYAWAY	135	\$2,285.5	\$308,548	184	\$1,988.9	\$365,962	241	\$1,844.4	\$444,509	267	\$1,752.7	\$467,961
CONTAINERS (FE957)		. ,	\$986		. ,	\$591		, ,	\$363		. ,	\$282
TOOLS AND TEST EQUIP (FE950)			\$7,582			\$2,741			\$2,685			\$2,342
COMPONENT IMPROVEMENTS (FE850)			\$5,101			\$4,911			\$4,028			\$3,914
TOTAL NONRECUR FLYAWAY COSTS			\$13,669			\$8,243			\$7,076			\$6,538
TOTAL FLYAWAY COSTS	135	\$2,386.8	\$322,217	184	\$2,033.7	\$374,205	241	\$1,873.8	\$451,585	267	\$1,777.1	\$474,499
GROUND EQUIP/FLEET SUPT			\$16,302			\$11,705			\$10,594			\$11,742
INSTAL & CHECKOUT EQUIP (FE970)			\$8,475			\$4,854			\$4,815			\$4,835
SPECIAL HANDLING EQUIP (FE971)			\$200.			\$200.			\$150			\$1,500
TRNG MTLEXP & NON-EXP (FE972)			\$5,497			\$4,668			\$4,382			\$4,140
FLEET DOCUMENTATION (FE973)			\$1,168			\$1,050			\$464			\$472
ILS (FE980)			\$962			\$933			\$783			\$795
TOTAL MISSILE COSTS	135	\$2,507.5	\$338,519	184	\$2,097.3	\$385,910	241	\$1,917.8	\$462,179	267	\$1,821.1	\$486,241
INITIAL SPARES		, ,	\$5,841		, ,	\$5,983		, ,	\$6,300		, ,	\$5,655
MODIFICATION			\$45,209			\$53,969			\$51,107			\$53,026
TOTAL PROGRAM COST	135	\$2,885.7	\$389,569		\$2,423.2	\$445,862	241	\$2,156.	\$519,586	267	\$2,040.9	\$544,922

MISSILE SYSTEM COST ANALYSIS

Classification:UNCLASSIFIED

UDGET ACTIVITY			P-5A							Y 1997
DENJENIE NIANA				P-1 ITEM I	NOMENCLAT	TURE		SUBHEAD		
REMENT, NAVY									12FE	
_				STANDAR	D MISSILE (	SM-2 N	IR/ER)			
		001170407			DATE OF	от.		00500	0050	15.750
						QIY				IF YES
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1	AND LOCATION	& TYPE	BY	DATE	DELIVERY		COST	NOW	REQ'D	AVAILABLE
E & CONTROL & AUTOPI	LOT/ MK72 BOOSTER									
E) ( 00 P)   ( 1) ( A E O IO	0.40	001/45		00/00	00/00	00	<b>***</b>	\/=0	NO	
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FY-99 BLK IIIB AEGIS	SMCo- McClean, VA.	FFP/AF	NAVSEA	01/99	01/01	75	\$569.7	YES	NO	
FY-99 BLK IVA AEGIS	SMCo- McClean, VA.	CPAF	NAVSEA	04/99	04/01	35	\$2,610.7	NO	YES	POST-CDR 2/9
ARE_										
104										
FY 96 MOD 3	ARC-Camden, AR.	SS/FFP/PI	NAVSEA	03/96	10/97	22	\$48.2			
FY 97 MOD 2/3	ARC-Camden, AR.	SS/FFP/PI	NAVSEA	03/97	10/98	139	\$48.7	YES	NO	
FY 98 MOD 2/3	ARC-Camden, AR.	SS/FFP/PI	NAVSEA	03/98	10/99	127	\$49.6	YES	NO	
FY 99 MOD 2/3	ARC-Camden, AR.	SS/FFP/PI	NAVSEA	03/99	10/00	110	\$58.	YES	NO	
AND ARMING DEVICE										
FY 96 MK 54	KAMAN - Middletown, CT.	SS/FFP	NAVSEA	03/96	10/97	22	\$7.0	YES	NO	
FY 97 MK 54	KAMAN - Middletown, CT.	SS/FFP	NAVSEA	03/97	10/98	139	\$8.3	YES	NO	
FY 98 MK 54	KAMAN - Middletown, CT.	SS/FFP	NAVSEA	03/98	10/99	127	\$8.2	YES	NO	
FY 99 MK 54	KAMAN - Middletown, CT.	SS/FFP	NAVSEA	03/99	10/00	110	\$8.3	YES	NO	
CE MK 45 TDD										
FY 96 MOD 9/10	MOTOROLA -Scottsdale, AZ.	SS/FFP/PI	NAVSEA	06/96	10/97	22	\$44.2	YES	NO	
FY 97 MOD 9/10	MOTOROLA -Scottsdale, AZ.	SS/FFP/PI	NAVSEA	06/97	10/98	139	\$44.1	YES	NO	
FY 98 MOD 9/10	MOTOROLA -Scottsdale, AZ.	SS/FFP/PI	NAVSEA	06/98	10/99	127	\$41.3	YES	NO	
FY 99 MOD 9/10	MOTOROLA -Scottsdale, AZ.	SS/FFP/PI	NAVSEA	06/99	10/00	110	\$50.5	YES	NO	
D							·			
FY 96 MK 125	HERCULES - Magna, UT.	SS/FFP	NAVSEA	03/96	10/97	22	\$15.1	YES	NO	
					1			1		
FY 97 MK 125	HERCULES - Magna, UT.	SS/FFP	NAVSEA	04/97	11/98	139	\$19.	YES	NO	
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FY 98 MK 125	HERCULES - Magna, UT.	SS/FFP	NAVSEA	04/98	11/99	127	\$18.8	YES	NO	
			1 2 1				¥ ·	1		
FY 99 MK 125	HERCULES - Magna LIT	SS/FFP	NAVSEA	04/99	11/00	110	\$18.90	YES	NO	
	FY-96-BLK IV AEGIS FY-97-BLK IIIB AEGIS FY-97-BLK IV AEGIS FY-98 BLK IIIB AEGIS FY-98 BLK IIIB AEGIS FY-98 BLK IIIB AEGIS FY-99 BLK IIIB AEGIS FY-99 BLK IVA AEGIS ARE 104  FY 96 MOD 3 FY 97 MOD 2/3 FY 98 MOD 2/3 FY 99 MOD 2/3 FY 99 MOD 2/3 AND ARMING DEVICE  FY 96 MK 54 FY 97 MK 54 FY 98 MK 54 FY 99 MK 54 FY 99 MK 54 FY 99 MK 54 FY 99 MOD 9/10 FY 98 MOD 9/10 FY 99 MOD 9/10 FY 99 MOD 9/10 D  FY 96 MK 125	FISCAL YEAR RHARDWARE ER HARDWARE ER CONTROL & AUTOPILOT/ MK72 BOOSTER  FY-96-BLK IV AEGIS FY-97-BLK IIIB AEGIS FY-97-BLK IV AEGIS FY-98 BLK IV AEGIS FY-98 BLK IV AEGIS FY-98 BLK IV AEGIS FY-99 BLK IV AEGIS FY-99 BLK IVA AEGIS FY 97 MOD 2/3 FY 97 MOD 2/3 FY 97 MOD 2/3 ARC-Camden, AR. FY 97 MK 54 FY 97 MK 54 FY 97 MK 54 FY 98 MK 54 FY 99 MK 55 FY 99 MOD 9/10 FY 96 MOD 9/10 FY 96 MOD 9/10 FY 97 MOD 9/10 FY 98 MK 125 HERCULES - Magna, UT. FY 98 MK 125 HERCULES - Magna, UT.	FISCAL YEAR	LINE ITEM/	LINE     TEM/   CONTRACTOR   METHOD   S TYPE   DATE	LINE ITEM/ FISCAL YEAR AND LOCATION #THOD BY DATE DELIVERY RHARDWARE ## AND LOCATION ## TYPE BY DATE DELIVERY  FY-96-BLK IV AEGIS SMC0- McClean, VA. FFP/AF NAVSEA 03/96 02/99 FY-97-BLK IIIB AEGIS SMC0- McClean, VA. FFP/AF NAVSEA 02/97 02/99 FY-98-BLK IIIB AEGIS SMC0- McClean, VA. FFP/AF NAVSEA 02/97 02/99 FY-99-BLK IIIB AEGIS SMC0- McClean, VA. FFP/AF NAVSEA 01/98 01/00 FY-99-BLK IIIB AEGIS SMC0- McClean, VA. FFP/AF NAVSEA 01/98 01/00 FY-99-BLK IIIB AEGIS SMC0- McClean, VA. FFP/AF NAVSEA 01/98 01/00 FY-99-BLK IIIB AEGIS SMC0- McClean, VA. FFP/AF NAVSEA 01/99 01/01 FY-99-BLK IIIB AEGIS SMC0- McClean, VA. FFP/AF NAVSEA 01/99 01/01 FY-99-BLK IVA AEGIS SMC0- McClean, VA. FFP/AF NAVSEA 01/99 01/01 FY-99-BLK IVA AEGIS SMC0- McClean, VA. FFP/AF NAVSEA 01/99 01/01 FY-99-BLK IVA AEGIS SMC0- McClean, VA. FFP/AF NAVSEA 01/99 01/01 FY-99-BLK IVA AEGIS SMC0- McClean, VA. 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FFP/AF NAVSEA 06/99 10/00 FY-99-BLK IVA AEGIS SMC0- MCClean, VA. FFP/AF NAVSEA 04/97 11/98 FY-99-BLK IVA AEGIS SMC0- MCCLEAN AEGIS MCCCLEAN AEGIS MCCCLEAN AEGIS MCCCLEAN AEGIS MCCCLEAN AEGIS MCCCLEAN	LINE ITEM/ FISCAL YEAR AND LOCATION AND LOCATION BY DATE  FRATE  RHARDWARE  E & CONTROL & AUTOPILOT/ MK72 BOOSTER  FY-96-BLK IV AEGIS FY-97-BLK IIIB AEGIS FY-97-BLK IIIB AEGIS FY-97-BLK IIIB AEGIS FY-98-BLK IV AEGIS FY-99 BLK IV AEGIS FY-99 BLK IIIB AEGIS FY-99 BLK IIIB AEGIS FY-99 BLK IIIB AEGIS FY-99 BLK IIIB AEGIS SMCo- McClean, VA. FFPI/AF NAVSEA 02/97 02/99 80 FY-99-BLK IV AEGIS FY-99 BLK IIIB AEGIS SMCo- McClean, VA. FFPI/AF NAVSEA 01/98 01/00 83 FY-99 BLK IV AEGIS FY-99 BLK IIIB AEGIS SMCo- McClean, VA. FFPI/AF NAVSEA 01/98 01/00 83 FY-99 BLK IV AEGIS SMCo- McClean, VA. FFPI/AF NAVSEA 01/99 01/01 75 FY-99 BLK IIIB AEGIS SMCo- McClean, VA. FFPI/AF NAVSEA 01/98 01/00 83 FY-99 BLK IV AEGIS SMCo- McClean, VA. FFPI/AF NAVSEA 01/99 01/01 75 FY-99 BLK IVA AEGIS FY-99 MCD 2/3 ARC-Camden, AR. SS/FFP/PI NAVSEA 03/96 10/97 22 FY 99 MOD 2/3 ARC-Camden, AR. SS/FFP/PI NAVSEA 03/96 10/97 10/98 139 10/90 110  FY 96 MK 54 KAMAN - Middletown, CT. SS/FFP NAVSEA 03/96 10/97 22 FY 97 MK 54 KAMAN - Middletown, CT. SS/FFP NAVSEA 03/96 10/97 22 FY 97 MK 54 KAMAN - Middletown, CT. SS/FFP NAVSEA 03/96 10/97 10/98 139 10/90 110  FY 96 MK 54 KAMAN - Middletown, CT. SS/FFP NAVSEA 03/99 10/00 110  FY 96 MK 54 KAMAN - Middletown, CT. SS/FFP NAVSEA 03/99 10/00 110  FY 96 MK 54 KAMAN - Middletown, CT. SS/FFP NAVSEA 03/96 10/97 22 FY 97 MCD 9/10 MCTOROLA - Scottsdale, AZ. SS/FFP/PI NAVSEA 06/96 10/97 22 FY 98 MOD 9/10 MCTOROLA - Scottsdale, AZ. SS/FFP/PI NAVSEA 06/96 10/97 22 FY 99 MOD 9/10 MCTOROLA - Scottsdale, AZ. SS/FFP/PI NAVSEA 06/96 10/97 22 FY 99 MC 125 FY 99 MK 125 HERCULES - Magna, UT. SS/FFP NAVSEA 04/97 11/98 139 139 139 139 139 139 139 139 139 139	LINE   TEM	LINE TIEM CONTRACTOR AND LOCATION & TYPE  R. ACONTROL & AUTOPILOT/ MK72 BOOSTER  FY-96-BLK IV AEGIS FY-97-BLK IIIB AEGIS SMC0- McClean, VA. FFP/AF NAVSEA 02/97 02/99 80 \$527.5 YES YES SMC0- McClean, VA. FFP/AF NAVSEA 02/97 02/99 99 \$12,7 \$12,80.7 YES FY-97-BLK IIIB AEGIS SMC0- McClean, VA. FFP/AF NAVSEA 02/97 02/99 99 \$12,7 \$12,80.7 YES YES SMC0- McClean, VA. FFP/AF NAVSEA 02/97 02/99 99 \$12,7 \$12,80.7 YES YES SMC0- McClean, VA. FFP/AF NAVSEA 02/97 02/99 99 \$12,7 \$12,80.7 YES YES SMC0- McClean, VA. FFP/AF NAVSEA 01/98 01/00 83 \$361.1 YES YES SMC0- McClean, VA. FFP/AF NAVSEA 01/98 01/00 83 \$361.1 YES YES SMC0- McClean, VA. FFP/AF NAVSEA 01/98 01/00 44 \$1,234.7 YES YES SMC0- McClean, VA. FFP/AF NAVSEA 01/99 01/01 75 \$569.7 YES YES SMC0- McClean, VA. FFP/AF NAVSEA 01/99 01/01 75 \$569.7 YES YES SMC0- McClean, VA. FFP/AF NAVSEA 01/99 01/01 75 \$569.7 YES YES YES YES SMC0- McClean, VA. FFP/AF NAVSEA 01/99 01/01 75 \$569.7 YES	LINE   TEM

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P21 PRODUCTION SCHEDULE

ITEM NO. - 9 PAGE NO. - 5

					P-1 ITI	EM NOM	MENCLA	TURE		STANI	OARD M	ISSILE															12FE															
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#### P21 PRODUCTION SCHEDULE

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ITEM NO. - 9 PAGE NO.- 8

**DATE: February 1997** 

# APPROPRIATION/BUDGET ACTIVITY WEAPONS PROCUREMENT, NAVY / 2-OTHER MISSILES

P-1 ITEM NOMENCLATURE

RIM 116A - ROLLING AIRFRAME MISSILE (RAM)-12EF

BLI: 224200

	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
	210	135	100	145	0	0	0	0
QUANTITY								
COST ( In Millions)	\$61.3	\$47.6	\$44.1	\$57.0	\$33.8	\$34.6	\$35.5	\$36.4
nitial Spares In Millions)	\$0.5	\$1.2	\$1.1	\$2.2	\$2.4	\$1.6	\$1.5	\$1.1
Total ( In Millions)	\$61.8	\$48.8	\$45.2	\$59.2	\$36.2	\$36.2	\$37.0	\$37.5
Unit Cost ( In Millions)	\$0.3	\$0.4	\$0.5	\$0.4	N/A	N/A	N/A	N/A

#### 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.

FY96 funds will procure 200 Block 0 and 10 Block I Missiles.

FY97 funds will procure 135 Block 0 Missiles.

FY98 funds will procure 60 Block 0 and 40 Block 1 Missiles.

FY99 funds will procure 145 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.

P-1 SHOPPING LIST

ITEM NO.

PAGE NO.

1

DD Form 2454, JUN 86

# WEAPONS PROCUREMENT, NAVY WEAPON SYSTEM COST ANALYSI DATE: February 1997

		7	TOTAL C	OST IN TH	IOUSA	NDS OF I	DOLLARS						
MISSILE:		FY 1	996 (QT	Y 210)	FY 1	997 (QT	Y 135)	FY 1	998 (QT	Y 100)	FY 19	99 (QTY 1	45)
ROLLING AIRFRAME MISSILE (	(RAM)												
		QTY	UNIT	TOTAL	QTY	UNIT	TOTAL	QTY	UNIT	TOTAL	QTY	UNIT	TOTAL
MODEL: RIM 116A			COST	COST		COST	COST		COST	COST		COST	COST
FLIGHT HARDWARE				57,744			41,222			40,301			53,090
	F001	200	235.6	47,126	135	266.7	36,000	60	307.8	18,466			
	F001	10	432.6	4,326				40	414.3	16,573	145	316.8	45,936
	EF001												
	EF001												
COMPONENT IMPROVEME				432			736			597			479
	F002	210	8.0	1,684	135	7.4	1,001	100	8.1	810	145	8.3	1,200
ORDNANCE PACK (TD)	F005	210	11.3	2,383	135	22.3	3,010	100	33.5	3,350	145	25.5	3,700
	F006	170	2.4	411	135	2.4	325	100	2.6	255	115	2.8	317
SAFE & ARM DEVICE E	F004				82	1.8	150	100	2.5	250	115	2.6	302
	EF010		36.1	1,083							30	38.5	1,156
TELEMETER for BLOCK 1   E	EF010	10	29.9	299									
PROCUREMENT SUPPORT				2,586			3,421			3,651			3,728
CONTRACTOR ENGINEER							336			626			639
GOVT IN-HOUSE ENGINEE	F830			1,988			2,500			2,500			2,553
PRODUCTION ACCEPTAN(E	F860			598			585			525			536
TOTAL RECURRING FLYWA	Y	210	287.3	60,330	135	330.7	44,643	100	439.5	43,952	145	391.8	56,818
NON-RECURRING PROC SUI	PT			252			2,882						
TOOLS & TEST EQUIPMENT	F950			252			2,882						
TOTAL FLYAWAY COSTS		210	288.5	60,582	135	352.0	47,525	100	439.5	43,952	145	391.8	56,818
FLEET SUPPORT COSTS				761			120			130			132
	EF974						120			130			132
CONTAINERS E	F957	300	2.5	761									
TOTAL MISSILE COSTS		210	292.1	61,343	135	352.9	47,645	100	440.8	44,082	145	392.8	56,950
CURRENT CONTROL				61,343			47,645			44,082			56,950
INITIAL SPARES				460			1,180			1,100			2,230
TOTAL PROGRAM				61,803			48,825			45,182			59,180

P-1 SHOPPING LIST

ITEM NO. 10 PAGE 2

CLASSIFICATION UNCLASSIFIED

#### CLASSIFICATION:

# **UNCLASSIFIED**

	IATION/BUDGET ACTIVITY  ONS PROCUREMENT, NAV	Υ			P-1 ITEM NOME	NCLATURE			SUBHEAD		
	THER MISSILES					RAM MIS	SILE			12EF	
COST CODE	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABI
F001	GUIDANCE & CONTROL ASSEMBLY										
	FY 1996										
	BLOCK 0 MISSILES	HMSC, TUCSON, AZ	SS/FP	NAVSEA	2/96	10/97	200	235.6	YES	NO	
	BLOCK 1 MISSILES FY 1997	HMSC, TUCSON, AZ	SS/CPIF	NAVSEA	3/97	4/98	10	432.6	YES	NO	
	BLOCK 0 MISSILES FY 1998	HMSC, TUCSON, AZ	OPTION	NAVSEA	10/96	10/98	135	266.7	YES	NO	
	BLOCK 0 MISSILES BLOCK 1 MISSILES	HMSC, TUCSON, AZ HMSC, TUCSON, AZ	55/FP 55/FP	NAVSEA NAVSEA	1/98 1/98	10/99 10/99	60 40	307.8 414.3	YES	NO	
	FY 1999 BLOCK 1 MISSILES	HMSC, TUCSON, AZ	OPTION	NAVSEA	1/99	10/00	145	316.8	YES	NO	
F002	PROPULSION ROCKET MC MK112/1 W/ ARMING & FIR DEVICE MK 298/1										
		TI ANTIO DEGEAROI	0/50	NAVAID	0/00	0.407	040	0.0	\/50		
	FY 1996 FY 1997	TLANTIC RESEARCH	C/FP C/FP	NAVAIR	2/96 3/97	8/97 9/98	210	8.0 7.4	YES YES	NO NO	
	FY 1997	TLANTIC RESEARCH COMPETITIVE	C/FP C/FP	NAVAIR NAVAIR	3/97 2/98	10/99	135 100	7. <del>4</del> 8.1	YES	NO NO	
	FY 1999	COMPETITIVE	C/FP	NAVAIR	2/99	10/99	145	8.3	YES	NO	
F005	ORDNANCE PACKAGE TA MK 20/0	RGET DETECTOR									
	FY 1996	HMSC, TUCSON, AZ	SS/CPIF	NAVSEA	12/96	2/98	210	11.3	YES	NO	
	FY 1997	HMSC, TUCSON, AZ	SS/CPIF	NAVSEA	12/96	10/98	135	22.3	YES	NO	
	FY 1998	COMPETITIVE	C/FP	NAVSEA	2/98	10/99	100	33.5	YES	NO	
	FY 1999	OPTION	C/FP	NAVSEA	2/99	10/00	145	25.5	YES	NO	

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

ITEM NO.-10

PAGE NO.3

#### CLASSIFICATION:

# **UNCLASSIFIED**

APPROPE	NATION/BUDGET ACTIVITY			P-5A	P-1 ITEM NOME	NCLATURE			SUBHEAD		
WEAP	ONS PROCUREMENT, NA	AVY									
BA-2 O	THER MISSILES					RAM MIS	SILE			12EF	
COST	LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST (000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABL
EF004	SAFE & ARM MK 13/2										
	FY 1995	PIQUA	C/FP	NAVAIR	7/95	8/96	240	2.2	YES	NO	
	FY 1997	RAYMOND ENGIN	C/FP	NAVAIR	1/97	7/97	82	1.8	YES	NO	
	FY 1998	COMPETITIVE	C/FP	NAVAIR	3/98	9/99	100	2.5	YES	NO	
	FY 1999	COMPETITIVE	C/FP	NAVAIR	3/99	9/00	115	2.6	YES	NO	
EF006	WARHEAD WDU 17/8										
	FY 1996	ENSIGN BICKFORD	C/FP	NAVAIR	1/96	1/97	170	2.4	YES	NO	
	FY 1997	COMPETITIVE	C/FP	NAVAIR	8/97	2/99	135	2.4	YES	NO	
	FY 1998	COMPETITIVE	C/FP	NAVAIR	2/98	7/99	100	2.6	YES	NO	
	FY 1999	COMPETITIVE	C/FP	NAVAIR	2/99	7/00	115	2.8	YES	NO	
EF010	TELEMETER FY 1996										
	BLOCK 0 TELEMETER	RAMSYS	C/FP	NAVSEA	09/96	1/98	30	36.1	YES	NO	
	BLOCK 1 TELEMETER FY 1999	SOLE SOURCE	P.O.	NAWC/CL	10/95	10/96	10	29.9	YES	NO	
	BLOCK 0 TELEMETER	COMPETITIVE	C/FP	NAVSEA	2/99	10/00	30	38.5	YES	NO	
EF957	CONTAINERS										
	FY 1996	COMPETITIVE	C/FP	NAVSEA	9/96	8/97	300	2.5	YES	NO	
REMARK	S	<del>!</del>		<u>!</u>	<u>l</u>	!			1		-

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

ITEM NO.-10 PAGE NO.4

#### FY 1998/1999 BUDGET PRODUCTION SCHEDULE

CLASSIFICATION: UNCLASSIFIED

P-21

APPROPRIATION/BUE					P-1 ITEM	NOMENC	LATURE																					SUBHEAD:						DATE: Fe	bruary 1997					
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ITEM NO.- 10 PAGE NO.- 5

**UNCLASSIFIED** CLASSIFICATION:

P-21

APPROPRIATION/BUDGET ACTIVITY WEAPONS PROCUREMENT,	NAVY	BA-2			P-1 ITEM	NOMENCL																							SUBHEAD:						DATE: F	ebruary 199	97			
OTHER MISSILES	S		ACCEPT	BAL			ROLLI	NG AIR	FISCAL Y		E-RA	M 116-	99								FISCAL Y	YEAR			01					12EF			FISCAL Y	EAR			02			L
ITEM/MANUFACTURER/ PROCUREMENT YEAR	E R	PROC	PRIOR TO			98				CALENDE	DA VEAD					99						CALENDA	AD VEAD					100						CALENDA	D.VEAD				101	A
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1998	N	100	0	100													8	8	8	8	8	8	8	8	9	9	9	9												
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NAVMAT FORM 7110/4 (REVISED 11/77)											P-1 SH	ODDIN	21161																				CLASSIFI	DATION:						

P-1 SHOPPING LIST NAVMAT FORM 7110/4 (REVISED 11/77)

> PAGE NO.- 6 ITEM NO.- 10

## **CLASSIFICATION:**

# **UNCLASSIFIED**

	BUD	GET ITE	M JUSTI P-40		N SHEE	Τ				DATE: Februa	ry 1997
APPROPRIATION/BUDGET ACTIVI Weapons Procurement, Nav BA2 - Other Missiles						P-1 ITEM	NOMENCL PENC	ATURE GUIN (J20	GS) (PE	O(CU)	
	Prior Years	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	101
COST (\$M)	\$158.2	\$0.0	\$6.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$165.1
Initial Spares (\$M)	\$6.4	\$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	\$6.9	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$171.5
Unit Cost (\$M)	\$1.630	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.932

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 weapon system to meet customer requirements and to support fleet operations. To date, the program requirement is for 193 All-Up-Round (AUR) missiles and the Navy has procured a total of 101 AUR missiles. 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 will allow for the procurement of six Penguin training missiles through Kongsberg Aerospace, with a contract award date of April 1997. These units will allow pilots to maintain proficiency in the use of this weapon. No Navy procurement is planned in FY 1998 and out.

P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO 11 'AGE NO 1

DD Form 2454, JUN 86

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

Missile Nomenclature & Popula	<u>PENGUI</u>	N	_							Date:	Feb 1997	
Cost Elements		Quantity Unit Cost			Quantity Unit Cost	Total Cost		Quantity <u>Unit Cost</u> To			Quantity Unit Cost	Total Cost
Missile Hardware HMB/SYS ENGR/DATA ECO SLAM UNIQUE ENGINE WARHEAD WINGS & FINS Total Hardware					0.000	0.000						
Procurement Support												
GOVT IN-HOUSE						0.000						
Total Procurement Support	t					0.000						
Total Flyaway Cost					0.000	0.000						
Fleet Support												
TRAINING EQUIPMENT FIELD ACTIVITY SUPPORT ILS SERVICES						6.513 0.342 0.000						
Total Fleet Support						6.855						
Weapon System Cost					0.000	6.855						
Modifications Initial Spares			0.000	ı		0.000 0.000			0.000			0.000
Total Program Cost			0.000	1	0.000	6.855			0.000			0.000
			IT	EM NO	11	AGE NO	2					

	BUDGE	T ITEM JUS P-	TIFICATION 40	SHEET			DATE: FEBRUA	RY 1997
APPROPRIATION/BUDGET AC Weapons Procurement, BA 2 - Other Missiles	-	•			P-1 ITEM NOM		LESKOA	
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (In Millions)	\$70.0	\$71.3	\$72.9	\$82.0	\$86.7	\$99.3	\$104.6	\$116.5

### 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 Years 1998 and 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.

File: C:/WPNTGTBUJDG - P40-Tgt

DD Form 2454, JUN 86

P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO 12

PAGE NO 1

			WEAPC	NS SYSTEN P-5	COST	ANALYSIS			B. DATE FEBRUA	ARY 1997
	IATION/BUDGET ACTIVITY DNS PROCUREMENT, NAVY	//BA-2 (	OTHER I	-		M NOMENCLATUR L TARGETS/J2		EAD		
COST	ELEMENT OF COST	IDENT CODE	QTY	FY 1996 FOTAL COST	QTY	FY 1997 ITOTAL COST	QTY	FY 1998 FOTAL COST	QTY	FY 1999 ITOTAL COS
	BQM-34S	Α	0	\$4,111	0	\$2,386	0	\$0	0	\$0
	AQM-37C/D	A	70	\$15,226	110	\$20,802	35	\$11,500	35	\$10,320
	BQM SUBSONIC SUBSCAL	A B (1)	120 6	\$31,192 \$4,266	120	\$34,337 \$0	133 12	\$36,378 \$11,808	165 11	\$41,849 \$11,303
EM300		A	0	\$15,187		\$13,810	12	\$13,237	11	\$18,503
	TOTAL		196	\$69,982	230	\$71,335	180	\$72,923	211	\$81,975
SPARES	2 (2)									
	BQM-34S			\$7,601		\$859		\$0 \$0		
	BQM-34S AQM-37C/D	F		\$0		\$0		\$0		\$210
	BQM-34S	_E								\$210 \$260
	BQM-34S AQM-37C/D BQM SUBSONIC SUBSCAI OTHER TARGETS TA/AS	_E		\$0 \$154 \$0 \$250		\$0 \$0 \$0 \$0		\$0 \$0 \$0 \$300		\$210 \$260 \$0 \$108
	BQM-34S AQM-37C/D BQM SUBSONIC SUBSCAI OTHER TARGETS TA/AS TOTAL SPARES	_E		\$0 \$154 \$0 \$250 \$8,005		\$0 \$0 \$0 \$0 \$859		\$0 \$0 \$0 \$300 \$300		\$0 \$210 \$260 \$0 \$108 \$578
	BQM-34S AQM-37C/D BQM SUBSONIC SUBSCAI OTHER TARGETS TA/AS	E	196	\$0 \$154 \$0 \$250	230	\$0 \$0 \$0 \$0	180	\$0 \$0 \$0 \$300	211	\$210 \$260 \$0 \$108
	BQM-34S AQM-37C/D BQM SUBSONIC SUBSCAI OTHER TARGETS TA/AS TOTAL SPARES	_E	196	\$0 \$154 \$0 \$250 \$8,005	230	\$0 \$0 \$0 \$0 \$859	180	\$0 \$0 \$0 \$300 \$300	211	\$210 \$260 \$0 \$108 \$578

P-1 SHOPPING LIST D. 12 PAGE NO. 2 ITEM NO. 12

CLASSIFICATION:

**UNCLASSIFIED** 

(1) See "Other Targets" P-5 for RDT&E and FCT program elements.(2) Initial spares requirements are displayed for information purposes only and are budgeted in Budget Activity 6, Spare and Repair Parts.

WEAPON SYSTEM COST ANALYSIS EXHIBIT (F										<b>FEBRUA</b>		
	FISCAL			FISCAL YI			FISCAL	YEAR		FISCAL \	/EAR	1999
MANUFACTURER: TELEDYNE RYAN, SAN DIEGO		UNIT	TOTAL		UNIT	TOTAL		UNIT	TOTAL		UNIT	TOTAL
COST CODE: EM010 FLYAWAY COST (\$000	QTY	COST	COST	QTY	COST	COST	QTY	COST	COST	QTY	COST	COST
HARDWARE:												
TARGET	0		\$0	0		\$0	0		\$0	0		\$0
GFM (1)			\$0			\$400			\$0			\$0
TECHNÍCAL DATA PACKAGE			\$0			\$0			\$0			\$0
INSTALL/MISSION KITS			\$1,208			\$0			\$0			\$0
TOTAL HARDWARE	0		\$1,208	0		\$400	0		<b>\$0</b>	0		<b>\$0</b>
PROCUREMENT SUPPORT (RECURRING):												
CONTRACTOR ENGINEERING			\$0			\$0			\$0			\$0
GOVERNMENT IN-HOUSE			\$1,752			\$665			\$0			\$0
DOCUMENTATION			\$198			\$150			\$0			\$0
GOVERNMENT TEST			\$125			\$440			\$0			\$0
OTHER			\$0			\$0			\$0			\$0
TOTAL RECURRING			\$2,075			\$1,255			<b>\$0</b>			<b>\$0</b>
PROCUREMENT SUPPORT (NONRECURRING	i):											
PRODUCT IMPROVEMENT			\$0			\$0			\$0			\$0
SPECIAL TOOLING AND TEST EQUIPMENT			\$0			\$0			\$0			\$0
TOTAL NONRECURRING			\$0			\$0			\$0			\$0
TOTAL FLYAWAY	0	\$0	\$3,283	0	<b>\$0</b>	\$1,655	0	\$0	<b>\$0</b>	0	\$0	\$0
GROUND EQUIPMENT/FLEET SUPPORT COST:												
GROUND EQUIPMENT			\$225			\$300			\$0			\$0
INSTALL & CHECKOUT			\$0			\$0			\$0			\$0
SPECIAL HANDLING EQUIPMENT			\$0			\$0			\$0			\$0
FLEET TEST EQUIPMENT			\$0			\$0			\$0			\$0
TRAINING DEVICES			\$75			\$20			\$0			\$0
DOCUMENTATION			\$0			\$0			\$0			\$0
ILS			\$528			\$411			\$0			\$0
TOTAL GRD EQUIP/FLEET SUP COST			\$828			\$731			<b>\$0</b>			\$0
WEAPONS SYSTEM COST	0	\$0	\$4,111	0	<b>\$</b> 0	\$2,386	0	\$0	<b>\$0</b>	0	\$0	\$0
TARGETS INITIAL SPARES			\$7,601			\$859			\$0			\$0
TOTAL PROGRAM COST	0	\$0	\$11,712	0	\$0	\$3,245	0	\$0	<b>\$0</b>	0	<b>\$</b> 0	\$0

P-1 SHOPPING LIST

ITEM NO. 12 PAGE NO.

(1) HERO safe cartridge activating devices.

WEAPON SYSTEM COST ANALYSIS EXHIB											RY 1997	
	FISCAL YI		1996	FISCAL \		1997	FISCAL	YEAR	1998	FISCAL	YEAR	1999
MANUFACTURER: RAYTHEON AIRCRAFT, W	ICHITA, K		TOTAL		UNIT	TOTAL		UNIT	TOTAL		UNIT	TOTAL
COST CODE: EM020 FLYAWAY COS	QTY	COST	COST	QTY	COST	COST	QTY	COST	COST	QTY	COST	COST
HARDWARE:												
TARGET	70	\$124	\$8,708	110	\$124	\$13,659	35	\$154	\$5,387	35	\$156	\$5,453
GFM-BATTERIES			\$182			\$293			\$92			\$94
* GFM-IRFNA			\$273			\$439			\$143			\$146
INSTALL/MISSION KITS			\$715			\$1,691			\$550			\$562
** EXTENDED PERFORMANCE KITS			\$0			\$1,111			\$1,167			\$1,179
TOTAL HARDWARE	70	\$141	\$9,878	110	<b>\$156</b>	\$17,193	35	\$210	\$7,339	35	\$212	\$7,434
PROCUREMENT SUPPORT (RECURRING	):											
GOVERNMENT IN-HOUSE			\$2,021			\$1,435			\$1,309			\$1,466
DOCUMENTATION			\$424			\$275			\$251			\$281
GOVERNMENT TEST			\$206			\$475			\$117			\$131
TOTAL RECURRING			\$2,651			\$2,185			\$1,677			\$1,878
PROCUREMENT SUPPORT (NONRECURE	RING):											
PRODUCT IMPROVEMENT		***	\$2,363		****	\$425		****	\$1,932			\$0
SPECIAL TOOLING AND TEST EQUIPMEN	1T		\$0			\$0			\$0			\$0
TOTAL NONRECURRING			\$2,363			\$425			\$1,932			\$0
TOTAL FLYAWAY	70	\$213	\$14,892	110	\$180	\$19,803	35	\$313	\$10,948	35	<b>\$266</b>	\$9,312
GROUND EQUIPMENT/FLEET SUPPORT COS	ST:											
GROUND EQUIPMENT			\$0			\$0			\$0			\$0
INSTALL & CHECKOUT			\$0			\$0			\$0			\$0 \$0 \$0 \$0
SPECIAL HANDLING EQUIPMENT			\$0			\$0			\$0			\$0
FLEET TEST EQUIPMENT			\$0			\$0			\$0			\$0
TRAINING DEVICES			\$29			\$29			\$30			\$31
DOCUMENTATION			\$0			\$400			\$0			\$395
ILS			\$305			\$570			\$522			\$582
TOTAL GRD EQUIP/FLEET SUP COST			\$334			\$999			\$552			\$1,008
WEAPONS SYSTEM COST	70	\$218	\$15,226	110	\$189	\$20,802	35	\$329	\$11,500	35	\$295	\$10,320
TARGETS INITIAL SPARES			\$0			\$0			\$0			\$210
TOTAL PROGRAM COST	70	\$218	<b>\$15,226</b>	110	\$189	\$20,802	35	\$329	\$11,500	35	\$301	\$10,530

ITEM NO. 12

PAGE NO. 4

<sup>\*</sup> Inhibited Red Fuming Nitric Acid.

\*\* 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 30 kits will be procured each year.

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

\*\*\*\* FY 97 - software changes/power supply.

\*\*\*\* FY 98 - avionics upgrade ECP.

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-										<b>FEBRI</b>	JARY 19	97
TARGET SYSTEM BQM SUBSONIC SUBSCALE	FISCA			FISCA	L YEAF		FISCA	L YEAF		FISCA	L YEAF	1999
MANUF: NORTHROP-GRUMMAN		UNIT	TOTAL		UNIT	TOTAL		UNIT	TOTAL		UNIT	TOTAL
COST CODE: EM030 FLYAWAY COST (\$0	: QTY	COST	COST	QTY	COST	COST	QTY	COST	COST	QTY	COST	COST
HARDWARE:												
TARGET	120	\$218	\$26,190	120	\$228	\$27,408	133	\$231	\$30,670	165	\$212	\$34,997
INSTALL/MISSION KITS			\$2,610			\$3,806			\$3,679			\$4,575
TOTAL HARDWARE	120	\$240	\$28,800	120	\$260	\$31,214	133	\$258	\$34,349	165	\$240	\$39,572
PROCUREMENT SUPPORT (RECURRING):												
GOVERNMENT IN-HOUSE			\$1,766			\$1,350			\$1,230			\$1,392
DOCUMENTATION			\$114			\$164			\$152			\$171
GOVERNMENT TEST			\$0			\$204			\$49			\$55
TOTAL RECURRING			\$1,880			\$1,718			\$1,431			\$1,618
PROCUREMENT SUPPORT (NONRECURRING):												
PRODUCT IMPROVEMENT (1)			\$0			\$750			\$0			\$0
SPECIAL TOOLING AND TEST EQUIPMENT			\$0			\$0			\$0			\$0
TOTAL NONRECURRING			\$0			\$750			\$0			\$0
TOTAL FLYAWAY	120	\$256	\$30,680	120	\$281	\$33,682	133	\$269	\$35,780	165	\$250	\$41,190
GROUND EQUIPMENT/FLEET SUPPORT COST:												
GROUND EQUIPMENT			\$125			\$0			\$0			\$0 \$0
INSTALL & CHECKOUT			\$0			\$0			\$0			\$0
SPECIAL HANDLING EQUIPMENT			\$0			\$0			\$0			\$0
FLEET TEST EQUIPMENT			\$0			\$0			\$0			\$0
TRAINING DEVICES			\$33			\$34			\$35			\$36
DOCUMENTATION			\$0			\$0			\$0			\$0
ILS			\$354			\$621			\$563			\$623
TOTAL GRD EQUIP/FLEET SUP COST			\$512			\$655			\$598			\$659
WEAPONS SYSTEM COST	120	\$260	\$31,192	120	\$286	\$34,337	133	\$274	\$36,378	165	\$254	\$41,849
TARGETS INITIAL SPARES			\$154			\$0			\$0			\$260
TOTAL PROGRAM COST	120	\$261	\$31,346	120	\$286	\$34,337	133	\$274	\$36,378	165	\$255	\$42,109

P-1 SHOPPING LIST

PAGE NO. 5

ITEM NO. 12

(1) FY-97 non-recurring engineering associated with ECP-182 (payload restructure).

<b>WEAPON SYSTEM COST ANALYSIS EXHIB</b>										<b>FEBR</b>	<b>UARY 199</b>	7
	FISC.	AL YEA		FISC/	AL YEA		FISCA	AL YEAR		FISC/	AL YEAR	1999
MANUF: VARIOUS			TOTAL			TOTAL		UNIT	TOTAL		UNIT	TOTAL
COST CODE: EM200 FLYAWAY COST (\$0	QIY	COST	COST	QIY	COST	COST	QIY	COST	COST	QTY	COST	COST
HARDWARE:												
MQM-8G(EER) VANDAL	6	\$434	\$2,604	0		\$0	6	\$457	\$2,741	0		\$0
MA-31 (1)	0		\$0	0		\$0	0		\$0	6	\$397	\$2,382
HARPOON TARGET	0		\$0	0		\$0	0		\$0	0		\$0
FOREIGN NDI - SUPERSONIC	0		\$0	0		\$0	3	\$1,491	\$4,473	2	\$1,491	\$2,982
FOREIGN NDI - SUBSONIC	0		\$0	0		\$0	3	\$1,491	\$4,473	3	\$1,491	\$4,473
ANCILLARY EQUIP			\$396			\$0			\$0			\$0
TOTAL HARDWARE	6	\$500	\$3,000			\$0	12		\$11,687	11		\$9,837
PROCUREMENT SUPPORT (RECURRING)	):											
GOVERNMENT IN-HOUSE			\$649			\$0			\$121			\$915
DOCUMENTATION			\$0			\$0			\$0			\$39
GOVERNMENT TEST			\$300			\$0			\$0			\$0
TOTAL RECURRING			\$949			<b>\$0</b>			\$121			\$954
PROCUREMENT SUPPORT (NONRECURE	RING):											
PRODUCT IMPROVEMENT			\$0			\$0			\$0			\$0
CONTRACTOR ENGINEERING			\$0			\$0			\$0			\$0
TOOLING			\$0			\$0			\$0			\$0
TEST EQUIPMENT			\$0			\$0			\$0			\$0
TOTAL NONRECURRING		****	\$0			\$0			\$0			\$0
TOTAL FLYAWAY	6	\$658	\$3,949			\$0	12		\$11,808	11		\$10,791
GROUND EQUIPMENT/FLEET SUPPORT CO:	<u>S1:</u>					Φ0						
GROUND EQUIPMENT			\$0			<b>\$</b> 0			\$0			<b>\$</b> 0
INSTALL & CHECKOUT			\$0 \$0			\$0 \$0			\$0 \$0			\$0 \$0
SPECIAL HANDLING EQUIPMENT			\$0 \$0			\$0 \$0			\$0 \$0			\$0 \$0
TOOLING TEST EQUIPMENT			\$0 \$0			\$0 \$0			\$0 \$0			\$0 \$512
TRAINING DEVICES			\$64			\$0 \$0			\$0 \$0			\$312 \$0
DOCUMENTATION	+		\$0			\$0 \$0	-		\$0 \$0	1		\$0 \$0
ILS			\$253			\$0 \$0			\$0 \$0			\$0 \$0
TOTAL GRD EQUIP/FLEET SUP COST			\$317			<b>\$0</b>			\$0	1 I		\$512
WEAPONS SYSTEM COST	6	\$711	\$4,266			<del>\$0</del>	12		\$11,808	11		\$11,303
TARGETS INITIAL SPARES			\$0			\$0			\$0			\$0
TOTAL PROGRAM COST	6	\$711	\$4,266			\$0	12		\$11,808	11		\$11,303

P-1 SHOPPING LIST

ITEM NO. 12 PAGE NO. 6

(1) MA-31 RDT&E PE 0604258N and FCT PE 0605130D

<b>WEAPON SYSTEM COST ANALYSIS EXHIBIT</b>	(P-5)									<b>FEBRU</b>	ARY 19	97
	FISCAL		1996	FISCAL	_ YEAR	1997	FISCAL	_ YEAR	1998	FISCAL	YEAR	1999
MANUFACTURER: VARIOUS		UNIT	TOTAL		UNIT	TOTAL		UNIT	TOTAL		UNIT	TOTAL
COST CODE: EM300 FLYAWAY COST (\$0	QTY	COST	COST	QTY	COST	COST	QTY	COST	COST	QTY	COST	COST
HARDWARE:												
CDM/CONTROL EQUIPMENT			\$1,632			\$510			\$0			\$4,768
SCORING EQUIPMENT			\$2,500			\$2,000			\$2,322			\$2,084
LOCATION/ID EQUIP			\$298			\$48			\$1,604			\$1,760
ECM/EMITTER EQUIP			\$4,693			\$4,921			\$4,282			\$4,703
AUGMENT/NAVIGAT EQUIP			\$305			\$853			\$868			\$407
INSTALL/MISSION EQUIP			\$495			\$508			\$519			\$535
MOBILE SEA RANGE			\$270			\$0			\$0			\$0
TOTAL HARDWARE			\$10,193			\$8,840			\$9,595			\$14,257
PROCUREMENT SUPPORT (RECURRING):												
GOVERNMENT IN-HOUSE			\$3,034			\$3,078			\$2,558			\$2,988
DOCUMENTATION			\$12			\$0			\$0			\$0
GOVERNMENT TEST			\$164			\$0			\$0			\$0
TOTAL RECURRING			\$3,210			\$3,078			\$2,558			\$2,988
PROCUREMENT SUPPORT (NONRECURRIN	۱G):											
* PRODUCT IMPROVEMENT	,		\$0			\$860			\$0			\$0
TOOLING			\$0			\$0			\$0			\$0
TEST EQUIPMENT			\$0			\$0			\$0			\$0
TOTAL NONRECURRING			\$0			\$860			<b>\$0</b>			\$0
TOTAL FLYAWAY			\$13,403			\$12,778			\$12,153			\$17,245
GROUND EQUIPMENT/FLEET SUPPORT COST	:											
GROUND EQUIPMENT			\$345			\$0			\$0			\$0 \$0
INSTALL & CHECKOUT			\$0			\$0			\$0			\$0
SPECIAL HANDLING EQUIPMENT			\$0			\$0			\$0			\$0
TOOLING			\$0			\$0			\$0			\$0
TEST EQUIPMENT			\$445			\$0			\$0			\$0
TRAINING DEVICES			\$68			\$25			\$25			\$25
DOCUMENTATION			\$0			\$0			\$0			\$0
ILS			\$926			\$1,007			\$1,059			\$1,233
TOTAL GRD EQUIP/FLEET SUP COST			\$1,784			\$1,032			\$1,084			\$1,258
WEAPONS SYSTEM COST			\$15,187			\$13,810			\$13,237			\$18,503
TARGETS INITIAL SPARES			\$250			\$0			\$300			\$108
TOTAL PROGRAM COST			\$15,437			\$13,810			\$13,537			\$18,611

P-1 SHOPPING LIST

ITEM NO. 12 PAGE NO. 7

<sup>\*</sup> FY-97 non-recurring engineering for GSQ-228 ground stations (replacing obsolete components).

#### CLASSIFICATION:

# **UNCLASSIFIED**

	BUDGET PROCUREMEN	THISTORY	AND PLANN	ING EX	HIBIT (	P-5A)			A. DATE	B 1997
B. APPROPRIATION/BUDGET	ACTIVITY it, Navy/ 2; Other Missiles			C. P-1 IT	EM NOME	NCLATUR	RE	SUBHEAD		
weapons Procuremen	it, Navy/ 2; Other Wissiles			AFRIA	L TAR	SETS			J2EM	
Cost Element/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD	DATE OF	QUANTITY	UNIT COST (\$000)	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES WHEN AVAILABLE
AQM-37C/FY-97 AQM-37C/FY-98	Raytheon A/C, Wichita, KS (1) Raytheon A/C, Wichita, KS (1) Raytheon A/C, Wichita, KS (1) Raytheon A/C, Wichita, KS (1)	C/Option C/Option C/Option SS/FP	NAVAIR NAVAIR NAVAIR NAVAIR	FEB 96 FEB 97 FEB 98 FEB 99	JUN 99	70 110 35 35	124 124 154 156	Yes Yes	No Yes	May 98
BQM-74E/FY-96 BQM-74E/FY-97 BQM-74E/FY-98 BQM-74E/FY-99	Northrop-Grumman, Hawthorne, C. Northrop-Grumman, Hawthorne, C. Northrop-Grumman, Hawthorne, C. Northrop-Grumman, Hawthorne, C.	C/Option	NAVAIR NAVAIR NAVAIR NAVAIR	FEB 97 FEB 98	JUL 97 MAY 98 APR 99 APR 00	120 120 133 165	218 228 231 212	Yes Yes	No No	
MQM-8G(EER)/FY-95 MQM-8G(EER)/FY-96 MQM-8G(EER)/FY-98	Allied-Signal, Mishawaka, IN Allied-Signal, Mishawaka, IN Allied-Signal, Mishawaka, IN		NAWC, Point Mugi NAWC, Point Mugi NAWC, Point Mugi	JUL 96	<b>OCT 97</b>	24 6 6	434(3) 434(3) 457	Yes	No	
MA-31/FY-99	McDonnell Douglas, St. Louis, MO	SS/Option(4)	NAVAIR	DEC 98	JUL 99	6	397	No	Yes	JUL 97
Foreign NDI-Supersonic/FY-98 Foreign NDI-Supersonic/FY-99		FP Option	NSMA NSMA		NOV98 NOV99	3 2	1,491 1,491	N/A N/A		
	CLASSIFIED CLASSIFIED	FP Option	NSMA NSMA		NOV98 NOV99	3	1,491 1,491	N/A N/A		

## D. REMARKS

- REMARS
   Formally known as Beech Aircraft Corporation.
   The FY-99 AQM-37D version will include the updated avionics system (old system will be replaced due to obsolete components).
   The MQM-8G(EER) unit price includes the incorporation of the Inertia Measurement Unit (a reliability improvement).
   Option modification to FY 1996 R&D procurement (A0610).
   Option on development contract.

ITEM NO. 12 PAGE NO. 8 CLASSIFICATION:

**UNCLASSIFIED** 

DD Form 2446-1, JUL 87

## AFRIAL TARGETS  ## ACCEP   BAIL   PRIOR   P	Y 1998/99 BUDGET PROD	UCT	ION	SCHE	DULE	P-1 I	TEM N	IOME	NCLA	TURE											DAT	E								
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PRODUCTION RATES   RCH'D   PRODUCTION RATES   RCH'D   MANUFACTURER'S NAME AND LOCATION   M SUST   1-8-5   MAXIMUM   D +   Raytheon, Wichita, KS   3   10   20   REORDER (Previous Source)   Northrop-Grumman, Hawthorne, CA   7-8   20   40-45   AQM-37C   Allied-Signal, Mishawaka, IN   2   3   4   BQM-74E   MQM-8G(EER)   MQM-8G(EER)   MR   M   J   J   A   S   U   N   D   J   F   M   A   M   J   J   A   S   U   N   D   J   F   M   A   M   J   J   A   S   U   N   D   J   F   M   A   M   J   J   A   S   U   N   D   J   F   M   A   M   J   J   A   S   U   N   D   J   F   M   A   M   J   J   A   S   U   N   D   J   F   M   A   M   J   J   A   S   U   N   D   J   F   M   A   M   J   J   A   S   U   N   D   J   F   M   A   M   J   J   A   S   U   U   U   E   C   O   E   A   E   A   P   A   U   U   U   E   C   O   E   A   E   A   D   A   E   A   E   A   A   E   A   A   E   A   A	Foreign NDI-Subsonic/Classified/FY-99	N	3	Ü	3																									3
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Raytheon, Wichita, KS       3       10       20       REORDER (Previous Source)       1 OCT       1 OCT       TIME       1 OCT         Northrop-Grumman, Hawthorne, CA       7-8       20       40-45       AQM-37C       16       16         Allied-Signal, Mishawaka, IN       2       3       4       BQM-74E       14       14         McDonnell Douglas, St Louis, MO       N/A       N/A       42+       MQM-8G(EER)       13					+ ט										_					-										
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McDonnell Douglas, St Louis, MO N/A N/A 42+ MQM-8G(EER) 13																														
Foreign Non-Developmental Items N/A N/A N/A MA MA-31								EER	)																					
	Foreign Non-Developmental Items	N/A	N/A	N/A															7											
Foreign NDI N/A						Fore	ign N	DI											N/A											

DD Form 2445, JUL 87

311 / 244

Previous editions are obsolete

P-1 SHOPPING LIST

ITEM NO 12 PAGE 9

FY 1998/99 BUDGET	PF	ROI	DU	СТ	10	N S	SC	HE	ΞDI	UL	E.			P-1	ITEM	MOM N	ENCI	_ATUF	RE										DAT	E							
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ITEM/MANUFACTURER/	•	1998					C	CALE	ND/	٩R١	/EAI	R 19	99							CA	ALENI	DAR	YEA	R 20	00					(	CALE	ND/	AR YI	EAR	2001		
PROCUREMENT YEAR	0 C T	N O V	D E C	J A N	F E B	M A R	F	,			JUL	A U G	S E P	С		E	Α	F E B		A P R	M A Y	ZCC	JUL	A U G	S E P	0 C T	N O V	DEC	J A N	F E B	M A R	A P R	M A Y	ZCC	JUL	U	S E P
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BQM-74E/NORTHROP/FY-97 BQM-74E/NORTHROP/FY-98	11	11	11	11	11	11		1 1	1 1	4	11	11	44	11	11	1 11	11	11	10																		
BQM-74E/NORTHROP/FY-99					Α		ľ	1 1	1 1		11	11	11		' '	1 1 1	<b> </b>	11	12		20	20	21	21	21	21	21										
MQM-8G(EER)/ALLIED-SIGNAL/FY-98						3	3	3																													
MA-31/MCDONNEL DOUGLAS/FY-99			Α								1			2	3																						
Foreign NDI-Supersonic/Classified/ FY-9 Foreign NDI-Supersonic/Classified/FY-9		1			Α	1					1				1				1																		
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DD Form 2445, JUL 87 Previous editions are obsolete P-1 SHOPPING LIST ITEM NO 12 PAGE NO. 10 Page of Pages
311/244 4-70 Exhibit P-21 Production Schedule

Exhibit P-20, Requirements Study		API	PROPRIATION/ WPN/BA-2	BUDGET ACTIV	/ITY	DAT	TE: February	1007
P-1 ITEM NOMENCLATURE		IAdmin Le	adtime (after Od	ct1):	Proc	d Leadtime :	rebruary	1991
AQM-37C/D (Aerial Targets)		7 (3.1 20	4 Months			2 2000	16 Months	
,	EV 4000	F)/ 4007	FV 4000	F)/ 4000	EV 2000	F)/ 0004	FV 0000	EV 0000
Dung Cummong	FY 1996	FY 1997	FY 1998 35	FY 1999 35	FY 2000 35	FY 2001	FY 2002	FY 2003 85
Buy Summary	70	110				45	65	
Unit Cost (Vehicle)	.12	.12	.15	.16	.16	.16	.15	.15
Total Cost	\$8.7	####	\$5.4	\$5.5	\$5.6	\$7.0	\$9.7	####
Asset Dynamics								
Beginning Asset Position	97	118	122	136	157	127	97	68
Deliveries from all prior year funding	114	94	48					
Deliveries from FY 1997 funding			36	74				
Deliveries from FY 1998 funding				12	23			
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 oy Year Asset Position	118	122	136	157	127	97	68	55
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:								
Approved Acquisition Objective	140	140	140	140	140	140	140	140
	Remarks:			1		1		1
Other than Training   Actual Training	· comand							
Usage Expenditures								
FY 1997 thru FY 1997 thru								
12/31/96 0 12/31/96 13								
FY 1996:35 FY 1996:58								
FY 1995: 27 FY 1995: 69								
FY 1994: 22 FY 1994: 92								
FY 1993: 34 FY 1993: 67								
11 1000.07			P-1 SHOPPING	TRIT		CLASSIFIC	CATION:	

DD Form 2454, JUN 86 ITEM NO. 12 PAGE NO. 11

Exhibit P-20, Requirements Study		AP	-	N/BUDGET AC	TIVITY	DAT		4 D.V. 4007
P-1 ITEM NOMENCLATURE		IAdmin Le	WPN/BA-2 adtime (after 0	Oct1)·	IProc	d Leadtime :	FEBRU	ARY 1997
BQM-74E (Aerial Targets)		7 (3) (1) (2)	4 Mont	,		a Loadiiiio .	14 N	<b>Months</b>
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Buy Summary	120	120	133	165	160	180	180	180
Unit Cost (Vehicle)	.22	.23	.23	.21	.22	.22	.22	.23
Total Cost	\$26.2	####	####	\$35.0	####	####	\$40.4	####
Asset Dynamics								
Beginning Asset Position	247	247	211	194	171	206	225	248
Deliveries from all prior year funding	157	119	84					
Deliveries from FY 1997 funding			54	66				
Deliveries from FY 1998 funding				66	67			
Deliveries from FY 1999 funding					123	42		
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 oy Year Asset Position	247	211	194	171	206	225	248	243
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:								
Approved Acquisition Objective	240	240	240	240	240	240	240	240
	Remarks:	•		•	•	•	•	•
Other than Training								
Usage Expenditures								
FY 1997 thru FY 1997 thru								
12/31/96 6 12/31/96 17								
FY 1996: 36 FY 1996: 121								
FY 1995: 31 FY 1995: 124								
FY 1994: 23 FY 1994: 130								
FY 1993: 34 FY 1993: 127								

DD Form 2454, JUN 86 ITEM NO. 12 PAGE NO. 12

	BU	DGET ITEM J	USTIFICATION	N SHEET			DATE:							
	P-40													
APPROPRIATION/BUDGET	OPRIATION/BUDGET ACTIVITY P-1 ITEM NOMENCLATURE													
<b>Weapons Procureme</b>	nt, Navy													
					<b>DRONES ANI</b>	D DECOYS								
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003						
QUANTITY														
COST (In Millions)	\$0.0	\$17.1	\$0.3	\$0.3	\$0.0	\$0.0	\$0.0	\$0.0						

#### PROGRAM COVERAGE:

All funding for Drones and Decoys from FY 1986 through 1990 has been used for continued procurement 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 launch 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.

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.

The FY 1998 and FY 1999 budget requests provide funding for production support efforts necessary to support final ITALD deliveries to Navy inventory.

P-1 SHOPPING LIST

**CLASSIFICATION:** 

ITEM NO 13

PAGE NO 1

# WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)

FEBRUARY 1997

SYSTEM: ITALD	FISCAL Y	'EAR	1996	FISCAL Y	EAR	1997	FISCAL YEA	٩R	1998	FISCAL YE	AR	1999
MANUFACTURER: IMI LTD, RAMAT HASHARON, IS		UNIT	TOTAL		UNIT	TOTAL		UNIT	TOTAL		UNIT	TOTAL
COST CODE: DJ010 FLYAWAY COST (\$000)	QTY	COST	COST	QTY	COST	COST	QTY	COST	COST	QTY	COST	COST
HARDWARE:												
ITALD	0		\$0	110	\$140	\$15,400	0		\$0	0		\$0
CONTAINERS			\$0		\$5	\$275	0		\$0	0		\$0
TOTAL HARDWARE	0	\$0	\$0	110	\$143	\$15,675	0		\$0	0		\$0
PROCUREMENT SUPPORT (RECURRING):												
CONTRACTOR ENGINEERING			\$0			\$0			\$0			\$0
GOVERNMENT IN-HOUSE			\$0			\$960			\$298			\$298
DOCUMENTATION			\$0			\$0			\$0			\$0
GOVERNMENT TESTING			\$0			\$500			\$0			\$0
OTHER			\$0			\$0			\$0			\$0
TOTAL RECURRING			\$0			\$1,460			\$298			\$298
PROCUREMENT SUPPORT (NONRECURRING):												
PRODUCT IMPROVEMENT			\$0			\$0			\$0			\$0
SPECIAL TOOLING AND TEST EQUIPMENT			\$0			\$0			\$0			\$0
TOTAL NONRECURRING			\$0			\$0			\$0			\$0
TOTAL FLYAWAY	0	\$0	\$0	110	\$156	\$17,135	0		\$298	0		\$298
GROUND EQUIPMENT/FLEET SUPPORT COST:												
GROUND EQUIPMENT			\$0			\$0			\$0			\$0
INSTALL & CHECKOUT			\$0			\$0			\$0			\$0
SPECIAL HANDLING EQUIPMENT			\$0			\$0			\$0			\$0
FLEET TEST EQUIPMENT			\$0			\$0			\$0			\$0
TRAINING DEVICES			\$0			\$0			\$0			\$0
DOCUMENTATION			\$0	1		\$0			\$0			\$0
ILS			\$0			\$0			\$0			\$0
TOTAL GRD EQUIP/FLEET SUP COST			\$0			\$0			\$0			\$0
WEAPONS SYSTEM COST	0	\$0	\$0		\$156	\$17,135	0		\$298	0		\$298
INITIAL SPARES			\$0			\$0			\$0			\$0
TOTAL PROGRAM COST	0	\$0	\$0	110	\$156	\$17,135	0		\$298	0		\$298

FILE NAME: C:\WPN\ITALDBUD - P5ITD.XLS (FEB 97)

P-1 SHOPPING LIST

P-1 NO 13

PAGE NO

ITEM 13 2

	BUDGET PROCUREMENT HISTOR	Y AND PLA	ANNING EXI	•	•				A. DATE	B 1997
	N/BUDGET ACTIVITY CUrement, Navy/2; Other Missiles				and Dec			SUBHEAD		2DJ
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
ADM-141/CFY-94	Israeli Military Industries, Ramat Hasharon, IS	SS/FP	NAVAIR	SEP 96	JUL 98	81	195 (1)	Yes	No	N/A
ADM-141C/FY-95	Israeli Military Industries, Ramat Hasharon, IS	SS/FP	NAVAIR	SEP 96	MAR 98	17	318 (1)	Yes	No	N/A
ADM-141C/FY-97	Israeli Military Industries, Ramat Hasharon, IS	SS/FP	NAVAIR	OCT 97	APR 99	110	140	Yes	No	N/A
D. REMARKS	(1) FY-94 and FY-95 contracts were awarded cor	ncurrently. FY-	95 funding was ເ	sed for first	article test u	nits.			<u> </u>	
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DD Form 2446-1, JUL 87 ITEM NO. 13 PAGE NO. 3 CLASSIFICATION:

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DD Form 2445, JUL 87

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Previous editions are obsolete

P-1 SHOPPING LIST

ITEM NO 13

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O B E A E A P A D U U U B C O B E A E A P A D U U U B C O B E A E A P A D U U U B C O B E A E A P A D U U U B C O B E A E A P A D U U U B C O B E A E A P A D U U	FISCAL YEAR 1999  FISCAL YEAR 2000  FISCAL YEAR 2000  CALENDAR YEA	FISCAL YEAR 1999  FISCAL YEAR 2000  FISCAL YEAR 2001  CALENDAR YEA	FISCAL YEAR 1999  FISCAL YEAR 1999  CALENDAR YEAR 1999  CALENDAR YEAR 2000  CALENDAR YEAR 2001  CALENDAR Y	FISCAL YEAR 1999  FISCAL YEAR 1999  FISCAL YEAR 1999  FISCAL YEAR 1999  FISCAL YEAR 1999  FISCAL YEAR 1999  CALENDAR YEAR 2000  CALENDAR YEAR 2001	FISCAL YEAR 1999  FISCAL YEAR 2000  FISCAL YEAR 2000  FISCAL YEAR 2000  FISCAL YEAR 2000  FISCAL YEAR 2000  FISCAL YEAR 2000  CALENDAR YEAR 2000

DD Form 2445, JUL 87 Previous editions are obsolete P-1 SHOPPING LIST ITEM NO 13 PAGE NO. 5 Page of Pages 311/244 4-70 Exhibit P-21 Production Schedule

	BUDGET ITEM	M JUSTIFICATI	ON SHEET			DATE:		
	P-40						February 19	97
APPROPRIATION/BUI WEAPONS PROCU BA: 2 OTHER MIS	JREMENT, NA	VY		P-1 ITEM NOME	OTHER MISS	ILE SUPPOR	T (12FD) - 22	290
	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST (In Millions)	\$12.3	\$17.7	\$18.3	\$18.8	\$17.6	\$21.4	\$22.7	\$23.3

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.

P-1 SHOPPING LIST

**CLASSIFICATION:** 

ITEM NO.- 14 PAGE NO.- 1

#### CLASSIFICATION:

# **UNCLASSIFIED**

WEAPON SYSTEM COST ANALYSIS
EXHIBIT (P-5)

DATE:
February 1997

Weapon System Cost Elements

P-1 ITEM NOMENCLATURE/SUBHEAD

OTHER MISSILE SUPPORT (12FD) - 2290

					l		ST IN THOUSAN				
COST CODE	ELEMENT OF COST		IDENT CODE	FY	1996	FY	1997	FY	1998	FY	1999
OODL			OODL	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
	VERTICAL LAUNCH SYSTEM										
FD005	TYPE I CANISTERS SM-2 MR BLK III/IIIA/IIIB (MK-13)					80	3,339	91	5,214	79	4,787
FD006	TYPE II CANISTERS TOMAHAWK (MK-14) SM-2 BLK IV (MK-21)			50	3,227 0	66	7,084	49	6,462	36	5,764
FD009	CANISTER EQUIPMENT				700		570		638		1,200
FD970	ILS SUPPORT				6,884		5,684		5,478		6,182
FD980	INITIAL TRAINING SUPPORT				1,514		991		502		906
		TOTAL			12,325		17,668		18,294		18,839

**DD FORM 2446, JUN 86** 

P-1 SHOPPING LIST ITEM NO.-14

PAGE NO.-2

CLASSIFICATION:

#### CLASSIFICATION:

### **UNCLASSIFIED**

CLASSIFICAT	ION.	0110E/100II									
			BUDGET PR	OCUREMENT	HISTORY A	ND PLANNING (F	P-5A)			DATE	
										February 1	997
APPROPRIAT	ION/BUDGET ACTIVITY				P-1 ITEM NOME	NCLATURE			SUBHEAD	-	
WEAPON	S PROCUREMEN	T, NAVY								12FD	
BA-2 OTH	IER MISSILES	•				OTHER MISSILE SU	IPPORT				
			CONTRACT			DATE OF			SPECS	SPEC	IF YES
COST	LINE ITEM/	CONTRACTOR	METHOD	CONTRACTED	AWARD	FIRST	QUANTITY	UNIT	AVAILABLE	REV	WHEN
CODE	FISCAL YEAR	AND LOCATION	& TYPE	BY	DATE	DELIVERY		COST	NOW	REQ'D	AVAILABLE
								(000)			
FD005	TYPE I CANISTE	RS.									
. 2000		/IIIA/IIIB (MK-13)									
	FY 95	United Defense FMC/BMY	C/FP OPT	NAVSEA	07/95	06/97	70	\$42.7	YES	NO	
		Minneapolis									
	FY 97	United Defense FMC/BMY	C/FP OPT	NAVSEA	12/96	10/98	80	\$41.7	YES	NO	
		Minneapolis									
	FY 98	United Defense FMC/BMY	SS	NAVSEA	01/98	10/99	91	\$57.3	YES	NO	
		Minneapolis									
	FY 99	United Defense FMC/BMY	C/FP OPT	NAVSEA	01/99	10/00	79	\$60.6	YES	NO	
		Minneapolis									
FD006	TYPE II CANISTE										
	TOMAHAWK (M	. '									
	FY 95	United Defense FMC/BMY Minneapolis	C/FP OPT	NAVSEA	07/95	06/97	12	57.4	YES	NO	
	FY 96	United Defense FMC/BMY	C/FP OPT	NAVSEA	07/96	01/98	50	\$64.5	YES	NO	
	1 1 30	Minneapolis	0/11 011	IVAVOLA	07750	01/30	30	ψ04.5	120		
	SM-2 BLK IV (MI	•									
	FY 97	United Defense FMC/BMY	C/FP OPT	NAVSEA	12/96	10/98	66	\$107.3	YES	NO	
		Minneapolis	0,11	10,1102,1	12,00	10/00		Ψ101.0	120	1.0	
	FY 98	United Defense FMC/BMY	SS	NAVSEA	01/98	10/99	49	\$131.9	YES	NO	
		Minneapolis									
	SM-2 BLK IVA (	MK-21 MOD 1)									
	FY 99	United Defense FMC/BMY	C/FP OPT	NAVSEA	01/99	10/00	36	\$160.1	YES	NO	
		Minneapolis									
REMARKS					<del></del>						

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

PAGE NO.3 ITEM NO.-14

FY 1998 /1999 BUDGET PROD	истіо	N SCHED	ULE		P-1 IT	EM NOM	IENCLA	TURE		отні	ER MI	SSILE	SUPF	PORT								Feb	oruai	ry 19	97																
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FY-93																																					$\Box$				
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SM-2 BLK III/IIIA/IIIB		36	0	36									q	q	q	q																					$\Box$	$\Box$			0
FY-94													Ŭ	Ü																							$\Box$	$\Box$			Ť
DDG(SCN)		276	0	276													35	35	35	35	34	34	34	34													$\Box$	$\Box$			0
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VLA		30	0	4								1	1	1	1		3					1															$\Box$	$\Box$			0
FY-95																																t					$\Box$	Г			
DDG(SCN)		288	0	288																					42	41	41	41	41	41	41						П				0
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NAVMAT FORM 7110/4 (REVISED 11/77)

P-1 SHOPPING LIST

ITEM NO.- 14 PAGE NO.- 4

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TOMAHAWK		50	#REF!	#REF!	5					-		-	+	╂	1																+	$\dashv$	$\dashv$	-	-+	-	$\dashv$	$\dashv$	-#	#REF!
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NAVMAT FORM 7110/4 (REVISED 11/77)

P-1 SHOPPING LIST

ITEM NO.- 14 PAGE NO.- 5

### **CLASSIFICATION:**

# **UNCLASSIFIED**

	JUSTIFICA P-40	TION S	HEET				DATE: Februar	y 1997
APPROPRIATION/BUDGET ACTIVITY			P-1 ITEM I			<u> </u>		
Weapons Procurement, Navy		T	OMAHAV	VK MOD	S (J2DN	)(PEO(C	:U)) (BLI	: <b>23010</b> (
BA2/Other Missiles								
	FY1996	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003
QUANTITY	-	-	-	-	-	_	-	_
COST (\$M)	\$48.1	\$8.1	\$0.0	\$3.2	\$0.0	\$0.0	\$0.0	\$0.0
	<u>FY 1996</u>	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
BLU-97 Insensitive Munitions	<u>FY 1996</u> 0.0	<u>FY 1997</u> 0.0	<u>FY 1998</u> 0.0	FY 1999 3.2	FY 2000 0.0	FY 2001 0.0	FY 2002 0.0	FY 2003 0.0
BLU-97 Insensitive Munitions Tomahawk Remanufacture (1) (1) Funding in FY99 and beyond is in the WPN P-1 #5.	0.0	0.0	0.0	3.2	0.0	0.0	0.0	0.0

P-1 SHOPPING LIST

4

CLASSIFICATION:

DD Form 2454, JUN 86

ITEM NO 15 AGE NO 1

CLASSIFICATION: UNCLASSIFIED INDIVIDUAL MODIFICATION MODIFICATION TITLE: **BLU-97 Insensitive Munitions** MODELS OF SYSTEM AFFECTED: R/UGM-109D DESCRIPTION/JUSTIFICATION: Insensitive replacement for current BLU-97 bomblets of the Land Attack Submunitions Dispenser variant. DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: FY 1996 & Prior FY 1997 FY 1998 FY 1999 FY 2000 FY 2001 FY 2002 FY 2003 TOTAL QTY \$ QTY \$ QTY \$ QTY \$ QTY \$ QTY \$ QTY \$ QTY \$ QTY QTY FINANCIAL PLAN (IN MILLIONS) RDT&E 0.0 **PROCUREMENT INSTALLATION KITS** 0.0 0.0 0 0.0 23904 3.2 0.0 0 0.0 0 0.0 0.0 0 0.0 23904 3.2 **INSTALLATION KITS (UNIT COST)** 0.000 0.000 0.000 0.000\*0.000 0.000 0.000 0.000 0.000 INSTALLATION KITS NONRECURRING 0.0 **EQUIPMENT** 0.0 **EQUIPMENT NONRECURRING** 0.0 **ENGINEERING CHANGE ORDERS** 0.0 0.0 DATA TRAINING DQUIPMENT 0.0 SUPPORT EQUIPMENT 0.0 OTHER 0.0 INTERIM CONTRACTOR SUPPORT 0.0 INSTALLATION OF HARDWARE FY 1996 EQUIPMENT & PRIOR 0.0 **FY 1997 EQUIPMENT** 0 0.0 **FY 1998 EQUIPMENT** 0 0.0 **FY 1999 EQUIPMENT** 0.0 **FY 2000 EQUIPMENT** 0.0 **FY 2001 EQUIPMENT** 0.0 0 **FY 2002 EQUIPMENT** 0 0.0 **FY 2003 EQUIPMENT** 0 0.0 TO COMPLETE 0 0.0 TOTAL INSTALLATION COST 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0.0 TOTAL PROCUREMENT COST 0.0 0 0.0 0 0.0 23904 3.2 0 0.0 0 0.0 0 0.0 0.0 0 0.0 23904 3.2 TOTAL COST 0.0 0.0 0.0 3.2 0.0 0.0 0.0 0.0 0.0 3.2 ADMINISTRATIVE LEADTIME: METHOD OF IMPLEMENTATION: Contractor Facilities (Depot) 4 **RODUCTION LEADTIME: 12** CONTRACT DATE: FY 199 N/A FY 1998: N/A FY 1999: Jan 99 PRODUCTION DELIVER DATE: FY 199 N/A FY 1998: N/A FY 1999: Jan 00 \* Actual Unit Cost is \$134 dollars.

PAGE

P-3A

#### CLASSIFICATION: UNCLASSIFIED

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CLASSIFICATION: UNCLASSIFIED																				
P3A		INDIVI	DUAL	_ MOD	IFIC	ATIO	N													
MODIFICATION TITLE: Tomahawk			_																	
MODELS OF SYSTEM AFFECTED: R/UGM Lan	d Attack	variant	S																	
DESCRIPTION/JUSTIFICATION:																				
Development complete; in production.																				
DEVELOPMENT STATUS/MAJOR DEVELOPMENT																				-
	FY 1996	& Prior	FY	1997	FY	1998	FY	1999	FY	2000	FY	2001	<u>FY</u>	2002	<u>FY</u>	<u>/ 2003</u>	_	<u>TC</u>	TC	<u>TAL</u>
	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																				
RDT&E																			0	0.0
PROCUREMENT																				
INSTALLATION KITS	165	48.1	20	8.1	0	0.0	0	0.0	0	0.0	0	0.0		0.0	0	0.0	0		185	56.2
INSTALLATION KITS (UNIT COST)		0.292		0.405		0.00		0.000		0.000		0.000		0.000		0.000	0	0.0		
INSTALLATION KITS NONRECURRING																				0.0
EQUIPMENT																				0.0
EQUIPMENT NONRECURRING																				0.0
ENGINEERING CHANGE ORDERS DATA																				0.0
TRAINING DQUIPMENT																				0.0
SUPPORT EQUIPMENT																				0.0
OTHER																				0.0
INTERIM CONTRACTOR SUPPORT																				0.0
INSTALLATION OF HARDWARE																				
FY 1996 EQUIPMENT & PRIOR																			0	0.0
FY 1997 EQUIPMENT																			0	0.0
FY 1998 EQUIPMENT																			0	0.0
FY 1999 EQUIPMENT																			0	0.0
FY 2000 EQUIPMENT																			0	0.0
FY 2001 EQUIPMENT																			0	0.0
FY 2002 EQUIPMENT																			0	0.0
FY 2003 EQUIPMENT																			0	0.0
TO COMPLETE																			0	0.0
TOTAL INSTALLATION COST	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
TOTAL PROCUREMENT COST	165	48.1	20	8.1	0		0	0.0	0		0	0.0	0	0.0	0	0.0	0		185	
TOTAL PROCUREMENT COST	100	48.1	20	8.1	U	0.0	U	0.0	U	0.0	U	0.0	U	0.0	U	0.0	U	0.0	185	56.2 56.2
		40.1		0.1														0.0		30.2
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CONTRACT DATE:	FY 1997					FY 19						1999:								
PRODUCTION DELIVER DATE:	FY 1997	Mar-98				FY 19	98:	N/A			FΥ	1999:	IN/A							
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## CLASSIFICATION: UNCLASSIFIED

MODIFICATION	)							IND	VIDU	JAL	MOD	IFIC	ATIO	N (Co	ontin	ued)												
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	BU	DGE	T	ITEM	J	USTIFICA	۱T	ION SH	IEET			<sub>DATE</sub> Februa	ry 1997
APPROPRIATION/BUDGET ACT	IVITY								P-1 ITEM NOMENCLA	TURE			
WEAPONS PROCUREM	ENT NAVY/	BA-2 OTH	IER M	ISSILES					SPARROW MOD	IFIC	CATIONS #230400	)	(12EN)
	FY 1	996		FY 1997		FY 1998		FY 1999	FY 2000		FY 2001	FY 2002	FY 2003
QUANITY													
COST (In Millions)	\$	1.3	\$		2.5	\$ -	\$	-	\$ -		\$ -	\$ -	\$ -

The FY95-FY01 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. Hardware buys provide configuration upgrades to the 7M missiles and are performed during retrofit.

The Evolved Seasparrow Missile (ESSM) Program is introduced in FY 1997. 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 manuevering 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.

RDT&E program elements for MHIP are 0603609N, Project Unit U1821 and 0604366N, Project U0439. RDT&E program element for ESSM is 0604755N, Project Unit U0173.

	FY 1996	<u>FY 1997</u>	FY 1998	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	FY 2002	FY 2003
7P	994	0	0	0	0	0	0	0
MHIP	325	0	0	0	0	0	0	0
ESSM 1]	0	2,478	0	0	0	0	0	0

1] Funding for ESSM for FY98 and out is reflected in Line Item 230700, WPN - P-1 line 4.

**EXHIBIT P-40** 

# FY 1998 PRESIDENT'S BUDGET SUBMISSION MODIFICATION OF WEAPON SYSTEM

MODIFICATION TITLE: **EVOLVED SEASPARROW MISSILE (ESSM)** MODELS OF SYSTEM AFFECTED: RIM-7P MODELS OF WEAPONS SYSTEMS MK41 Vertical Launching System (VLS) Quad Pack on U. S. AEGIS and LPD 17 Ships NATO SEASPARROW Surface Missile System (NSSMS) on U.S. Ships COMPATIBLE WITH: Ship Defense System (SSDS) Configured Ships 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. Assumptions used in pricing: 1) Support ESSM capability on 29 DDG Flt IIA, 12 LPD, 12 CV/CVN and 7 LHD. 2) Assumes AIM/RIM-7P Guidance Sections available from current fleet inventory for all missiles. DEVELOPMENT STATUS/MAJOR - Concept Definition Phase (FY91-94) Completed DEVELOPMENT MILESTONES: - Milestone Documentation/COEA Oct 94 - MS IV Decision Nov 94 - Transition to EMD Nov 94-May 95 - ESSM EMD Award Jun 95 - MK41 VLS Quad Pack EMD Contract Award Jun 95 - NSSMS System/MK91 Contract Award Jul 95

		<u>FY97</u>		FY	<u>98</u>	<u>FY</u>	<u>99</u>	FY	00	FYC	<u>)1</u>	TO COM	<u>IPLETE</u>	<u>TO</u> 1	Γ <u>AL</u>
_	Qty		\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
PROCUREMENT Pre-Production Engineering Missile Hdwr/Integration	0	1,480		NOTE: ES	SM funding for	r FY98 and ou	t years is includ	ed in a separ	ate line item.					0	1,512
Production Tools/Test Equip Gov't In-House Sys Engr/Test Fleet/ILS Support Support Equipment		998													1,018
TOTAL PROCUREMENT COST	0	2,478	0	0	0	0	0	0	0	0	0	0	0	0	2,530
Installation		0	0		0		0		0		0		0		
TOTAL COST METHOD OF IMPLEMENTATION:	0	_,	0 f All Up Ro	0 ound (AUR), i	0 ncluding test,	0 will occur at th	0 ne contractor fac	0 cility.	0	0	0	0	0	0	2,530
CONTRACT DATE:		FY97: N/A	•	, ,				•			ADMINISTRA	ATIVE LEAD	TIME: 6 MON	THS.	
PRODUCTION DELIVER DATE:		FY97: N/A									PRODUCTIO	N LEADTIM	E: 18 MONTH	IS.	
PRODUCTION DELIVERIES:															
								FY00		FY01		TC		TOTAL	
								1 2 3 4		1 2 3 4		1 2 3 4		1 2 3	4

MODIFICATION TITLE: AIM/RIM-7R Missile Homing Improvement Program

MODELS OF SYSTEM AFFECTED: AIM/RIM-7M/P

Retrofit provides U.S. forces with an upgraded air-to-air and surface-to-air missile capable of intercepting low flying antiship missiles in the presence of enchanced ECCM. The MHIP provides a significant improvement to RIM-7M seeker capabilities. The low altitude fuze (7P) capability is inherent in the MHIP 7R upgrade. This is an evolutionary program which utilizes the 7P as an interim change. DESCRIPTION/JUSTIFICATION:

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ 000)	FY96/	Prior	FY:	97	FY	98	FY9	9	FY00	)	FY0	1	FY0	2	FY	03	T	3	TOT	AL
	Qty	\$	Qty	<u></u> \$	Qty	\$	Qty	<u> </u> \$	Qty		Qty	<u> </u> \$	Qty	= \$	Qty	\$	Qty	<u> </u>	Qty	<u>^</u>
RDT&E PROCUREMENT Installation Kits Installation Kit Nonrecurring Gov't Sys Engr ILS Support Training Equipment	0	0 8,602 0 0	0	0 0 0 0	0	0 0 0 0	0	0 0 0 0	0	0 0 0 0	0	0 0 0 0	0	0 0 0 0	0	0 0 0 0	0	0 0 0 0	0 0 0 0	8,602 ( (
Installation of Hardware																				
TOTAL INSTALLATION COST TOTAL PROCUREMENT COST	0 0	0 8,602	0	0	<u> </u>	0 0	0	0 0	0	0 0	<u>0</u> 0	0 0	0	0 0	0	0 0	0	0 0	0	0 8,602
TOTAL COST		8,602		0		0 0		0 0		0 0		0 0		0 0		0 0		0 0		8,602
METHOD OF IMPLEMENTATION:					ADMINI	STRATIVE	LEADTIN	1E:		F	PRODUCT	TION LEAD	TIME:							
CONTRACT DATE:	F	Y1997: N/A	A I	Y1998:	N/A															
PRODUCTION DELIVER DATE:	F	Y1997: N/A	A I	FY1998:	N/A															
INSTALLATION SCHEDULE	1	FY97	2	4	4	FY9	3	4	4	FY99	9			FY00	)			TOTA	₹L	4

MODIFICATION TITLE: RIM-7P Low Altitude Fuse Retrofit

MODELS OF SYSTEM AFFECTED: RIM-7M

DESCRIPTION/JUSTIFICATION: Retrofit provides U.S. forces with an upgraded surface-to-air missile capable of intercepting extremely low flying antiship missiles.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

FINANCIAL PLAN: (\$ 000)	FY95	/Prior	FY	96	FY	97	FY9	18	FY99	<b>,</b>	FY00	)	FY01		FY	02	I	С	T01	ΆΙ
	Qty	\$	Qty	\$	Qty	<u>\$</u>	Qty	<u> </u>	Qty	\$	Qty		Qty		Qty	\$	Qty .	\$	Qty	\$
PROCUREMENT Installation Kits Installation Kits Nonrecurring Gov't In-House Sys Engr/Test Training Equipment ILS/Support Equipment	2,128	69,685 2,000 54,709 6,521 23,870	0	0 0 0 0	0	0 0 0 0	0	0 0 0 0	0	0 0 0 0	0	0 0 0 0	0	0 0 0 0	0	0 0 0 0	0	0 0 0 0	2,128 0 0 0 0	69,685 2,000 54,709 6,521 23,870
Installation of Hardware FY95 & Prior (896 Kits)		6,662																	0	6,662
TOTAL INSTALLATION COST TOTAL PROCUREMENT COST TOTAL COST	0 2,128	6,662 156,785 163,447	0	0 0 0	0	0 0 0 0 0 0	0	0 0 0 0 0 0	0	0 0 0 0 0 0	0 0	0 0 0 0 0 0	0 0	0 0 0 0 0 0	0	0 0 0 0 0 0	0	0 0 0 0 0 0	<u>0</u> 2,128	6,662 156,785 163,447
METHOD OF IMPLEMENTATION:	Contracto	or Facilities			ADMINIS	STRATIVE	LEADTIM	IE: 6 Mont	ths	ĺ	PRODUCT	ION LEADT	IME: 23 M	lonths						
CONTRACT DATE: PRODUCTION DELIVER DATE:		FY1996: N/ FY1996: N/		FY1997: FY1997:																
INSTALLATION SCHEDULE	1	<u>FY95</u> 2	. 3	4	1	<u>FY9</u> 2	1 <u>6</u> 3	4	1	<u>FY9</u>	<u>7</u> 3	4	1	<u>FY98</u>	. 3	4	1	<u>TOT/</u>	<u>AL</u> 3	4
INPUT FY95 & Prior *	132	163	183	186	73												205	163 0	183	186
OUTPUT FY95 & Prior **	90	132	163	183	186	73											276	205 0	163	183
* INPUT: Induction to Contractor																				
** OUTPUT: Delivery of Modified GCS from	Contractor. I	nstallation co	sts for F	Y95 & Pi	rior procure	ments fun	ded in Fy9	4 and prio	r years.											

EXHIBIT P-3A

#### **CLASSIFICATION:**

### UNCLASSIFIED

BU	DGET ITEM	JUSTIFICA P-40	ATION SHE	ET			DATE: Februa	ry 1997
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy BA 2 - Other Missiles					P-1 ITEM NO			
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY					75	125	300	300
(In Millions)	\$16.1	\$1.3	\$0.3	\$0.0	\$36.2	\$42.7	\$70.1	\$70.8

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.

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 CCM without changing any basic AIM-9M characteristics. FY 1997 and FY 1998 funding installs previously procured AIM-9M modifications.

Funds in FY 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.

AIM-9X PE 0207161N, E0457

DD Form 2454, JUN 86

AIM -9X Quantities:		FY 2000	FY 2001	FY 2002	FY 2003
	Air Force	75	125	300	300
	Navv	75	125	300	300

P-1 SHOPPING LIST

ITEM NO 17 PAGE NO 1

**CLASSIFICATION:** 

# CLASSIFICATION: UNCLASSIFIED

MODIFIC				MARY			DATE	<b>-</b>	
	•	IIBIT P-3I	•					Feb-97	
,		lars in M	illions)		I			_	
APPROPRIATION/BUDGET AC					P-1 ITEM	I NOMEN	CLATURE	=	
Weapons Procurement, BA 2 - Other Missiles	navy				AIM-9 S	Sidewind	er Mods		
System/Modification	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	TOTAL
Sidewinder Mods	0.6	1.3	0.3						2.2
TOTAL	0.6	1.3	0.3	0.0	0.0	0.0	0.0	0.0	2.2

P-1 SHOPPING LIST

ITEM NO. 17 4GE NO. 2

CLASSIFICATION:

#### CLASSIFICATIO| UNCLASSIFIED

INDIVIDUAL MODIFICATION

MODIFICATION TITLE: AIM-9M PRODUCT IMPROVEMENT PROGRAM
MODELS OF SYSTEM AFFECTE(AIM-9M)
DESCRIPTION/JUSTIFICATION:

The current AIM-9M Sidewinder does not meet the IRCM 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:

	FY 1996	& Prior	FY	1997	FY	1998	<u>FY 1</u>	999	FY 2	000	FY 2	2001	FY 2	002	FY 2	2003	<u>TC</u>	TO	TAL
	QTY	\$	QTY	\$	QTY	\$	QΤΥ	\$	QTY	\$	QTY	\$	ΩTY	\$	ΩTY	\$	QTY \$	QTY	\$
FINANCIAL PLAN (\$000)																			
RDT&E PROCUREMENT INSTALLATION KITS INSTALLATION KITS NONRECURRING ENGINEERING CHANGES GOV'T IN-HOUSE SYS ENGR/TEST TRAINING EQUIPMENT ILS/SUPPORT EQUIPMENT	4207	25061 498 100 9486 1365 2941																4207	25061 498 100 9486 1365 2941
INSTALLATION OF HARDWARE																			
FY93 (1009 Kits)	1009	1530																1009	1530
FY 94 (1520 Kits) FY 96 (1678 Kits)	1520 439	4570 571	981	1274	250	333												1520 1678	4570 2178
TOTAL INSTALLATION COST	439	6671	901	1274	256	333												4207	8278
TOTAL PROCUREMENT COST TOTAL COST	4207	39451 46122		0 1274		0 333												4207	39451 47729
METHOD OF IMPLEMENTATION: Contractor, CONTRACT DATE: PRODUCTION DELIVER DATE:	Depot and FY 199 FY 199		on Sta	ition	ADMI	NISTF FY 19 FY 19		LEA	ADTIMI	E: P	FY 1	JCTI0 999: 999:	N/A	ADT	IME:				

The 1,678 modified GCS's procured in FY96 will be installed by the contractor (Raytheon Option III for 1,200 units and 478 units on the new contract). Quantity/price structure reflects consideration of USAF buys in FY94/95/96 and results in lowest unit price over program duration.

ITEM 17 PAGE 3

CLASSIFICATION: UNCLASSIFI

CLASSIFICAT P3A (Continue MODIFICATIO	ed)		ASSII		UCT	IMPR	OVEN						DIF	ICAT	101	V (Co	onti	nue	d)																
INSTALLATI																																			
INPUT ===>	FY 1996		FY 1	997			FY 19	998			FY 1	999	7	F١	/ 20	00	٦Г	FY	200	1	1	FΥ	2002	2		FY:	2003	3	1	-	ГС				
	& Prior	1	2	3	4	1	2	3	4	1 1	2	3	4 II	1		3 4	ı II.	1 2	2 3	_ 4	II 1	2	3	4	ll 1	2	3	4	1	2	3	4	TOTA	\L	
FY 1993	725	0	0	0	0	0	0	0	0	0	0	0	0	0	0 7	0 0	7 1	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	725		
FY 1994	1804	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	)    (	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	180	1	
FY 1996	1678	0	##	##	##	##	119	39	0	0	0	0	0	0	0	0 0	)    (	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	335	3	
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OUTPUT ==>	FY 1996		<u>FY 1</u>				FY 19			Į į	FY 1	<u>999</u>		<u>F</u>				<u>FY</u>	200	1		<u>FY</u>	2002	2_		<u>FY :</u>	2003	3_		1	<u>rc</u>				
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	<u> </u>		3 4	ЫĽ	1 2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	TOTA		
FY 1993	725	0	0	0	0	0	0	0	0	0	0	0	0	•	0	0 0	)  (	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	725		
FY 1994	1804	0	0	0	0	0	0	0	0	0	0	0	٠ ا ا	•	0 (	0 0	)  (	0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	180		
FY 1996	1678	0	0	##	##	##	181	##	39	0	0	0	0	0	0 (	0 0		0 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	167	3	
																																		_	
1																													TC	ΙAΙ	L OL	IIPL	J 420	7	
Input: Induc																																			
Output: Deli	ivery of mo	odifie	ed GC	S fro	m cor	ntract	or									<u> </u>	_										-		<u></u>				P-3A	<u> </u>	
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BUDGE	T ITEM JUS	STIFICATIO	N SHEET				DATE:	
	P	P-40					Febru	ary 1997
APPROPRIATION/BUDGET ACTIVITY					P-1 ITEM N	IOMENCLA	TURE	
Weapons Procurement, Navy BA2 - Other Missiles					HARPOON	SLAM MODIF	FICATION (J2	EW) (PEO-CU)
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
COST (In Millions)								
	\$2.6	\$42.1	\$21.7	\$36.3	\$36.5	\$28.9	\$29.6	\$30.5

MISSION AND DESCRIPTION:

The HARPOON/SLAM missile modification program provides funds for Engineering Change Proposals (ECP's) and other improvements to its weapons components which are already in the inventory and require retrofit activity. This budget contains the following mofication projects which will provide improvements to the guidance, warhead, exercise, sustainer and control sections of the HARPOON/SLAM missile.

FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03
1.865	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.741	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.091	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.129	0.000	0.000	0.000	0.000	0.000	0.000
0.000	41.881	21.694	36.314	36.535	28.907	29.550	30.500
2.606	42.101	21.694	36.314	36.535	28.907	29.550	30.500
	1.865 0.741 0.000 0.000	1.865     0.000       0.741     0.000       0.000     0.091       0.000     0.129       0.000     41.881	1.865     0.000     0.000       0.741     0.000     0.000       0.000     0.091     0.000       0.000     0.129     0.000       0.000     41.881     21.694	1.865       0.000       0.000       0.000         0.741       0.000       0.000       0.000         0.000       0.091       0.000       0.000         0.000       0.129       0.000       0.000         0.000       41.881       21.694       36.314	1.865       0.000       0.000       0.000       0.000         0.741       0.000       0.000       0.000       0.000         0.000       0.091       0.000       0.000       0.000         0.000       0.129       0.000       0.000       0.000         0.000       41.881       21.694       36.314       36.535	1.865         0.000         0.000         0.000         0.000         0.000           0.741         0.000         0.000         0.000         0.000         0.000           0.000         0.091         0.000         0.000         0.000         0.000           0.000         0.129         0.000         0.000         0.000         0.000           0.000         41.881         21.694         36.314         36.535         28.907	1.865         0.000         0.000         0.000         0.000         0.000         0.000           0.741         0.000         0.000         0.000         0.000         0.000         0.000           0.000         0.091         0.000         0.000         0.000         0.000         0.000           0.000         0.129         0.000         0.000         0.000         0.000         0.000           0.000         41.881         21.694         36.314         36.535         28.907         29.550

P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO 18

PAGE NO 1

# CLASSIFICATION: UNCLASSIFIED

	ATION INS (EXH (TOA, Doll	IBIT P-3	BN)		łΥ		DATE	Februa	ry 1997
APPROPRIATION/BUDGET Weapons Procurement BA2 - Other Missiles	_			НА		1 NOMEN /SLAM M			) (PEO-C
System/Modification	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	TOTAL
Harpoon/SLAM Mods									
Encapsulated Exercise	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Surface Launch Exercise	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Air Launch Exercise	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Harpoon/SLAM Mods TOTAL	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2
IUIAL	0.0		<b>0.0</b> PPING LI		0.0	0.0	CLASSIFICA		0.2

ITEM NO. 18 PAGE NO. 2

CLASSIFICATION: UNCLASSIFIED P3A		INDIV	חווא	I MC	DIEI	CATIO	N													
MODIFICATION TITLE: CAPSULE MODELS OF SYSTEM AFFECTED: UGM-84C/L DESCRIPTION/JUSTIFICATICAPSULE FOR SUBM	MARINE LA	UNCH	ED H	IARPO				ON CO	ORRE	CTIV	E AC	TION	CHAI	NGE-I	REPL	_ACE	NON-	-RFI (	OR E	XPEN
DEVELOPMENT STATUS/MAJOR DEVELOPMEN	FY 1996	& Prio	r FY	1997														<u>.c</u>		OTAL
FINANCIAL PLAN (IN MILLIONS)	QTY	\$	QIY	\$	QIY	\$	QIY	\$	QIY	\$	QIY	\$	QIY	\$	QIY	\$	QIY	\$	QIY	\$
RDT&E																			0	0.0
PROCUREMENT INSTALLATION KITS INSTALLATION KITS - UNIT COST	14	4.2 0.300																	14	4.2
INSTALLATION KITS NONRECURRING		0.000																		0.0
EQUIPMENT EQUIPMENT NONRECURRING ENGINEERING CHANGE ORDERS																				0.0 0.0 0.0
DATA TRAINING EQUIPMENT		0.8																		0.0
SUPPORT EQUIPMENT OTHER																				0.0
INTERIM CONTRACTOR SUPPORT  NSTALLATION OF HARDWARE																				0.0
FY 1996 EQUIPMENT & PRIOR (14 Kits) FY 1997 EQUIPMENT	5	0.0	2	0.0	7	0.0													14 0	0.0
FY 1997 EQUIPMENT FY 1998 EQUIPMENT FY 1999 EQUIPMENT																			0	0.0
FY 2000 EQUIPMENT FY 2001 EQUIPMENT																			0	0.0
FY 2002 EQUIPMENT																			0	0.0
FY 2003 EQUIPMENT TO COMPLETE																			0	0.0
TOTAL INSTALLATION COST	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	14	0.0
TOTAL PROCUREMENT COST TOTAL COST	14	5.0 5.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	14	5.0 5.0
METHOD OF IMPLEMENTATION: CONTRACT DATE:	FY 1997					/INIST FY 19	98:	N/A	EADT	7	FY '	1999:	N/A	EAD	TIME	24				
PRODUCTION DELIVER DATE:	FY 1997	N/A			ا	FY 19	98:	N/A			FY '	1999:	N/A							
NOTE: INSTALLATIONS ARE INCIDENTAL TO F		Y SCH	EDU	LED I	MISSI	LE BL	JILD-	UP AT	Γ I-LE	VEL.										
THEREFORE NO INSTALLATION FUNDING REC	JUIKED.																			
																				P-3A

CLASSIFICATI P3A (Continued MODIFICATION	<u>d)</u>								IND	IVI	DUA	LM	OD	IFIC	ATIC	ON (C	Con	inu	ed)												
INSTALLATIO					•																										
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	0 0 0 0 0 0	0 0 0 0 0 0 0 0	Y 1 2 0 0 0 0 0 0 0 0	997 3 2 0 0 0 0 0 0 0	4 0 0 0 0 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0 0	FY 1 2 7 0 0 0 0 0 0	3 0 0 0 0 0 0 0 0	4 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0	EY 1 2 0 0 0 0 0 0 0 0	999 3 0 0 0 0 0 0 0	4 0 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0	FY 2 0 0 0 0 0 0 0 0	3 0 0 0 0 0 0 0 0	4 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0 0	FY 2 0 0 0 0 0 0 0 0	001 3 0 0 0 0 0 0 0	4 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	Y 2 2 0 0 0 0 0 0 0 0	002 3 0 0 0 0 0 0 0 0	4 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	Y 2 0 0 0 0 0 0 0 0 0	003 3 0 0 0 0 0 0 0 0	4 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 TPU	TOTAL 14 0 0 0 0 0 0 0 0 1 14
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CLASSIFICATION: UNCLASSIFIED																			
P3A MODIFICATION TITLE: ENCAPSULATED					DIFICAT		ON KI	те											
MODELS OF SYSTEM AFFECTED: UGM-840		ALIC	JIJL	KOUI	ND CON	LKS	ON KI	13											
DESCRIPTION/JUSTIFICATIONVERT SUB-LA		CAL M	IISSII	FST	OFLEET	FXF	RCISE/	TELE	METI	RY M	ISSII	FS							
DEVELOPMENT STATUS/MAJOR DEVELOPME													SRI	FOLI	IRFD				
DEVELOT MENT OF THOSAN BON DEVELOT ME					FY 1998											٦	С	Т	OTAL
	QTY				QTY \$														\$
FINANCIAL PLAN (IN MILLIONS)							•												•
RDT&E																		0	0.0
PROCUREMENT																		U	0.0
INSTALLATION KITS	16	2.8																16	2.8
INSTALLATION KITS - UNIT COST	10	0.176																10	2.0
INSTALLATION KITS NONRECURRING		0.170																	0.0
EQUIPMENT																			0.0
EQUIPMENT NONRECURRING																			0.0
ENGINEERING CHANGE ORDERS																			0.0
DATA																			0.0
TRAINING EQUIPMENT																			0.0
SUPPORT EQUIPMENT																			0.0
OTHER																			0.0
INTERIM CONTRACTOR SUPPORT																			0.0
NSTALLATION OF HARDWARE																			
FY 1996 EQUIPMENT & PRIOR (16 Kits)	6	0.1														10	0	16	0.3
FY 1997 EQUIPMENT	-																	0	0.0
FY 1998 EQUIPMENT																		0	0.0
FY 1999 EQUIPMENT																		0	0.0
FY 2000 EQUIPMENT																		0	0.0
FY 2001 EQUIPMENT																		0	0.0
FY 2002 EQUIPMENT																		0	0.0
FY 2003 EQUIPMENT																		0	0.0
TO COMPLETE																		0	0.0
TOTAL INSTALLATION COST	6	0.1	0	0.0	0 0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	10	0.2	16	0.3
TOTAL PROCUREMENT COST	16	2.9	0	0.0	0 0.0		0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.2		3.1
TOTAL COST	10	2.9	U	0.0	0.0	-	0.0	U	0.0	U	0.0	U	0.0	U	0.0	U	0.2	10	3.1
		2.0		0.0													0.2		0.1
METHOD OF IMPLEMENTATION:	EV 4007	N1/A			ADMINIS			EADT	/		DUCT		EAD	IIME	24				
CONTRACT DATE:	FY 1997				FY 1		N/A				999:								
PRODUCTION DELIVER DATE:	FY 1997	IN/A			FYI	998:	N/A			FYI	999:	N/A							
																		F	2-3A
					ITEM	18	PA	GE	- 4						CLAS	SIFIC	CATIO		JNCLA:

P3A (Continued MODIFICATION	1)						) HA							IFIC ROL							TS										
INSTALLATIO	ON SCH	IEDI	JLE	:																											
	0 0 0 0 0	1 0 0 0 0 0 0 0	EY 1 2 0 0 0 0 0 0 0 0	3 0 0 0 0 0 0 0	4 0 0 0 0 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0	EY 1 2 0 0 0 0 0 0 0	998 3 0 0 0 0 0 0 0	4 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0	FY 1 2 0 0 0 0 0 0 0	3 0 0 0 0 0 0 0	4 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0	EY 2 0 0 0 0 0 0 0 0	2000 3 0 0 0 0 0 0 0	4 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0	EY 2 0 0 0 0 0 0 0	2001 3 0 0 0 0 0 0 0 0	4 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0 0	0 0 0 0 0 0	3	4 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0	2 0 0 0 0 0 0 0 0	003 3 0 0 0 0 0 0 0	4 0 0 0 0 0 0 0 0	10 0 0 0 0 0 0	TOTAL 16 0 0 0 0 0 0
																											то	TAL	INF	PUT	16
	FY 199 & Prior 6 0 0 0 0 0 0	1 0 0 0 0 0 0 0	EY 1 2 0 0 0 0 0 0 0	3 0 0 0 0 0 0 0 0	4 0 0 0 0 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0	FY 1 2 0 0 0 0 0 0 0	998 3 0 0 0 0 0 0 0	4 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0	FY 1 2 0 0 0 0 0 0 0 0	3 0 0 0 0 0 0 0	4 0 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0	EY 2 0 0 0 0 0 0 0 0	3 0 0 0 0 0 0 0	4 0 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0	EY 2 0 0 0 0 0 0 0 0	3 0 0 0 0 0 0 0 0	4 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0	3 0	4 0 0 0 0 0 0 0 0	F 1 0 0 0 0 0 0 0 0	Y 2 2 0 0 0 0 0 0 0 0 0 TO	3 0 0 0 0 0 0 0 0	4 0 0 0 0 0 0 0 0	10 0 0 0 0 0 0 TPU	TOTAL 16 0 0 0 0 0 0 0 0

ITEM # PAGE 4a

CLASSIFICATION: UNCLASSIFIED

P-3A

LASSIFICATION: <b>UNCLASSIFIED</b> 3A	r	NDIVI	DUA	L MC	DIFI	CATIO	N													
ODIFICATION TITLE: SURFACE LAUNCH I								SION 1	KITS	,										
ODELS OF SYSTEM AFFECTED: RGM-84C/D					•	•														
ESCRIPTION/JUSTIFICATIONVERT SURFACE		FACTIC	TAL	MISSI'	IFS/	/I FSS	SAL	VO TE	ZAY M	40DIF	FICAT	rion) r	TO F	4 FET	FXF	RCIS	F/TE	I EMI	FTRY	MISS
EVELOPMENT STATUS/MAJOR DEVELOPMENT																				Wire.
EVELOFIVILINI STATOG/MAGON DEVELOT METT	FY 1996																7	ГС	TC	OTAL
	QTY					<u>1998</u> ′\$														
NAMED AND AND AND AND AND AND AND AND AND AN	QII	Ψ	Ų i i	Ψ	اللا	Φ,	االح	Φ.	<u>اللا</u>	<u> </u>	االح	Ψ	را ۱	Φ,	<u>اللا</u>	Ψ	ווגט	ψ	ŲΠ	Ψ
NANCIAL PLAN (IN MILLIONS)																				
DT&E																			0	0.0
ROCUREMENT																				
NSTALLATION KITS	37	11.0															15	5.3	52	16.3
NSTALLATION KITS - UNIT COST		0.297																		
NSTALLATION KITS NONRECURRING																				0.0
EQUIPMENT																				0.0
QUIPMENT NONRECURRING																				0.0
NGINEERING CHANGE ORDERS																				0.0
DATA																				0.0
RAINING EQUIPMENT																				0.0
SUPPORT EQUIPMENT																				0.0
OTHER																				0.0
NTERIM CONTRACTOR SUPPORT																				0.0
			=											_						
STALLATION OF HARDWARE																				
FY 1996 EQUIPMENT & PRIOR (37 Kits)	30	0.7	7	0.1													15	0.4	52	1.2
TY 1997 EQUIPMENT																			0	0.0
Y 1998 EQUIPMENT																			0	0.0
Y 1999 EQUIPMENT																			0	0.0
Y 2000 EQUIPMENT																			ő	0.0
Y 2001 EQUIPMENT																			0	0.0
Y 2002 EQUIPMENT																			0	0.0
Y 2002 EQUIPMENT																			0	0.0
TO COMPLETE																			0	0.0
O CONFLETE																			U	0.
OTAL INSTALLATION COST	30	0.7	7	0.1	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	15	0.4	52	1.
OTAL PROCUREMENT COST	37	11.7	0	0.1		0.0	0	0.0		0.0		0.0	0	0.0	0		15			17.
OTAL PROCUREMENT COST	31	11.7	U	0.1	U	0.0	U	0.0	U	0.0	U	0.0	U	0.0	U	0.0	10	5.7	52	17
		11.7		0.1									4.7					5.7		17
ETHOD OF IMPLEMENTATION:						MINIST			<u>-</u> ADT						·IME	24				
ONTRACT DATE:	FY 1997					FY 199		N/A				1999:								
RODUCTION DELIVER DATE:	FY 1997	N/A			,	FY 199	<i>3</i> 8:	N/A			FY 1	1999:	N/A							

ITEM 18 PAGE

5

P-3A CLASSIFICATION: UNCLASS

LASSIFICATI	ION: <b>U</b>	NCL	_AS	SIF	IED	ı																								
3A (Continued									IND	IVIE	UA	LM	OD	IFIC	ATIC	ON (	Con	tinı	ied)											
ODIFICATIO		: SU	RF	ACE	E LA	NUN	СН														ITS									
							-																							
INSTALLATION	ON SCH	IEDL	JLE	:																										
IPUT ===>	FY 199	<u> </u>	FY 1		_			1998	3			999	.		<u>FY 2</u>			<u> </u>	FY 2		. [[		Y 20				200		TC	
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				4	1 2				TOTAL
FY 1996 & P		0	0	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-		-	- 1	0 (		•	0	37
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0 0		0	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		-	0	0 (	0	•	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	0 (	0	0	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		-	0	U C	0	0	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	0	U C	0	0	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			- 11	0 0	-	0	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-	- 11	0 0		0	0	0
To Complete	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (	0	0	15	15
																												L IN	PUT	52
UTPUT ==>	FY 199	<u> </u>	FY 1		,			1998	3_	Ī		999			<u>FY 2</u>			<u> </u>	FY 2		. []		Y 20				200		TC	
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				4	1 2				TOTAL
FY 1996 & P		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	37
FY 1997	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			- 11	0 0	-	-	0	0
FY 1998	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0	0 (		_	0	0
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	U	0			- 11	0 0	-	-	0	0
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Ü	0	0	0		-	- 11	0 0	, ,	•	0	0
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			- 11	0 0	-	-	0	0
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	U	0	0	0		-	- 11	0 0	_	_	0	0
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0 0	-	-	0	0
To Complete	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 (		L OL	15	15 IT 52
																										- 1	OTA	IL UL	IPL	11 52
																														P-3A
																		_								N A C	OIE	ICAT	101	
													ITEN		18		PAG	⊢	5a											UNCL

CLASSIFICATION: UNCLASSIFIED																			
P3A					DIFICAT														
MODIFICATION TITLE: AIR LAUNCH HAF		RCISE	RO	UND	MOD KI	rs													
MODELS OF SYSTEM AFFECTED: AGM-840				"															. = 0
DESCRIPTION/JUSTIFICATICONVERT AIR LA																MET	RYN	IISSI	LES
DEVELOPMENT STATUS/M <mark>AJOR DEVELOPM</mark>																_		_	
	FY 1996																<u>C</u>		<u>OTAL</u>
	QTY	\$	QIY	\$	QTY \$	QIY	′\$	QIY	\$	QIY	\$	QIY	\$	QIY	\$	QIY	\$	QTY	\$
FINANCIAL PLAN (IN MILLIONS)																			
RDT&E																		0	0.0
<u>PROCUREMENT</u>																			
INSTALLATION KITS	6	1.4																6	1.4
INSTALLATION KITS - UNIT COST		0.234																	
INSTALLATION KITS NONRECURRING																			0.0
EQUIPMENT																			0.0
EQUIPMENT NONRECURRING																			0.0
ENGINEERING CHANGE ORDERS																			0.0
DATA																			0.0
TRAINING EQUIPMENT																			0.0
SUPPORT EQUIPMENT																			0.0
OTHER																			0.0
INTERIM CONTRACTOR SUPPORT																			0.0
NSTALLATION OF HARDWARE																			
FY 1996 EQUIPMENT & PRIOR (6 Kits)			6	0.1														6	0.1
FY 1997 EQUIPMENT																		0	0.0
FY 1998 EQUIPMENT																		0	0.0
FY 1999 EQUIPMENT																		0	0.0
FY 2000 EQUIPMENT																		0	0.0
FY 2001 EQUIPMENT																		0	0.0
FY 2002 EQUIPMENT																		0	0.0
FY 2003 EQUIPMENT																		0	0.0
TO COMPLETE																		0	0.0
TOTAL INSTALLATION COST	0	0.0	6	0.1	0 0.	0 0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	6	0.1
			_	_				_				_				_			
FOTAL PROCUREMENT COST	6	1.4	0	0.1			0.0	0		0	0.0	0	0.0	0	0.0	0	0.0	6	1.5
TOTAL COST		1.4		0.1	0.	)	0.0		0.0		0.0		0.0		0.0		0.0		1.5
METHOD OF IMPLEMENTATION:					ADMINI	STRAT	TIVE L	EADT	7	POR	DUCT	ION L	EAD	TIME	24				
CONTRACT DATE:	FY 1997	N/A			FY	1998:	N/A			FY 1	1999:	N/A							
PRODUCTION DELIVER DATE:	FY 1997	N/A			FY	1998:	N/A			FY 1	1999:	N/A							
* Actual cost is \$41 thousand.																			
																			P-3A
					ITEN	1 18	PΛ	AGE	6	3					CLAS	SIFIC	CATIC		JNCLA

CLASSIFICATION: UNCLASSIFIED		
P3A (Continued)	INDIVIDUAL MODIFICATION (Continued) HARPOON EXPERCISE ROUND MOD KITS	
MODIFICATION TITLE. AIR LAUNCH	HARFOON EXPERCISE ROUND MOD KITS	
INSTALLATION SCHEDULE:		
INPUT ===> FY 199( <u>FY 1997</u>	FY 1998 FY 1999 FY 2000 FY 2001 FY 2001	2 FY 2003 TC
& Prior 1 2 3 4	1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4	4 1 2 3 4 TOTAL
FY 1996 & Pr 0 0 0 3 3	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 6
FY 1997 0 0 0 0 0		0 0 0 0 0 0 0
FY 1998 0 0 0 0 0		
FY 1999 0 0 0 0 0 FY 2000 0 0 0 0 0	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	
FY 2001 0 0 0 0 0		
FY 2002 0 0 0 0 0		0 0 0 0 0 0 0
FY 2003 0 0 0 0 0		0 0 0 0 0 0 0
To Complete 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0
		TOTAL INPUT 6
OUTPUT ==> FY 199( FY 1997	FY 1998 FY 1999 FY 2000 FY 2001 FY 2001 FY 2002	
& Prior 1 2 3 4 FY 1996 & Pr 0 0 0 3 3	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	4 1 2 3 4 TOTAL 6
FY 1997 0 0 0 0 0		
FY 1998 0 0 0 0 0		0 0 0 0 0 0 0
FY 1999 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0
FY 2000 0 0 0 0 0 FY 2001 0 0 0 0 0		
FY 2001	$ \mid 0  0  0  \mid \mid 0  0  0  \mid \mid 0  0 $	
FY 2003 0 0 0 0 0		
To Complete 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0
		TOTAL OUTPUT 6
		P-3A
	ITEM 18 PAGE 6a	CLASSIFICATION: UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED		INIDIN/II	SILAL	140	NIE IC	ATIO														
P3A MODIFICATION TITLE: SLAM EXPANDED RE		INDIVID	DUAL	MOL	JIFIC	AHOI	N													
MODELS OF SYSTEM AFFECTED: AGM - 84E	SPUNSE	(EK)																		
DESCRIPTION/JUSTIFICATIONVERTS SLAM TO	SLAM ER	CONF	IGUR	ΔΤΙΟΙ	N IN	CREA	SINC	RANG	E AC	CLIRA	CY	I ETH	AT ITY	ANDEN	ΙНΔΝ	ICES I	NTER	-SER\/I	CE CC	МРАТ
DEVELOPMENT STATUS/MAJOR DEVELOPMENT					IN, IIN	CITLA	Olive	INANO	L, AU	CUITA	Ο1,	LL III/	\LIII	, AND LI	WI IZALA	ICLUI	MILIX	-OLIVI	<u> </u>	JIVII ATI
DEVELOR MENT STATOS/MAJOR DEVELOR MENT	FY 1996				FV	1008	E,	Y 1999	ΕV	2000	ΕV	2001	E,	Y 2002	ΕV	2003		TC	T	OTAL
	QTY	\$				\$				\$				\$		\$	QTY		QTY	\$
FINANCIAL PLAN (IN MILLIONS)	QTT	Ψ	QII	Ψ	QII	Ψ	QII	Ψ	QII	Ψ	QII	Ψ	QII	Ψ	QII	Ψ	QII	Ψ	QII	Ψ
RDT&E		127.8		31.0		28.9		5.2											0	192.9
PROCUREMENT		127.0		31.0		20.9		5.2											U	132.3
INSTALLATION KITS (1) (2) (3)			60	32 Q	22	16.5	54	28.8	58	30.7	38	24 1	38	24.9	38	25.7	317	178.3	625	361.9
INSTALLATION KITS - UNIT COST				02.5 0.548		0.750	04	0.533		0.529		0.634	00	0.655	50	0.676		0.562	020	501.5
INSTALLATION KITS NONRECURRING				J.040		0.750		0.000		0.020		0.004		0.000		0.070		0.002		0.0
EQUIPMENT				0.6		0.5		1.3												2.4
EQUIPMENT NONRECURRING				0.0		0.0		1.0												0.0
ENGINEERING CHANGE ORDERS				0.4		0.2		0.4		0.4		0.3		0.3		0.3		2.2		4.4
DATA				1.2		0.3		0.5		0.1		0.0		0.0		0.0				1.9
TRAINING EQUIPMENT (Exercise Sections)			13	2.2			3	0.5	4	0.7		0.0		0.0		0.0	30	5.7	50	9.3
SUPPORT EQUIPMENT (Containers)				0.6	22		54	0.5	58	0.6	38	0.4	38	0.4	38	0.4	317	3.2	625	6.3
OTHER (Field Activity Support)				4.0		3.7	•	4.1		4.1		4.1		4.0		4.1		14.4		42.5
INTERIM CONTRACTOR SUPPORT						0.2		0.2						***						0.4
NSTALLATION OF HARDWARE (2)																				
FY 1996 EQUIPMENT & PRIOR																			0	0.0
FY 1996 EQUIPMENT (60 Kits)																			0	0.0
FY 1998 EQUIPMENT (22 Kits)																			0	0.0
FY 1998 EQUIPMENT (22 Kits) FY 1999 EQUIPMENT (54 Kits)																			0	0.0
FY 2000 EQUIPMENT (58 Kits)																			0	0.0
FY 2001 EQUIPMENT (38 Kits)																			0	0.0
FY 2002 EQUIPMENT (38 Kits)																			0	0.0
FY 2003 EQUIPMENT (38 Kits)																			0	0.0
TO COMPLETE (317 Kits)																			0	0.0
TO COM LETE (OTT MIC)																			Ŭ	0.0
FOTAL INSTALLATION COST	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
FOTAL PROCUREMENT COST	0	0.0	60	41.9	22	21.7	54	36.3	58	36.5	38	28.9	38	29.6	38	30.5	317	203.8	625	429.1
FOTAL COST		127.8		72.9		50.6		41.5		36.5		28.9		29.6		30.5		203.8		622.1
METHOD OF IMPLEMENTA DEPOT COMMERCIAL					۸۵۸	AINIIQT	ъΛΤ	11/5   5/	\ DTIN	7	)DOI	NI ICTI	ONI	EADTIME		12				
CONTRACT DATE:	FY 1997	Apr-07				FY 199			אוווער	,		1999:	ONL	Apr-99		12				
PRODUCTION DELIVER DATE:	FY 1997					FY 199						1999:		Apr-00						
ROBOTION BELIVER BATE.	1 1 1557	Api-30				1 1 150		Api-55				1000.		Api-00						
NOTE(S):																				
) KIT CONSISTS OF GFE SLAM AUR AND CFE C	OMPONE	NTS																		
) INSTALLATION COSTS ARE INCLUDED IN THE			KITS I	LINE	SINC	CE KIT	COS	ST AND	INST	ALLAT	ION	ARE N	ION-S	SEVERA	BLE					
B) ESTIMATED COSTS FOR INSTALLATION KITS																RPOOI	N AND	OOR SL	AM)	
FMS ASSUMPTIONS INCLUDE 50 UNITS IN FY9								_							,				,	
																				P-3A
																				P3A

CLASSIFICAT P3A (Continue MODIFICATIO	d) N TITLE	: SL	AM	EXF		IDEI	D RE					. MO	DIF	ICA	TION	N (Co	ontir	nuec	<del>l</del> )												
INSTALLATI	ON SCF	IEDU	JLE:																												
NPUT ===> FY 1996 & P	FY 199 & Prior	1	FY 1 2 0	997 3 0	4	1	FY 1	998 3 0	4	1	FY 1 2 0	999 3 0	4	1	FY 2 2	2000 3 0	4	1	FY 2	2001 3 0	4	1	FY 2 2 0	002 3 0	4	1	FY 2 2 0	3 0	4	<u>TC</u>	TOTAL 0
FY 1997         0         0 60 0 0         0 0 0 0 0 0         0 0 0 0 0 0         0 0 0 0 0 0         0 0 0 0 0 0         0 0 0 0 0 0         0 0 0 0 0 0         0 0 0 0 0 0 0         0 0 0 0 0 0 0         0 0 0 0 0 0 0         0 0 0 0 0 0 0         0 0 0 0 0 0 0         0 0 0 0 0 0 0         0 0 0 0 0 0 0 0         0 0 0 0 0 0 0         0 0 0 0 0 0 0         0 0 0 0 0 0 0         0 0 0 0 0 0 0         0 0 0 0 0 0 0         0 0 0 0 0 0 0         0 0 0 0 0 0 0         0 0 0 0 0 0 0 0         0 0 0 0 0 0 0 0         0 0 0 0 0 0 0 0         0 0 0 0 0 0 0 0 0         0 0 0 0 0 0 0 0 0 0         0 0 0 0 0 0 0 0 0 0         0 0 0 0 0 0 0 0 0 0         0 0 0 0 0 0 0 0 0 0 0         0 0 0 0 0 0 0 0 0 0 0         0 0 0 0 0 0 0 0 0 0 0 0 0         0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0         0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0         0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0																															
FY 1999         0 </td																															
FY 2002 FY 2003	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	38	0	0	0	0 38	0	0	0	38 38
OUTPUT ==>	FY 199	4	FY 1	997	_		FY 1	998			FY 1	999			FY 2	2000			FY 2	2001			FY 2	002			FY 2	2003		TC	
	& Prior	1	2	3	4	1	2	3	4	1		3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		TOTAL
FY 1996 & P	r O	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FY 1997	0	0	0	0	0	0	0	15	15	15	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60
FY 1998	0	0	0	0	0	0	0	0	0	0	0	6	6	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
FY 1999	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	14	13	13	0	0	0	0	0	0	0	0	0	0	0	54
FY 2000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	14	15	15	0	0	0	0	0	0	0	58
FY 2001	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	10	9	9	0	0	0	38
FY 2002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	10	18	38
FY 2003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38	38
To Complete		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	TOT	O AL C	0 DUTF	317 PUT	317 625
/ Input Schedule reflects delivery of Fleet baseline SLAM Missiles to the contractor's site for modification.														con	tracto	or S S	ite ro	or mo	Dailic	ation											
ITEM 18 PAGE 7a CLASSIFICATION: UNCLASSIFIED																															

# CLASSIFICATION UNCLASSIFIED

	BUDGET	TITEM JU	STIFICAT	ION SHE	ΕT		DATE:	
			P-40				Februa	ry 1997
APPROPRIATION/	BUDGET AC	TIVITY			P-1 ITEM N	OMENCLATI	JRE	
<b>Weapons Proc</b>	urement, l	Navy						
BA 2 - Other M	issiles				Other Mis	ssile Mods	8	
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (In Millions)	\$0.4	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0

FY 1996 funding provided for incorporation of a capstan sealant ECP into 4,600 Navy TOW 2A missiles. The ECP was required to correct a cold weather reliability problem, and allow for final acceptance of TOW 2A missiles into the Navy inventory.

P-1 SHOPPING LIST

CLASSIFICATION:

DD Form 2454, JUN 86

ITEM NO. 19

PAGE NO. 1

BUDGET ITEM JUS	TIFICATIO	N SHEET					Date: Fe	bruary 1997
APPROPRIATION/BUDGET ACTIVITY WEAPONS PROCUREMENT, NAVY		P-1 ITEM NOMEN		ES MODIF	ICATION (1	I2FK)		
BA-2 OTHER MISSILES					,	•	BLI: 23560	00
	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
QUANTITY								
COST (In Millions)	\$33.2	\$18.2	\$35.6	\$46.4	\$45.2	\$54.0	\$51.1	\$53.0

<u>PROGRAM OVERVIEW</u>: 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:

		FY96	FY97	FY98	FY99	FY00	FY01	FY02	FY03	To Complete
SM-1		7,297	7,427	0	0	0	0	0	0	0
Missile Homing Improvement Program	(WP,N) (RDT&E)*	25,900 9,500	10,726	35,601	46,433	45,209	53,969	51,107	53,026	117,483

\*NON ADD

Form 2454, JUN 86 P-1 Shopping List PAGE NO. 1 EXHIBIT P-40

ITEM NO. 20

### INDIVIDUAL MODIFICATION

P-3A

February 1997

**Modification Title:** 

**Low Altitude Improvement** 

**Models of Systems Affected:** 

STANDARD Missile RIM-66E (SM-1 BLOCK VI)

#### <u>Description/Justification</u>:

The STANDARD Missile Low Altitude Improvement consists of 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.

#### **Financial Plan:**

	FY96 &								
	Prior	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	TOTAL
RDT&E: N/A									
WPN: (\$K)									
KIT Quantity	280	30	0	0	0	0	0	0	310
Installation Kits	44,235	6,897	0	0	0	0	0	0	51,132
Installed Equipment Nonrecurring	0	0	0	0	0	0	0	0	0
Engineering Change Orders	90	30	0	0	0	0	0	0	120
Data	540	0	0	0	0	0	0	0	540
Training Equipment	1,435	0	0	0	0	0	0	0	1,435
Support Equipment	400	0	0	0	0	0	0	0	400
Total Procurement Cost	46,700	6,927	0	0	0	0	0	0	53,627
Installation Cost	582	0	0	0	0	0	0	0	582
Other	8,004	500	0	0	0	0	0	0	8,504
Total Cost	54,704	7,427	0	0	0	0	0	0	62,131

Method of Implementation: TDDs and guidance sections will be refurbished at the depots and will be modified into Block VIB configuration on the production line at a rate which will provide a constant workload. The modified sections will then be returned to the AUR Facility for integration into the round.

P-3A

Low Altitude Improvement (C	Continued)						Date: Febru	ıary 1997
(U) Contract Date:	Prior Year: 07/96	Current Year: 01/9	07	Budget Year: 0	0	Budget Year -	-1: 00	
(U) Production Delivery Date:	Prior Year: 11/97	Current Year: 11/9	8	Budget Year: 0	0	Budget Year -	-1: 00	
(U) Installation Schedule:								
	FY 96 FY 97	<u>FY 98</u>	FY 99	FY 00	<u>FY 01</u>	FY 02	<u>FY 03</u>	TOTAL
	<u>1 2 3 4 1 2 3</u>	4 1 2 3 4 1	<u>234</u>	<u>1 2 3 4</u>	<u>1</u> <u>2</u> <u>3</u> <u>4</u>	<u>1 2 3 4</u>	<u>1 2 3 4</u>	
INPUT								
FY 95	11 20 20	14						65
FY 96		10 14 14 14						52
FY 97		7	8 8 7					30
FY 98								
FY 99								
(U) Installation Schedule:								
	FY 96 FY 97	FY 98	FY 99	FY 00	<u>FY 01</u>	FY 02	FY 03	
	1 2 3 4 1 2 3	4 1 2 3 4 1	<u>2</u> <u>3</u> <u>4</u>	<u>1</u> <u>2</u> <u>3</u> <u>4</u>	<u>1</u> <u>2</u> <u>3</u> <u>4</u>	<u>1</u> <u>2</u> <u>3</u> <u>4</u>	<u>1</u> <u>2</u> <u>3</u> <u>4</u>	
OUTPUT								
FY 95	9 18 20	18						65
FY 96		8 14 14 16						52
FY 97		8	8 8 6					30
FY 98								

Date: February 1997

Modification Title: Missiles Homing Improvement Program (MHIP)

Models of Systems Affected: STANDARD Missile (MR) 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.

#### Development Status/Major Development Milestones:

The SM-2 Block IIIB successfully completed DT TECHEVAL at White Sands Missile Range (WSMR) and was approved for Low Rate Initial Production (LRIP) via modification by paper NPDM; the ADM was signed on 20 Nov 95. The SM-2 Block IIIB capability to detect the designated threat B at-sea OPEVAL was completed in April 1996. An SM-2 Block IIIB Milestone III full rate production decision was granted in July 1996. The ADM was approved 19 Sept 1996 following congressional notification, beyond LRIP Report dated 23 Aug 1996.

Financial Plan RDT&E: NA WPN: (\$K)	FY96 & Prior F 304,071	-Y97 I	FY98	FY99	FY00	FY01	FY02	FY03	To Comp	Total
IIIB KIT Quantity	135	40	80	102	102	126	122	126	267	1,100
IIIB Installation Kit	48,598	10,726	20,891	28,130	26,595	30,728	28,279	29,051	65,481	288,479
SLEP Kit Quantity	0	0	80	102	102	126	122	126	267	925
SLEP Kit Installation Kits	0	0	14,710	18,303	18,614	23,241	22,828	23,975	52,002	173,673
Installation Kit Non-recurring	0	0	0	0	0	0	0	0	0	0
Installed Equipment	0	0	0	0	0	0	0	0	0	0
Installed Kit Non-recurring	0	0	0	0	0	0	0	0	0	0
<b>Engineering Change Orders</b>	0	0	0	0	0	0	0	0	0	0
Data	0	0	0	0	0	0	0	0	0	0
Training Equipment										
Support Equipment	*7704									
Total Procurement Cost	48,598	10,726	35,601	46,433	45,209	53,969	51,107	53,026	117,483	462,152
Installation Cost	0	0	0	0	0	0	0	0	0	0
Total Cost	48,598	10,726	35,601	46,433	45,209	53,969	51,107	53,026	117,483	462,152

Missile Homing Improvement Program (MHIP) (Continued)

Date: February 1997

Method of Implementation : Guidance sections will be reworked at the depots and modified into SM-2 Block IIIB 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 Mov SLEP Mods (starting in FY98) will be incorporated concurrently.

Contract Date: SEEKER Target Detecting Device (TDD) SLEP/GC&A MK125 Warhead MK54 Safe and Arm SLEP MK104  Production Delivery Date: SEEKER Target Detecting Device (TDD) SLEP/GC&A MK125 Warhead MK54 Safe and Arm	Prior Year 6/96 6/96 6/96 7/96 6/96 N/A Prior Year 11/98 8/98 11/98 8/98 8/98	Current Year 1/97 6/97 1/97 4/97 3/97 N/A  Current Year 7/99 4/99 4/99 4/99	Budget Year 1/98 6/98 1/98 4/98 3/98 3/98 3/98  Budget Year 1/00 10/99 1/00 10/99 10/99	Budget Year +1 1/99 6/99 1/99 4/99 3/99 3/99  Budget Year +1 12/00 9/00 12/00 9/00 9/00	Budget Year +2 1/00 6/00 1/00 4/00 3/00 3/00 3/00 Budget Year +2 12/01 9/01 12/01 9/01	Budget Year +3 1/01 6/01 1/01 4/01 3/01 3/01 3/01  Budget Year +3 12/02 9/02 12/02 9/02 9/02 9/02 9/02	Budget Year +4  1/02  6/02  1/02  4/02  3/02  3/02  3/02  Budget Year +4  12/03  9/03  12/03  9/03  9/03  9/03	Budget Year +5 1/03 6/03 1/03 4/03 3/03 3/03 Budget Year +5 12/04 9/04 12/04 9/04
SLEP MK104  Installation Schedule:  INPUT  FY 95 FY 96 FY 97 FY 98 FY 98 FY 99 FY 00 FY 01 FY 02 FY 03	FY 98 1 2 3 4 8 25 26	9 17 25 25 19 #	10/99  Y 00 FY 01 1 2 3  I 21 23 15 8 27 26	10/00  FY 02  1 2 3 4  26 15 9 # 24 24	1 2 3 4 20 15 37 37 37	10/02  EYOND TOTAL  68 67 40 80 102 102 126 122 126 1212 126	10/03	10/04
OUTPUT FY 95 FY 96 FY 97 FY 98 FY 99 FY 00 FY 01 FY 02 FY 03	25 26	17 8 26 25 8 13 # 7 14	4 22 23 21 26 27	26 23 # 27 26	1	68 67 40 80 102 102 35 126 122 126 126		

20-5 **UNCLASSIFIED** 

#### **CLASSIFICATION:**

### **UNCLASSIFIED**

BUDGET ITEM JUSTIFICATION SHEET P-40							DATE: February 1997	
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy BA 2 - Other Missiles								
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
(In Millions)	\$41.8	\$33.5	\$34.9	\$10.7	\$10.9	\$11.1	\$10.9	\$11.7

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 Aquisition 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.

- 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.
- 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.
- 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.
- 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 (Defense Appropriations Committee).
- FACILITIES RESTORATION: Provides funds for replacement of Weapons Industrial FACILITIES that have exceeded their useful life and deteriorated beyond safe operations.

P-1 SHOPPING LIST

CLASSIFICATION:

DD Form 2454, JUN 86 ITEM NO. 21 PAGE NO. 1

# CLASSIFICUNCLASSIFIED

	WEAPO	NS SY	STEN	I COST ANA	LYSIS				DATE	:				
			P											
	PRIATION/BUDGET ACTIVITY			P-1 ITEM NOM	ENCL	ATURE/SUBHE/	ΑD							
	ons Procurement, Navy													
BA 2	Other Missiles			Weapons Industrial Facilities  TOTAL COST IN THOUSANDS OF DOLLARS										
					S									
COST	ELEMENT OF COST	IDENT CODE		FY 1996		FY 1997		FY 1998		FY 1999				
CODE		CODE	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST				
FU002	Capital Type Rehabilitation													
	Environmental			3,678		1,057		<u>5,521</u>		6,280				
		(SEA	()	1,000		0		3,901		4,003				
		(AIR)	)	2,678		1,057		1,620		2,277				
	Safety			<u>1,751</u>		<u>557</u>		<u>1,418</u>		1,359				
	•	(SEA	١)	450		0		1,200		1,250				
		(AIR)	)	1,301		557		218		109				
	Major Repairs			<u>3,368</u>		<u>1,931</u>		<u>2,143</u>		<u>2,507</u>				
		(SEA		812		856		391		737				
		(AIR)	)	2,556		1,075		1,752		1,770				
	Energy Conservation													
		(SEA	<b>(</b> )	2,315		0		850		590				
	Closure Costs													
	NWIRP, McGregor	(AIR)		723		0		0		0				
FU005	Facilities Restoration (ABL)													
		(SEA	<b>(</b> )	30,000		30,000		25,000		0				
	TOTAL Weapons Industrial Facilities													
	•	(SEA	١)	34,577		30,856		31,342		6,580				
		(AIR)	)	7,258		2,689		3,590		4,156				
. <u></u>	TOTAL			41,835		33,545		34,932		10,736				

ITEM NO. 21 PAGE NO. 2

**UNCLASSIFIED** 

# **CLASSIFICUNCLASSIFIED**

	WEAPO	NS SY		COST ANA	LYSIS	1			DATE				
APPRO	PRIATION/BUDGET ACTIVITY		P.	-5 P-1 ITEM NOM			16-Sep-96						
	ons Procurement, Navy												
	- Other Missiles			Weapons Industrial Facilities									
					TOTAL COST IN THOUSANDS OF DOLLARS								
COST CODE	ELEMENT OF COST	IDENT CODE		FY 2000	FY 2001		FY 2002			FY 2003			
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST			
FU002	Capital Type Rehabilitation												
	Environmental	(SEA) (AIR)		6,044 2,841 3,203		7,201 2,853 4,348		6,321 2,888 3,433		4,582 2,843 1,739			
	Safety	(SEA) (AIR)		1,786 1,350 436		1,841 1,350 491		1,800 1,350 450		1,622 1,350 272			
	Major Repairs	(SEA) (AIR)		2,271 311 1,960		1,267 384 883		2,416 472 1,944		4,609 649 3,960			
	Energy Conservation	(SEA)	·	900		900		900		900			
FU005	TOTAL Weapons Industrial Facilities	(SEA) (AIR)	·	5,402 5,599		5,487 5,722		5,610 5,827		5,742 5,971			
	TOTAL			11,001		11,209		11,437		11,713			

ITEM NO. 21 PAGE NO. 3

# UNCLASSIFIED CLASSIFICATION

BUDGET ITEM JUSTIFICATION SHEET							February 1997			
APPROPRIATION/BUDGET WEAPONS PROCUREMENT	-	er Missiles		P-1 ITEM NOMENCLATURE FLEET SATELLITE COMMUNICATIONS (A) Q2EU						
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003		
QUANTITY										
COST (in millions)	\$87.9	\$110.6								

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 ecommunications requirements including Presidential airborne command post, Strategic Air Command and emergency mission support. Existing Fleet Satellite (FLTSAT) and Lease Satellite (LEASAT) assets 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.

FY 1996 and FY 1997 funded launch service payments for satellites #7 through #9 and provide technical support for satellite production . FY 96 and FY 97 also funded the Global Broadcast System (GBS) ECP to F8, F9 and F10.

The sixth satellite was launched in October 1995 and the seventh satellite was successfully launched in July 1996.

P-1 SHOPPING LIST

ITEM NO. PAGE NO.

22

1

Exhibit P-40

UNCLASSIFIED CLASSIFICATION

#### UNCLASSIFIED

#### **CLASSIFICATION**

							DATE:						
	WEAPON SYSTEM	COST	ANA	LYSIS	February 1997								
B. APPROP	RIATION/BUDGET ACTIVITY				C. P-1 ITEM NOMENCLATURE								
WEAPONS P	ROCUREMENT, NAVY/BA-2 - Other Mis	ssiles			FLEET SATELLITE COMMUNICATIONS (A) Q2EU								
					TOTAL COST IN THOUSANDS OF DOLLARS								
COST		IDENT		FY 96		FY 97		FY 98	FY 99				
CODE	ELEMENT OF COST	CODE (2)	QTY (3)	TOTAL COST (4)	QTY (5)	TOTAL COST (6)	QTY (7)	TOTAL COST (8)	QTY (9)	TOTAL COST (10)			
02000	UHF FOLLOW-ON			•				• •		, ,			
02000	SPACECRAFT AND LAUNCH	N/A		26,467		22,272							
	Global Broadcast Services (GBS)			57,721		86,737							
	ENGINEERING SUPPORT	N/A		<u>3,663</u>		<u>1,603</u>							
	SUBTOTAL			87,851		110,612							
	TOTAL PROGRAM			87,851		110,612							

DD FORM 2446, JUN 86

P-1 SHOPPING LIST ITEM NO. 22 PAGE NO.: 2

Exhibit P-5 UNCLASSIFIED CLASSIFICATION

MODIFICATION TITLE: FLEET SATELLITE COMMUNICATIONS (Shore Installations)

MODELS OF SYSTEMS AFFECTED: DESCRIPTION/JUSTUIFICATION:

The Fleet Satellite Communications (FLTSATCOM) System satisfies DOD worldwide Ulra High Frequency (UHF) mobile user communications 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 s selected aircraft, ships and submarines. The system satisfies Air Force equatorial satellite communications requirements including Presidential airborne command post, Strate 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)		IVIILE						uie s	men procur	em												
	QTY	\$	QTY	\$ QTY	, AO		Fī 99 TY	\$ 0	FT QTY \$	sl o	QTY	\$	ΓT U∠ QTY \$	ا ا	FT US QTY	\$	QTY	U	\$	QTY	สเ \$	
RDT&E PROCUREMENT Kit Quantity Installation Kits Installation Kit Nonrecurring		,	-				•		•			,									*	
Equipment Equipment Nonrecurring Engineering Change Orders Data Training Equipment Support Equipment Other Interim Contractor Support Installation of Hardware	5 1	11.5																		5	11.5	
(PY) Eqpt FY97 Eqpt FY98 Eqpt FY99 Eqpt FY00 Eqpt FY01 Eqpt FY02 Eqpt FY03 Eqpt FY03 Eqpt		3.9																		5	3.9	
Total Installation Cost Total Procurement Cost		3.9 15.4																		5	3.9 15.4	
METHOD OF IMPLEMENTATION:		15.4			ADMI	NIST	RATIVE	LEAD	DTIME:				PROC	CUR	EMENT	LEA	DTIME	:			15.4	1
CONTRACT DATES:	FY 1997:		N/A				FY 19		N/A						1999		I/A					
DELIVERY DATE:	FY 1997:		N/A				FY 19	998	N/A					FY	1999	N	I/A					
	PY			FY 97	_				FY 98	_				/ 99						FY (		_
INSTALLATION SCHEDULE:			1	2 3	3	<u>4</u>		1	2 3	3	4	-	1 2	2	3	4			1	2	3	4
INPUT	N/A		N/A				N/A						N/A					N/A				
OUTPUT	N/A		N/A				N/A						N/A					N/A				
INSTALLATION SCHEDULE:			1	FY 01 2	<del>-</del> }	<u>4</u>		1	FY 02 2 3	3	4	-	1 2	7 03 2	3	4			TC			Total
INPUT	N/A		N/A				N/A						N/A									N/A
OUTPUT	N/A		N/A				N/A						N/A									P-3A Ex

### UNCLASSIFIED

CLAS	SIFICATION									
				<del></del>				A. DATE		
									February 1997	
R APE	PROPRIATION/BUDGET ACTIVIT	ν			C P-1 ITEM N	IOMENCLATURE	=			
l	BA2 COMMUNICATIONS & ELECT		IT		0.1112		- TE COMMUNICA	TIONS (A)		Q2EU
OF,IN -	BAZ COMMUNICATIONS & ELECT	NONIC EQUIPMEN	QUANTITY	QUANTITY	QUANTITY DUE	PLANNED	PLANNED	PLANNED		QZEO
ITEM		TOTAL I/O REQUIREMENT	ON HAND & NOT IN USE	IN USE	IN WITH FY 96 AND PRIOR FUNDS	BUDGET YEAR (FY97) PROCUREMENT	BUDGET YEAR (FY98) PROCUREMENT	BUDGET YEAR (FY99) PROCUREMENT	BALANCE	PHASING RATIONALE
2000	UHF FOLLOW-ON S/C	9		6	3				None	COMPLETE
3000	LEASAT SPACECRAFT	3		3					None	COMPLETE
				MEMO EN	TERED					
ITEM #	1 2000 UHF FOLLOW-	ON		MEMO EN	TERED					
	THE UHF-FOLLOW-ON (UHF/FO) MARCH 1993, BUT WAS DECLAI SPACECRAFT WAS SUCCESFU LAUNCHED IN JANUARY 1995. THE FY94 APPROPRIATION AC SUCCESSFULLY LAUNCHED IN	, RED A TOTAL LOSS DI LLY LAUNCHED IN SE THE FIFTH SPACECR T, CONGRESS APPRO	UE TO THE INABILIT' PTEMBER 1993. TH AFT WAS SUCCESS DVED FUNDING A R	Y TO REACH OPER E THIRD SPACECR SFULLY LAUNCHED EPLACEMENT FOR	ATIONAL ORBIT BEO AFT WAS SUCCESS IN MAY 1995. F6 I F1 WITH CONTRAC	CAUSE OF LESS THA FULLY LAUNCHED II LAUNCHED IN OCTO T REMEDIES FUNDS	NN EXPECTED PERF N JUNE 1994. THE DBER 1995. IN JUI	FORMANCE OF THE I FOURTH SPACECRA LY 1996, F7 WAS SUO	LAUNCH VEHICLE. THI FT WAS SUCCESSFUL CCESSFULLY LAUNCH	E SECOND LY ED. IN VAS
									TOTAL I/O	9
ITEM #	2 3000 LEASAT SPAC	ECRAFT	ITEM #3 hull/location	cost code qty	item hull/location	qty	ITEM #4 hull/location	cost code qty	item hull/location	qty
	TOTAL I/O	3 3			TOTAL I/O				TOTAL I/O	
DD FOR	M 2447-1, JUN 86				P-1 SHOPPING L	IST			LINCI ACCIDID	Exhibit P-23B

ITEM NO. 22 PAGE NO. 4

UNCLASSIFIED **CLASSIFICATION** 

### CLASSIFICATION UNCLASSIFIED

	BUDGE	Γ ITEM JU	ET		DATE:						
			P-40		January 199						
APPROPRIATION	/BUDGET AC	TIVITY	P-1 ITEM NOMENCLATURE								
Weapons Procurement, Navy											
BA 2 - Other M	/lissiles	-	Ordnance Support Equipmen								
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003			
QUANTITY											
COST (In Millions)	\$9.7	\$14.2	\$5.3	\$8.7	\$3.0	\$3.4	\$4.5	\$5.8			

No justification materials are submitted in this backup book due to security considerations.

CLASSIFICATION: P-1 SHOPPING LIST

#### UNCLASSIFIED

FY 1998/1999 PROCUREMENT PROGRAM

# EXHIBIT P-1 DEPARTMENT OF THE NAVY

APROPRIATION: 1507N Weapons Procurement, Navy

DATE: 02/04/97

LINE NO ITEM NOMENCLATURE	IDENT	DOLLARS FY1998	FY 19	996	FY 1	997	FY 1		IILLIONS OF	
	CODE	UNIT COST	QUANTITY	COST	QUANTITY	COST	QUANTITY	COST	QUANTITY	COST
BUDGET ACTIVITY 03: Torpedoes and Related Ed	uipment									
Torpedoes And Related Equipment	•									
24 3141 ASW Targets	Α			0.6	3	4.9	)	0.	7	5.8 U
25 3145 Vertical Launched ASROC (VLA)	В		13	9.8	3	12.7	7	-		- U
Mod Of Torpedoes And Related Equip										
26 3215 MK-46 Torpedo Mods	Α			3.5	5	1.7	7	0.	3	21.3 U
27 3225 MK-48 Torpedo ADCAP Mods				59.6	6	62.1		55.	4	57.1 U
Support Equipment										
28 3301 Torpedo Support Equipment	Α			30.5	5	22.1	l	25.	5	25.6 U
29 3302 ASW Range Support	Α			17.6	3	14.5	5	11.	8	14.6 U
Destination Transportation										
30 2410 First Destination Transportat	Α			3.9	)	2.6	6	2.	0	2.0 U
TOTAL Torpedoes and Related Equipment				125.6	6	120.6	3	95.	7	126.3

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

Budget Plan (amounts for PROCUREMENT actions programed) \_\_\_\_\_\_ 1996 actual 1997 est. 1998 est. 1999 est. Identification code 17-1507-0-1-051 Program by activities: Direct program: 00.0101 Ballistic missiles 508,776 316,332 341,412 319,657 00.0201 Other missiles 802,532 844,202 612,993 910,722 125,607 120,594 95,715 126,284 41,615 30,815 59,230 26,648 00.0301 Torpedoes and related equipment 00.0401 Other weapons 00.0501 Other Ordnance 00.0601 Spares and repair parts 62,167 46,490 26,943 52,429 \_\_\_\_\_ \_\_\_\_\_ 00.9101 Total direct program 1,540,697 1,358,433 1,136,293 1,435,740 01.0101 Reimbursable program 74,800 74,800 74,800 10.0001 1,541,338 1,433,233 1,211,093 1,510,540 Total Financing: Offsetting collections from: 11.0001 Federal funds(-) -541 -74,800 -74,800 -74,800 14.0001 Non-Federal sources(-) -100 17.0001 Recovery of prior year obligations Unobligated balance available, start of year: 21.4002 For completion of prior year budget plans 21.4003 Available to finance new budget plans -68,963 21.4009 Reprograming from/to prior year budget plans -19,781 22.1001 Unobligated balance transferred to other accounts 2,500 Unobligated balance available, end of year: 24.4002 For completion of prior year budget plans 25.0001 Unobligated balance expiring 9,093 39.0001 Budget authority 1,463,546 1,358,433 1,136,293 1,435,740 \_\_\_\_\_\_ Budget authority: 40.0001 Appropriation 1,641,505 1,389,913 1,136,293 1,435,740 40.3601 Appropriation rescinded (unob bal) -14,600 40.7501 Reduction pursuant to P.L. 104-208 (-), 8037(h) -3,682 41.0001 Transferred to other accounts (-) -193,177 -27,798 Transferred from other accounts 42.0001 43.0001 Appropriation (adjusted) 1,463,546 1,358,433 1,136,293 1,435,740

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

Obligations

Obligations							
 1996 actual	1997 est.	1998 est.	1999 est.				
542,059	358,595	327,492	322,687				
954,331	889,447	602,197	861,404				
125,800	121,852	116,946	121,301				
48,218	29,431	50,823	31,828				
1,742,395	1,447,178	1,145,480	1,385,411				
663	74,925	74,800	74,800				
303	-74,800	-74,800	-74,800				
14,344							
-3,074							
	-464,823	-375,953	-366,766				
-68,963							
2,500							
•	375,953	366,766	417,095				
9,093							
1,463,546	1,358,433	1,136,293	1,435,740				
1,641,505	1,389,913	1,136,293	1,435,740				
-14,600							
	-3,682						
	-27,798						
1,463,546	1,358,433	1,136,293	1,435,740				
	542,059 954,331 125,800 48,218 13,358 58,629 1,742,395 663 1,743,058  303 14,344 -3,074 -698,539 -68,963 2,500 464,823 9,093 1,463,546  1,641,505 -14,600 -193,177 29,818	1996 actual 1997 est.  542,059 358,595 954,331 889,447 125,800 121,852 48,218 29,431 13,358 58,629 47,853  1,742,395 1,447,178 663 74,925  1,743,058 1,522,103  303 -74,800 14,344 -3,074  -698,539 -464,823 -68,963 2,500 464,823 375,953 9,093  -1,463,546 1,358,433  1,641,505 1,389,913 -14,600 -3,682 -193,177 29,818	1996 actual 1997 est. 1998 est.  542,059 358,595 327,492 954,331 889,447 602,197 125,800 121,852 116,946 48,218 29,431 50,823 13,358 58,629 47,853 48,022  1,742,395 1,447,178 1,145,480  663 74,925 74,800  1,743,058 1,522,103 1,220,280  303 -74,800 -74,800  14,344 -3,074  -698,539 -464,823 -375,953 -68,963  2,500  464,823 375,953 366,766 9,093  1,463,546 1,358,433 1,136,293  1,641,505 1,389,913 1,136,293  -14,600 -3,682 -193,177 -27,798 29,818				

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

\_\_\_\_\_\_ Obligations Identification code 17-1507-0-1-051 1996 actual 1997 est. 1998 est. 1999 est. Relation of obligations to outlays: 71.0001 Obligations incurred 1,757,705 1,447,303 1,145,480 1,385,411 72.1001 Orders on hand, SOY -80,181 -37,434 -37,434 -37,434 72.4001 Obligated balance, start of year 4,183,692 3,286,784 2,668,165 2,198,465 74.1001 Orders on hand, EOY 37,434 37,434 37,434 37,434 -3,286,784 -2,668,165 -2,198,465 -2,141,60974.4001 Obligated balance, end of year 77.0001 Adjustments in expired accounts (net) 12,874 78.0001 Adjustments in unexpired accounts -3,074 \_\_\_\_\_\_

2,621,666 2,065,922 1,615,180 1,442,267

90.0001

Outlays (net)

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

Identification code 17-1507-0-1-051	1996 actual	1997 est.	1998 est.	1999 est.
Direct obligations:				
125.101 Advisory and assistance services	35,154	26,777	22,185	25,915
Purchases goods/services (inter/intra) Fed accounts				
125.303 Purchases from revolving funds	105,464	90,331	76,554	87,745
126.001 Supplies and materials	72,491	95,265	61,702	94,453
131.001 Equipment	1,529,286	1,234,805	985,039	1,177,298
199.001 Total Direct obligations	1,742,395	1,447,178	1,145,480	1,385,411
Reimbursable obligations:				
226.001 Supplies and materials		20,768	21,262	21,900
231.001 Equipment	663	54,157	53,538	52,900
299.001 Total Reimbursable obligations	663	74,925	74,800	74,800
999.901 Total obligations	1,743,058	1,522,103	1,220,280	1,460,211

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

<u>P</u> e	FY 1997 Total Program Requirements er FY 1997 Budget	FY 1997 Program Requirements Per FY 1998 Budge	or
Ballistic Missiles	323,149	316,322	-6,817
Other Missiles	738,239	844,202	+105,963
Torpedoes and Related Equipment	110,682	120,594	+9,912
Other Weapons	31,467	30,815	-652
Ammunition	149,355	0*	-149,355
Spares and Repair Parts	47,471	46,490	-981
Subtotal Direct Program	1,400,363	1,358,433	-41,930
Reimbursable	74,800	74,800	-
Total Fiscal Year	1,475,163	1,433,233	-41,930

<sup>\*</sup>Funding appropriated in the Procurement Ammunition, Navy & Marine Corps appropriation.

#### Explanation of Changes in FY 1997 Program Requirements

- 1. <u>Ballistic Missiles (-\$6.8 million)</u>
  Decrease reflects undistributed Congressional reductions.
- 2. Other Missiles (+\$106.0 million)
  The overall funding increase reflects the net of undistributed Congressional reductions (-\$19.9 million) and reduced funding for Ordnance Support Equipment (-\$4.6M) offset by Congressional increases for additional Standard Missiles (+\$22.5 million), Tomahawk (+\$11.5 million), AMRAAM (+\$21.9 million), JSOW (+\$15.6 million, Penguin (+\$7 million), Drones and Decoys (+\$17.5 million), Tomahawk modifications (+\$14.4 million), and Harpoon/SLAM (+\$20.1 million).
- 3. Torpedoes and Related Equipment (+\$9.9 million)
  Changes include Congressional undistributed reductions (-\$3.1 million) and additional funding provided by Congress for the Vertical Launch ASROC program (+\$13 million).
- 4. Other Weapons (-\$0.7 million)
  Changes reflect adjustments for Congressional undistributed reductions.
- 5. Ammunition (-149.4 million)
  The FY 1997 President's Budget reflected \$149.355 million for Navy ammunition procurement in the Weapons Procurement, Navy (WPN) appropriation. The Congress transferred this amount to the Procurement of Ammunition, Navy & Marine Corps (PANMC) appropriation. FY 1998 and out funding is now reflected in this appropriation.
- 6. Spares & Repair Parts (\$-1.0 million)
  This funding reduction is due to an undistributed Congressional reduction.

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

Fin	FY 1997 ancing Per 1997 Budget	FY 1997 Financing Per FY 1998 Budget	<pre>Increase (+) Decrease (-)</pre>
Program Requirements (Total) Program Requirements (Direct) (Total) Program Requirements (Reimb)	1,400,363)	1,433,233 (1,358,433) (74,800)	-41,930 (-41,930) -
Less: Anticipated Reimbursements	74,800	74,800	-
Add:  Unob bal avail, start of year to finance new budget plans Unob bal avail, end of year to finance subseq yr budget plan Reprog, prior year budget	S		
Appropriation Adjusted	1,400,363	1,358,433	-41,930
Budget Authority: FY 1997 DoD Appropriations Act Appropriation rescinded Reduct Pursuant to P. L. 104-208 Transferred to other accounts		1,389,913 -3,682 -27,798	-10,450 -3,682 -27,798
Appropriation (Adjusted)	1,400,363	1,358,433	-41,930

#### Explanation of Changes in Financing

The FY 1997 Weapons Procurement, Navy appropriation financing (\$1,358.4 million for direct and \$74.8 million for reimbursable) was subsumed within the WPN appropriations' Programming and Financing exhibits. The \$41.9 million change in program requirements is the result of Congressional reductions (-\$10.5 million), and Sect. 8037(h) (-\$2,376 thousand), and Sect. 8120 (-\$27,798 thousand) and Sect. 8138 (-\$1,306 thousand) adjustments.

# Comparison of FY 1996 Program Requirements as Reflected in the FY 1997 Budget with FY 1996 Program Requirements as Shown in FY 1998 Budget (In Thousands of Dollars)

	FY 1996 Total Program Requirements Per FY 1997 Budget	FY 1996 Total Progr Requirements Per FY 1998 Budge	or
Ballistic Missiles	505,431	508,776	+3,345
Other Missiles	814,857	802,532	-12,325
Torpedoes and Related Equipment	124,934	125,607	+673
Other Weapons	42,155	41,615	-540
Ammunition	*	*	-
Spares and Repair Parts	61,323	62,167	+844
Subtotal Direct Program	1,548,700	1,540,697	-8,003
Reimbursable	74,800	641	-73,159
Total Fiscal Year	1,623,500	1,541,338	-82,162

<sup>\*</sup>Funding appropriated in the Procurement Ammunition, Navy and Marine Corps appropriation.

#### Explanation of Changes in FY 1996 Program Requirements

1. <u>Ballistic Missiles (+\$3.3 million)</u>

Increase reflects minor year of execution adjustments.

2. Other Missiles (-\$12.3 million)

Decrease reflects minor programmatic execution adjustments (-\$11.5 million) and Omnibus Reprogramming action (-\$.8 million).

- 3. Torpedoes and Related Equipment (+\$0.7 million)
  Change reflects minor funding updates.
- 4. Other Weapons (-\$0.5 million)
  Change reflects minor year of execution adjustments.
- 5. Ammunition

Funding realigned to the Procurement Ammunition, Navy & Marine Corps appropriation.

6. Spares & Repair Parts (+\$0.8 million)
Change reflects mimor adjustments to reflect year of execution issues.

# Comparison of FY 1996 Financing as Reflected in the FY 1997 Budget with FY 1996 Financing as Shown in FY 1998 Budget (In Thousands of Dollars)

	FY 1996 Financing Per FY 1997 Budget	FY 1996 Financing Per FY 1998 Budget	Increase (+) Decrease (-)
Program Requirements (Total) Program Requirements (Direct) Program Requirements (Reimb)	1,623,500 (1,548,700) (74,800)	1,541,338 (1,540,697) (641)	-82,162 (-8,003) (-73,159)
Less: Anticipated Reimbursements	74,800	641	-73,159
Add: Unob bal avail, start of year to finance new budget plans:	-64,963	-68,963	-4,000
Unob bal transf to other accts Reprogramming from/to prior ye budget plans		2,500 -19,781	-19,781
Appropriation Adjusted	1,486,237	1,463,546	-22,691
Budget Authority: FY 1996 DoD Appropriations Act Appropriation rescinded Transferred from other accts Transferred to other accounts	1,656,193 -14,600 29,818 -185,174	1,641,505 -14,600 29,818 -193,177	-14,688 - - -8,003
Appropriation (Adjusted)	1,486,237	1,463,546	-22,691

#### Explanation of Changes in Financing

The -\$22.7 million change in program financing is the result of the actual FY 1996 Congressional appropriation (-\$14.7 million) and transfers to other accounts (-\$8.0 million).

				IS PROCUREME EM JUSTIFICA	•	(EXHIBIT P-40)	DATE: 01 Febru	uary 1997
BUDGET ACTIVITY BA-3: Torpedo and		ment		P-1 ITEM NON ASW Targets			LI # 314100 C3TG	
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Quantity								
Cost (In Millions)	0.6	4.9	0.7	5.8	6.3	7.5	19.3	19.2

#### ITEM DESCRIPTION/JUSTIFICATION

This line item funds three distinct systems: (a) MK39 Mod 0 EMATT (Cost Codes TG001, TG830, TG840, TG850, TG860 and TG900);

(b) MK 39 Mod 1 (Cost Codes TG002, TG832, TG842, TG852, TG862, and TG902); (c) MK 30 Mod 2 (Cost Codes TG005, TG015, TG835, TG865, and TG905). The MK 39 Mod 0 Expendable Mobile ASW Training Target (EMATT) is a small, self-propelled underwater vehicle launchable from fixed wing

and rotary wing ASW aircraft, and ASW surface ships for the purpose of providing basic, open ocean sonar training and MK46 placement exercises. MK39 Mod 0 operation consists of a three hour dynamic run trajectory that is actively controlled in depth and course with pre-programmable run maneuvers. MK 39 Mod 0 is detectable and trackable by: passive towed arrays SQR-18 and SQR-19, and passive sonobouys SSQ-41 and SSQ-53; active sonars, SQS-23, 26, 35, 53, 56, SQQ-23 and SQS-13 and active sonobouys SSQ-50 and SSQ-62; and the MK46 torpedo operating in the active mode. The MK 39 Mod 0 EMATT is also capable of generating a magnetic field (anomaly) detectable by all current Navy Magnetic Anomaly Detectors (MAD). 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. The MK 30 Mod 2 is the next generation fleet ASW training target for training the Navy surface ship, submarines and aircraft that will be capable of simulating the Russian and Rest of the World (ROW) submarine threats anticipated in the twenty-first century littoral warfare environment. Replacing the aging MK 30 Mod 1 target, MK30 Mod 2 will be a highly reliable and maintainable unmanned undersea vehicle simulating the dynamics, acoustics and magnetic signatures of submarines and act as a target for ASW sensors and torpedoes to detect, classify, track and pursue in a REALISTIC training environment. WPN funding will commence FY 01.

DD Form 2454, Jul 88 P-1 SHOPPING LIST CLASSIFICATION: Unclassified

APPROPRIATION: Weapons Procurement, Navy  WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)  01 Februa													
BUDGET	ACTIVITY: rpedo and Related Equipment	***	AI OIL	P-1 ITEM NOMI ASW Targets -	ENCLA	TURE:	<u> </u>		011	SUBHEAD: C3TG			
COST	ELEMENT OF COST	I/C	QTY	FY 1996 TOTAL COST	QTY	FY 1997 TOTAL COST	QTY	FY 1998 TOTAL COST	QTY	FY 1999 TOTAL COST			
TG002	MK39 Mod 1 - EMATT	170	<u> </u>	\$0	1,040		0	\$0	1,120				
TG800	Production Engineering (MK39 Mod 0)			\$639		\$0		\$0		\$0			
TG832	Production Engineering (In-house)			\$0		\$541		\$238		\$760			
TG842	Quality Assurance			\$0		\$46		\$103		\$100			
TG852	Product Improvement			\$0		\$91		\$77		\$80			
TG862	Acceptance T & E			\$0		\$109		\$135		\$139			
TG902	Production Engineering (Contractor)			\$0		\$0		\$132		\$165			
				\$639		\$4,947		\$685		\$5,836			
	<u>I</u>			L SHOPPING LIST INE ITEM NO.		PAGE NO.		CLASSIF	FICATION	ON: Unclassified			
				24		2							

APPRO	PRIATION:									DATE:	
Weapo	ns Procurement, Navy	PRO	CUREMENT HIS	TORY & PLANN	ING (EXI	HIBIT P-5A)	)			01 Februa	ary 1997
BUDGE	T ACTIVITY:			P-1 ITEM NOME	NCLATUR	RE:				SUBHEAD:	
BA-3:	Torpedo and Related Equipment			ASW Targets						C3T	·G
	FISCAL YEAR		CONTRACT			DATE OF			SPECS	ARE SPEC	IF YES,
COST		CONTRACTOR		CONTRACTED	AWARD			UNIT COST		REVISIONS	WHEN
CODE		AND LOCATION	TYPE	BY	DATE	DELIVERY	·		WHEN	REQUIRED?	AVAILABLE
	FY 1995		T	T	ı	1	1	T	1	,	
TG001	MK39 Mod 0 - EMATT/ECPs	SECHAN Lititz, PA	C/FFP - Option	NAVSEA	Jul-95	Mar-98	1,525	\$3,900	Yes	No	
	FY 1997										
TG002	MK39 Mod 1 - EMATT/ECPs	Unknown	C/FFP	NAVSEA	Jun-97	Sep-98	1,040	\$4,160	Yes	No	
	FY 1999						<u> </u>				
TG002	MK39 Mod 1 - EMATT/ECPs	Unknown	C/FFP-Option	NAVSEA	Oct-98	Aug-99	1,120	\$4,592	Yes	No	
REMAF	RKS:										

P-1 SHOPPING LIST NO. PAGE NO.

CLASSIFICATION: Unclassified APPROPRIATION: DATE: **FY96 PRODUCTION SCHEDULE (EXHIBIT P-21)** Weapons Procurement, Navy 01 February 1997 BUDGET ACTIVITY: P-1 ITEM NOMENCLATURE: SUBHEAD: C3TG BA-3: Torpedo and Related Equipment ASW Targets - MK 39 Mod 1 ACCEPT BALANCE FISCAL YEAR 96 FISCAL YEAR 98 FISCAL YEAR 97 L PROCUREMENT YEAR | E | PROC. | PRIOR DUE **CALENDER YEAR 96** CALENDER YEAR 97 **CALENDER YEAR 98** 95 Α S М COST R QTY TO AS OF 0 Ν D M М Α S 0 Ν D F М М Α O N D М Α CODE ITEM/MANUFACTURER V С 0 Е Е Α Р Α U U U Е С 0 Е Α Е Α Р Α U U U Е С 0 Е Α Е Α Ρ Α U U U Ε Ε 1 OCT 1 OCT Т V G С Ν В R R Ν Ν В R G Р R FY 1997 TG002 MK 39 Mod 1 Unknown 1.040 1,040 88 952 PRODUCTION RATES PROCUREMENT LEAD TIME REMARKS: MANUFACTUER'S MINIMUM MAXI-REACHED ADMIN MANU-Note 1 This is a competitive contract award. . SUST. LEAD TIME FACTUR-1-8-5 DATE TOTAL The production rates are estimates. NAME & LOCATION MUM AFTER PRIOR AFTER ING TBD (See Note 1) 40 250 500 1 OCT 1 OCT TIME 1 OCT INITIAL 10 4 10 24

REORDER (Previous Source)

P-1 SHOPPING LIST ITEM NO.

24

Form 2445, Jul 87

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PAGE

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10

10

20

A = Contract Award

APPRO	OPRIATION:																																	DAT	ſΕ:					
Weapo	ns Procurement, Navy								F'	Y96 I	PRO	DU	CTI	ON	sc	HE	DU	LE	(E	XH	BIT	P-2	1)											_			1-1	eb-9	97	
BUDG	ET ACTIVITY:																P-1	ITE	M N	ОМЕ	NCL	ATUR	E:												$\Box$	SUE	ЗНЕА	D:		
BA-3:	Torpedo and Related Eq	uip	ment														ASV	V Tai	rget	s - M	K 39	Mod	1															зтс	}	
		s		ACCEPT	BALANCE				F	ISCAL	YEAF	R 99								F	ISCA	L YEA	R 00									FISC	AL	YEAR	₹ 01					L
	PROCUREMENT YEAR	Е	PROC.	PRIOR	DUE		98				C	CALE	NDEF	R YEA	AR 99	9						C	ALE	NDEF	R YE	AR 0	00						CAL	END	ER Y	YEAR	₹ 01			Α
COST		R	QTY	то	AS OF	0	Ν	D	J	F	МА	М	J	J	Α	S	0	Ν	D	J	F	МА	М	J	J	Α	S	0	Ν	D	7	F	М	Α	М	J	J	А	S	Т
CODE	ITEM/MANUFACTURER	٧		1 OCT	1 OCT	С	0	Е	Α	Ε.	A P	Α	U	U	U	Е	С	0	Е	Α	E .	A P	Α	U	U	U	Е	С	0	E	Α	Е	Α	Р	Α	U	U	U	Е	Е
						Т	٧	С	N	В	R R	Y	N	L	G	Р	Т	٧	С	N	В	R R	Υ	N	L	G	Р	Т	٧	С	N	В	R	R	Υ	Ν	L	G	Р	R
	FY 1997																																							
TG002	MK 39 Mod 1		1,040	88	952	88	89	88	88	89 8	88 88	89	88	88	89																									0
	FY 1999																																							
TG002	MK 39 Mod 1		1,120	0	1,120	Α										94	93	93	94	93	93 9	94 93	93	94	93	93														0
					PRODUCT	ION F	RATE	S													PR	OCUR	ЕМЕ	NT L	EAD	TIMI	E			REM	1AR	KS:								
	MANUFACTUER'S			MIN	IMUM			MAX	XI-	REA	CHED										ADMI	N		N	IANL	J-				Note	1 T	his is	sac	ompe	∍titiv€	e con	tract a	warc	d	
	NAME & LOCATION			SI	JST.	1-8	3-5	MU	JM	DA	ATE							L		LE	AD T	IME		FA	CTU	IR-	Т	OTAL	L	The	prod	luctio	n rat	es ar	e es	timate	es.			
																			Р	RIOR		AFTI	ER		ING		Α	FTEF	₹											
TBD (S	ee Note 1)				40	25	50	50	00										1	OCT		1 00	т		TIME	<u> </u>	1	ОСТ	Г											
												INI	TIAL							0		10			14			24												
												RE	ORD	ER (F	revio	ous S	Sourc	e)		1		0			10			11			A =	Cont	ract	Awar	d					
Form 2	ME III 07								D 4	CHO	DINC	110	T 1TF	M NIC	、 I		DΛ.	^ F		l														N A C	OIE	10 A =	TION!	Llna	Joor	oifica

Form 2445, Jul 87

P-1 SHOPPING LIST ITEM NO. 24

<b>EXHIBIT P-20, REQUIRE</b>	MENTS STUDY	•	APPROPRIATI	ON:				DATE:		
			Weapons Procu	urement, Nav	у	BA-3: Torp	edo and Rela	ted Equipmer	01 Februa	ary 1997
P-1 ITEM NOMENCLATUR ASW Targets - EMATT	RE:	SUBHEAD: C3TG		Admin Leadt	ime (after Oc	ct 1): 4		Prod Leadtim	ie: 10	
			FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Buy Summary			0	1040	0	1120	1200	1180	1180	1190
Unit Cost			0		0		4.2	4.3	4.4	4.5
Total Cost			0	4160	0	4592	5040	5074	5192	5355
Asset Dynamics										
Beginning Asset Position			1780		4622	7123	4496	1949	-526	-3019
Deliveries from all prior yea			1050	3600	3300	0	0	0	0	0
Deliveries from FY 97 fundi	•		0	0	86	954	0	0	0	0
Deliveries from FY 98 fundi			0		0		0	0	0	0
Deliveries from FY 99 fundi	•		0	0	0	94	1026	0	0	0
Deliveries from subsequent	years' funding		0	0	0		100	1198	1180	1090
Other Gains			0		0		0	0	0	0
Combat Losses/Usage			0	J	0		0	0	0	0
Training Losses/Usage			793		751	3565		3563	3563	3563
Test losses/Usage			100		84	90	90	90	90	90
Other Losses/Usage			30	20	50	20	20	20	20	20
Disposals/Retirements/Attri									0	
End of Year Asset Position			1907	4622	7123			-526	-3019	-5602
Inventory Objective or Curre		llowance	1519		885	3675		3673	3673	3673
,	Actual Training		Other than Trai	ning	Disposals		Vehicles Elig		Aircraft:	
	Expenditures		Usage		(Vehicles/Ot	:her)	FY 98 Repla			n/a
1	FY 96 thru		FY 96 thru		FY 96 thru		Vehicles Elig		PAA:	
	30-Sep-1996:		30-Sep-1996:		30-Sep-1996	6:	FY 99 Repla			n/a
	FY 1995		FY 1995		FY 1995	0	Vehicle Augr		Attririon Res:	0
	FY 1994		FY 1994		FY 1994	0			BAI	0
	FY 1993		FY 1993		FY 1993	0			Inactive Inv:	0
<b>TOTAL</b> : 1425		3197		455					Storage:	0
DEMARKS.										

#### **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. 24 6

	DATE:												
				BUDG	SET ITEM JUS	TIFICATION S	SHEET		(Exhibit P-40)	FEBRU	ARY 1997		
NAVMAT FORMAT 7110/1													
BUDGET ACTIVITY:						P-1 ITEM NO	MENCLATURI	E:	LI# 314500				
BA-3: Torpedo and Relat	ed Equipment					Vertical Laur	C3DQ						
	PRIOR	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	To Complete	Total Program		
Quantity	410	13	0	0	0	0	0	0	0	0	438		
Cost (In Millions)	217.9	9.7	12.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	240.3		
Initial Spares (In Millions)	9.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.6		
Total (In Millions)	227.3	9.9	12.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	249.9		
Unit Cost (In Millions)	0.6	0.8	0.0	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 5 torpedo payload.

FOT&E tests were completed in September 1992 and Full Production authorized in March 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).

DD Form 2454, Jul 88

LINE ITEM NO.   PAGE NO



		WE	<b>APONS PRO</b>	CUREMENT, NA	AVY		DATE:				
		BUD	GET ITEM JUS	STIFICATION S	HEET	(Exhibit P-40)	FEBRU <i>A</i>	RY 1997			
NAVMAT FORMAT	7110/1										
BUDGET ACTIVITY:				P-1 ITEM NON	MENCLATURE		LI# 321500				
BA-3: Torpedo and	Related Equip	ment		Torpedo MK-4	46 Mods		C3F5				
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003			
Quantity											
Cost (In Millions)	3.5	1.7	0.3	21.3	19.2	36.3	37.2	38.2			

#### ITEM DESCRIPTION/JUSTIFICATION

The Torpedo MK-46 is an in-service lightweight torpedo designed for launch from surface vessel torpedo tubes, VLA/ASROC, and fixed/rotary wing aircraft. The product improvement program will improve effectiveness.

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

The Lightweight Hybrid Torpedo (LHT) will be a modular upgrade to the MK46 torpedo. It is comprised on the MK50 sonar, MK46 warhead & propulsion system and new COTS processors which will use tactical software derived from MK50 and MK48 ADCAP. The LHT will provide improved performance against diesel electric submarine threats operating in shallow littoral water. The LHT production will begin with a LRIP contract in FY99 of 25 units.

	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
MK 46 SLEP	3.5	1.7	0.3					
LWT HYBRID				21.3	19.2	36.3	37.2	38.2

P-3A Exhibits for the Bottom Avoidance/CCM Shallow Water/Aft Seal and Hybrid Torpedo are attached.

All installations will be "Turn-Key".

DD Form 2454, Jul 88

P-1 SHOPPING LIST	
LINE ITEM NO.	PAGE NO.
26	1
	· ·

APPROPI Weapons	RIATION: s Procurement, Navy	WE	APON	SYSTEM COST	ANAL	/SIS EXHIBIT (P	-5)		DATE: FEE	BRUARY 1997
	ACTIVITY: orpedo and Related Equipment			P-1 ITEM NOME Torpedo MK-46		TURE:				SUBHEAD NO: C3F5
COST				FY 1996		FY 1997		FY 1998		FY 1999
CODE	ELEMENT OF COST	I/C	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
F5103	SLEP Hardware	Α	220	\$3,183	73	\$1,097		\$0		\$0
F5104	HYBRID Hardware	В		\$0		\$0		\$0	25	\$14,296
F5105	Exercise Head			\$0		\$0		\$0	16	\$1,826
F5830	Production Engineering (In-house)			\$0		\$382		\$186		\$2,908
F5840	Quality Assurance			\$11		\$78		\$34		\$137
F5860	Acceptance T & E			\$220		\$68		\$0		\$1,591
F5900	Production Engineering (Contractor)			\$96		\$100		\$54		\$494
				\$3,510		\$1,725		\$274		\$21,252
	FY96 Production Engineering (In	l η-Ηοι	use) and	d Quality Assurar	nce are	 forward financed 	by FYS	 94 and FY95 fund I	S.	
				SHOPPING LIST INE ITEM NO.		PAGE NO.		CLASSII	FICATION	ON: Unclassified
				26		2				

#### MODIFICATION OF WEAPON SYSTEM (EXHIBIT P-3A)

FEBRUARY 1997

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

MODELS OF SYSTEM AFFECTED: MK-46 SLEP

DESCRIPTION/JUSTIFICATION: FY94 efforts provide preproduction models to allow proof of products and verification testing by the Navy. The Counter-Counter Measure (CCM) Shallow Water modification will modify algorithms and PWBs in the control group of the MK46 torpedo in improve performance against counter-measures in a shallow water environment. The Aft Seal modification will provide an improved seal on the drive shaft of the MK46 torpedo to prevent water entry. The Bottom Avoidance modification will provide search depth setting limitations on the MK46 torpedo to provide bottom avoidance in shallow water environments.

DEVELOPMENT STATUS/MAJOR	R DEVELOPMEN	MILESTONES:		TECH EVA	L: N/A	OP	EVAL: N/A		ASU: N/A	!
FINANCIAL PLAN	FY96 & PRIOR	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	TO COMPLETE	TOTAL
DEVELOPMENT										
RDT&E	0	0	0	0	0	0	0	0	0	0
PROCUREMENT										
Kit Quantity	1,075	73	0	0	0	0	0	0	0	1,148
Installation Kits									0	0
Installation Kit Nonrecurring									0	0
Installed Equipment	14,606	1,097							0	15,703
Installed Equipment Nonrecurring									0	0
Engineering Support*	1,185	628	274						0	2,087
Data									0	0
Training Equipment									0	0
Support Equipment									0	0
Interim Support Contractor										
Procurement Cost Less Inst	15,791	1,725	274	0	0	0	0	0	0	17,790
Installation Cost	0	0	0	0	0	0	0	0	0	0
Unit Cost	15	24								
Total Procurement Cost	15,791	1,725	274	0	0	0	0	0	0	17,790

METHOD OF IMPLEMENTATION: FIRM FIXED PRICE CONTRACT - Alliant Techsystems contracted by NAVSEA.

CONTRACT DATE: PY: 4/96 CY: 3/97 PRODUCTION DELIVERY DATE: PY: 2/97 CY: 1/98

INSTALLATION	FY96 8	R PR	IOR		FY	97			FY	98			FΥ	99			FY	00			FY	01		F	Y 0	2		F	Y 03		TO	
SCHEDULE	1 2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3 4	1	2	2	3 4	1	1 :	2 3	4	COMPLETE	TOTAL
Bottom Avoidance/CCM Shallow Wa	ter/Aft Se	eal																														
INPUT																																
FY96 & PRIOR	150	150	150	150	150	150	88	87																								1,075
FY 97									20	20	20	13																				73
TOTAL	150	150	150	150	150	150	88	87	20	20	20	13																				1,148
OUTPUT																																
FY96 & PRIOR		50	150	68	68	69	69	62	62	63	63	81	82	82	82	24																1,075
FY 97																	24	24	25													73
TOTAL		50	150	68	68	69	69	62	62	63	63	81	82	82	82	24	24	24	25													1,148

<sup>(\*)</sup> Represents the total engineering support for SLEP efforts.

P-1 SHOPPING LIST NO.	PAGE NO.
26	2

#### **MODIFICATION OF WEAPON SYSTEM (EXHIBIT P-3A)**

FEBRUARY 1997

MODIFICATION TITLE: HYBRID Hardware, F5104 and Exercise Head, F5105

MODELS OF SYSTEM AFFECTED: Lightweight HYBRID Torpedo

DESCRIPTION/JUSTIFICATION: The Lightweight Hybrid Torpedo (LHT) will be a modular upgrade, designed to take advantage of the current USN investments in hardware and technology by utilizing components from the MK46 & MK50 Torpedoes, as well as commercial-off-the-shelf (COTS) processor components with open systems architecture. In addition, it will integrate software improvements gained from the MK50 Shallow Water Performance Program.

DEVELOPMENT STATUS/MAJOR	R DEVELOPMEN	Γ MILESTONES:		TECH EVA	L: 2nd Qtr FY00	OP OP	EVAL: 1st Qtr	FY01 A	SU: 4th Qtr FY	01
FINANCIAL PLAN	FY96 & PRIOR	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	TO COMPLETE	TOTAL
DEVELOPMENT RDT&E	40,963	10,832	17,290	8,129	4,771	2,272	2,324	2,382	0	88,963
PROCUREMENT Kit Quantity Installation Kits				25	25	85	86	103	676	1,000
Installation Kit Nonrecurring Installed Equipment Installed Equipment Nonrecurring				16,122	14,802	29,921	31,444	32,750	230,188	355,227
Engineering Support* Data Training Equipment				5,130	4,419	6,356	5,733	5,404	42,759	69,801
Support Equipment Interim Support Contractor										
Procurement Cost Less Inst	-	0	0	21,252	19,221	36,277	37,177	38,154	272,947	425,028
Installation Cost Unit Cost	0	0	0	0 850	0 769	0 427	0 432	0 370	0	0
Total Procurement Cost	0	0	0	21,252	19,221	36,277	37,177	38,154	272,947	425,028

METHOD OF IMPLEMENTATION: FIXED PRICE CONTRACT - Contractor Unknown

CONTRACT DATE:
PRODUCTION DELIVERY DATE:

BY2: 6/99 BY2: 8/00

																																	, , , , , , , , , , , , , , , , , , , ,	
INSTALLATION	FYS	96 &	PRIC	R		FY 9	97			FΥ	98			FY 9	99			FY (	00			FΥ	01			FΥ	02			F١	′ 03		TO	
SCHEDULE	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3 4	4	1	2	3	4	1	2	3	4	1	2	3	4	COMPLETE	TOTAL
HYBRID Torpedo																																		
INPUT																																		
FY96 & PRIOR																																		0
FY 97																																		0
FY 98																																		0
FY 99																				5 1	10	10												25
TOTAL																				5 1	10	10	5	10	10		21	21	21	22	21	22	822	1,000
OUTPUT																																		
FY96 & PRIOR																																		0
FY 97																																		0
FY 98																																		0
FY 99																				5 1	10	10												25
TOTAL																				5 1	10	10			5	10	10		21	21	21	22	865	1,000

P-1 SHOPPING LIST NO.	PAGE NO.
26	3

#### CLASSIFICATIC UNCLASSIFIED

		BUDGE P-40	T ITEM JU	STIFICA	TION SH	IEET	DATE:	FEBRUAR	Y 1997
APPROPRIATION	ON/BUDG	ET ACTIVI	TY		P-1 ITEM	NOMENCLA	ATURE		
<b>WEAPONS P</b>	ROCUR	EMENT I	NAVY/ -			MK 48 TO	RPEDO A	DCAP MO	DDS/C3D1
TORPEDOES	3 & RELA	ATED EQ	UIPMENT	BA3		Line Item 3	225		
	1996	1997	1998	1999	2000	2001	2002	2003	
QUANTITY									
COST (In Millions)	\$59.6	\$62.1	\$55.4	\$57.1	\$57.5	\$55.9	\$60.7	\$81.0	

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.

The Torpedo Acoustic Improvement Program, starting in FY02 with the purchase of 10 LRIP units, will incorporate a new wide band transducer array, receiver, transmitter, and software algorithms into the ADCAP MODS torpedo. These new elements will provide the capability to transmit and receive over a wide frequency band to take advantage of broadband signal processing techniques. These improvements are necessary to

	1996	1997	1998	1999	2000	2001	2002	2003
MK48 ADCAP MODS (C3D1)	\$56.7	\$52.6	\$55.4	\$57.1	\$57.5	\$55.9	\$60.7	\$81.0
Funds Designated for Reimbursem	\$2.9	\$9.5	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
to Judgment Fund (C4PJ)*								

\* Funds are to be used to reimburse the Judgment Fund for the MK48 ADCAP Alternative Dispute Resolution settlement.

P-1 SHOPPING LIST ITEM NO. 27 PAGE NO. 1 CLASSIFICATION:

DD Form 2454, JUN 86

**UNCLASSIFIED** 

# CLASSIFICATION: UNCLASSIFIED

		то	TORPEDO I	<b>VIK 48</b>	S ADCAD MODS	COD	1/04D I	,	
		ΤO			ADOAI MODO	C3D	I/C4PJ		
		10	TAL COST IN TH	IOUSA	NDS OF DOLLARS	3		,	
	IDENT CODE		FY 1996		FY 1997		FY 1998	F	FY 1999
		QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
ADCAP TORPEDO MODS									
ADCAP MODS	В	150	20,163	135	24,613	151	26,243	135	25,974
Support and Ancillary Equipment			4,977		2,478		2,513		2,634
PRODUCTION SUPPORT SERVICES	 		31,575		25,521		26,636		28,447
Production Engineering - In-House			8,117 9,350 885		6,620 7,416 801		6,646 7,437 810		7,18 <sup>,</sup> 8,340 865
			13,223		10,684		11,743		12,061
Funds Designated for Reimburseme o Judgment Fund (C4PJ)	ent		2,927		9,468				
S	DCAP MODS  upport and Ancillary Equipment  RODUCTION SUPPORT SERVICES  roduction Engineering - Contractor  roduction Engineering - In-House  ccept. Test & Evaluation - Contract  ccept. Test & Evaluation - In-House  ccept. Test & Evaluation - In-House	DCAP MODS  upport and Ancillary Equipment  RODUCTION SUPPORT SERVICES  roduction Engineering - Contractor roduction Engineering - In-House ccept. Test & Evaluation - Contractor ccept. Test & Evaluation - In-House	DCAP MODS  upport and Ancillary Equipment  RODUCTION SUPPORT SERVICES  roduction Engineering - Contractor roduction Engineering - In-House ccept. Test & Evaluation - Contractor ccept. Test & Evaluation - In-House	DCAP MODS  B 150 20,163  upport and Ancillary Equipment  RODUCTION SUPPORT SERVICES  roduction Engineering - Contractor roduction Engineering - In-House ccept. Test & Evaluation - Contractor ccept. Test & Evaluation - In-House unds Designated for Reimbursement  2,927	DCAP MODS  B 150  20,163 135  upport and Ancillary Equipment  RODUCTION SUPPORT SERVICES  roduction Engineering - Contractor roduction Engineering - In-House ccept. Test & Evaluation - Contractor ccept. Test & Evaluation - In-House  unds Designated for Reimbursement  2,927	DCAP MODS  B 150 20,163 135 24,613  upport and Ancillary Equipment 4,977 2,478  RODUCTION SUPPORT SERVICES 31,575 25,521  roduction Engineering - Contractor roduction Engineering - In-House ccept. Test & Evaluation - Contractor ccept. Test & Evaluation - In-House 13,223 10,684  unds Designated for Reimbursement 2,927 9,468	DCAP MODS  B 150 20,163 135 24,613 151  upport and Ancillary Equipment 4,977 2,478  RODUCTION SUPPORT SERVICES 31,575 25,521  roduction Engineering - Contractor roduction Engineering - In-House ccept. Test & Evaluation - Contractor ccept. Test & Evaluation - In-House 13,223 10,684  unds Designated for Reimbursement 2,927 9,468	DCAP MODS  B 150 20,163 135 24,613 151 26,243  upport and Ancillary Equipment 4,977 2,478 2,513  RODUCTION SUPPORT SERVICES 31,575 25,521 26,636  roduction Engineering - Contractor roduction Engineering - In-House 9,350 7,416 7,437 (apr.) 7,416 7,437 (apr.) 7,416 885 801 810 (apr.) 885 801 810 (apr.) 810 (apr.) 7,437 (apr.) 7,437 (apr.) 823 (apr.) 824 (apr.) 825 (apr.) 82	DCAP MODS  B 150 20,163 135 24,613 151 26,243 135  upport and Ancillary Equipment 4,977 2,478 2,513  RODUCTION SUPPORT SERVICES 31,575 25,521 26,636  roduction Engineering - Contractor roduction Engineering - In-House 9,350 7,416 7,437 885 801 810 ccept. Test & Evaluation - Contractor ccept. Test & Evaluation - In-House 13,223 10,684 11,743 2,000 11,743 11,743

**DD FORM 2446, JUN 86** 

P-1 SHOPPING LIST

ITEM NO. 27 PAGE NO. 2

CLASSIFICATION:

**UNCLASSIFIED** 

CLASSIFICATION: UNCLASSIFIED February 1997 INDIVIDUAL MODIFICATION

P3A
MODIFICATION TITLE: Torpedo MK48 ADCAP MODS Program

MODELS OF SYSTEM AFFECTED: MK48 ADCAP MODS Program MDDELS OF SYSTEM AFFECTED: MK48 ADCAP Torpedo will allow 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. The Torpedo Acoustic Improvement Program will take advantage of broadband signal processing techniques and overcome current and future improvements in advanced threat countermeasures capabilities. DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: MS II approved in Jan 1993; MS III approved in Apr. 1996.

		QT	Y 'Y 96 AND PRIOR	QTY	FY 97	QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY03	QTY	COST	QTY	COS
INANCIAL PLAN (IN \$000)																					
DT&E			48167		12242		10786		19543		16223		16460		20362		33430			0	1772
QUANTITY (MODS) JNIT COST (MODS)		238	32271 136	135	18133 134	151	19201 127	135	19344 143	139	20242 146	131	19515 149	120	17960 150	135	20219 150	0	0	1184	1668
QUANTITY (ACOUSTIC IMPROVEMEN	ıT)		130		134		121		143		140		149	10	2750	70		1104	192765	1184	2109
NIT COST (ACOUSTIC IMPROVEMEN ISTALLATION KITS	1 <u>T</u> )														275		220		175	0	0
ISTALLATION KITS NONRECURRING	;																			0	C
QUIPMENT QUIPMENT NONRECURRING			4743														5700			0	104
NGINEERING CHANGE ORDERS			4745														3700			0	10-
JPPORT EQUIPMENT			4116		2478		2513		2634		2605		2576		2884		2717		19537	0	42
THER ITERIM CONTRACTOR SUPPORT			55525 10052		20321 5200		21321 5315		23010 5437		22012 5556		21429 5679		24384 5804		24176 5932		75635 32257	0	287 812
			10032		3200		3313		3437		3330		3079		3004		3332		32231	U	012
STALLATION OF HARDWARE																					
(96 AND PRIOR EQUIPMENT (238 K	ITS)			143	6480	95 57	4401 2641	70	2604											238	108 63
Y97 EQUIPMENT (135 KITS) Y98 EQUIPMENT (151 KITS)						57	2041	78 62	3694 2936	89	4307									135 151	72
Y99 EQUIPMENT (135 KITS)										57	2759	78	3858							135	66
Y00 EQUIPMENT (139 KITS)												57	2819	82	4145	77	2072			139	69
Y01 EQUIPMENT (131 KITS) Y02 EQUIPMENT (130 KITS)														54	2729	77 55	3973 2837	75	3703	131 130	67 65
Y03 EQUIPMENT (205 KITS)																55	2007	205	10003	205	10
O COMPLETE (1104 KITS)																		1104	56161	1104	561
TAL INSTALLATION COST			0	143	6480	152	7042	140	6630	146	7066	135	6677	136	6874	132	6810	1384	69867	2368	117
TAL PROCUREMENT COST TAL COST			106707 154874		52612 64854		55392 66178		57055 76598		57481 73704	ļ	55876 72336		60656 81018		80954 #####	ļ	390061 390061	ļ	916
ETHOD OF IMPLEMENTATION: DEP					_																
NTRACT DATE:							OTIME: 3				CTION LE	ADTIN	1E: 16 MON								
ODLICTION DELIVER DATE:		YEAF 4/96		CURRE	NT YEAR	: 1/97	OTIME: 3	BUDG	ET YEAR	R 1/98	CTION LE	ADTIN	BUDGET YE	AI 1/99							
ODUCTION DELIVER DATE:		YEAF 4/96 YEAF 5/97		CURRE		: 1/97	OTIME: 3	BUDG		R 1/98	CTION LE	EADTIM		AI 1/99							
			FY98	CURRE	NT YEAR	: 1/97	FY00	BUDG	ET YEAR	R 1/98	FY02	EADTIM	BUDGET YE	AI 1/99 AI 5/00	COMPL	ETE	TOTAL				
TALLATION SCHEDULE:	PRIOR Y	YEAF 5/97 FY97	FY98	CURRE	NT YEAR NT YEAR	: 1/97		BUDG	ET YEAR ET YEAR	R 1/98		EADTIM	BUDGET YE BUDGET YE	AI 1/99 AI 5/00	COMPL	ETE					
TALLATION SCHEDULE:  INPUT* ======> FY	PRIOR Y	YEAF 5/97		CURRE	NT YEAR NT YEAR	: 1/97 : 5/98		BUDG	ET YEAR ET YEAR	R 1/98		EADTIM	BUDGET YE BUDGET YE	AI 1/99 AI 5/00	COMPL	ETE	TOTAL 238 135				
TALLATION SCHEDULE:  INPUT* ======> FY FY	PRIOR Y FY96 /96 AND PRIOR /97 /98	YEAF 5/97 FY97	FY98 43,43,9,0	CURRE	NT YEAR NT YEAR FY99	: 1/97 : 5/98	FY00 38,38,13,(	BUDG BUDG	ET YEAR ET YEAR FY01	R 1/98 R 5/99		EADTIM	BUDGET YE BUDGET YE	AI 1/99 AI 5/00	COMPL	ETE	238 135 151				
STALLATION SCHEDULE:  INPUT* ======> FY FY FY FY	PRIOR Y FY96 796 AND PRIOR 797 98 799	YEAF 5/97 FY97	FY98 43,43,9,0	CURRE	FY99 34,33,11,0	: 1/97 : 5/98	FY00	BUDG BUDG	ET YEAR ET YEAR FY01 34,33,11,	R 1/98 R 5/99	FY02		BUDGET YE BUDGET YE	AI 1/99 AI 5/00	COMPL	ETE	238 135 151 135				
TALLATION SCHEDULE:  INPUT* =====>> FY FY FY FY FY FY FY	PRIOR Y FY96 /96 AND PRIOR /97 /98	YEAF 5/97 FY97	FY98 43,43,9,0	CURRE	FY99 34,33,11,0	: 1/97 : 5/98	FY00 38,38,13,(	BUDG BUDG	ET YEAR ET YEAR FY01	R 1/98 R 5/99	FY02 35,35,12,	0	BUDGET YE BUDGET YE FY03	TO	COMPL	ETE	238 135 151 135 139				
INPUT* ======> FY FY FY FY FY FY FY FY FY FY	PRIOR Y FY96 (96 AND PRIOR (97 (98 (99 (00 (01 (02	YEAF 5/97 FY97	FY98 43,43,9,0	CURRE	FY99 34,33,11,0	: 1/97 : 5/98	FY00 38,38,13,(	BUDG BUDG	ET YEAR ET YEAR FY01 34,33,11,	R 1/98 R 5/99	FY02	0	BUDGET YE	TO	75	ETE	238 135 151 135 139 131 130				
TALLATION SCHEDULE:  INPUT* ======> FY FY FY FY FY FY FY FY FY FY	PRIOR Y FY96 /96 AND PRIOR /97 /98 /99 /00 /01 /02 /03	YEAF 5/97 FY97	FY98 43,43,9,0	CURRE	FY99 34,33,11,0	: 1/97 : 5/98	FY00 38,38,13,(	BUDG BUDG	ET YEAR ET YEAR FY01 34,33,11,	R 1/98 R 5/99	FY02 35,35,12,	0	BUDGET YE BUDGET YE FY03	TO	75 205	ETE	238 135 151 135 139 131 130 205				
INPUT* ======> FY FY FY FY FY FY FY FY FY FY FY FY FY F	PRIOR Y FY96 (96 AND PRIOR (97 (98 (99 (00 (01 (02	YEAF 5/97 FY97	FY98 43,43,9,0	CURRE	FY99 34,33,11,0	: 1/97 : 5/98	FY00 38,38,13,(	BUDG BUDG	ET YEAR ET YEAR FY01 34,33,11,	R 1/98 R 5/99	FY02 35,35,12,	0	BUDGET YE BUDGET YE FY03	TO	75	ETE	238 135 151 135 139 131 130				
STALLATION SCHEDULE:  INPUT* ======> FY FY FY FY FY FY FY TC	PRIOR Y FY96  (96 AND PRIOR (97 (98 (99 (00 (01 (02 (03 O COMPLETE OTAL	FY97 FY97 14,21,48,60	FY98 43,43,9,0 0,0,23,34	CURRE	NT YEAR NT YEAR FY99 34,33,11,0 0,0,25,37	: 1/97 : 5/98	FY00 38,38,13,(	BUDG BUDG	ET YEAR ET YEAR FY01 34,33,11,	R 1/98 R 5/99	FY02 35,35,12,	0	BUDGET YE BUDGET YE FY03	TO	75 205	ETE	238 135 151 135 139 131 130 205 1,104 2,368				
INPUT* =====> FY FY FY FY FY FY FY TC TC OUTPUT* =====> FY	PRIOR Y FY96  (96 AND PRIOR (97 (98 (99 (00 (01 (02 (03 O COMPLETE OTAL	YEAF 5/97 FY97	FY98 43,43,9,0	CURRE	FY99 34,33,11,0	: 1/97 : 5/98	FY00 38,38,13,(	BUDG BUDG	ET YEAR ET YEAR FY01 34,33,11,	R 1/98 R 5/99	FY02 35,35,12,	0	BUDGET YE BUDGET YE FY03	TO	75 205	ETE	238 135 151 135 139 131 130 205 1,104				
INPUT* =====>> FY FY FY FY FY FY FY FY TC TC OUTPUT* ====>> FY FY	PRIOR Y FY96  (96 AND PRIOR (97 (98 (99 (00 (01 (02 (03 0) COMPLETE DTAL (96 AND PRIOR (97 (98	FY97 FY97 14,21,48,60	FY98 43,43,9,0 0,0,23,34	CURRE	FY99 34,33,11,( 0,0,25,37	: 1/97 : 5/98	FY00 38,38,13,0 0,0,23,34	BUDG BUDG	ET YEAF ET YEAF FY01 34,33,11, 0,0,23,34	R 1/98 R 5/99	FY02 35,35,12, 0,0,21,33	0	BUDGET YE BUDGET YE FY03	TO	75 205	ETE	238 135 151 135 139 131 130 205 1,104 2,368 238 135 151				
STALLATION SCHEDULE:  INPUT* ======> FY FY FY FY FY FY FY TC TC OUTPUT* =====> FY FY	PRIOR Y FY96  /96 AND PRIOR /97 /98 /99 /00 /01 /02 /03 D COMPLETE DTAL /96 AND PRIOR /97 /98 /99	FY97 FY97 14,21,48,60	FY98 43,43,9,0 0,0,23,34	CURRE	FY99 34,33,11,( 0,0,25,37	: 1/97 : 5/98	FY00 38,38,13,0 0,0,23,34	BUDG BUDG	ET YEAF ET YEAF FY01 34,33,11, 0,0,23,34	R 1/98 R 5/99	FY02 35,35,12, 0,0,21,33	0	BUDGET YE BUDGET YE FY03 33,33,11,0 0,0,20,35	TO	75 205	ETE	238 135 151 135 139 131 130 205 1,104 2,368 238 135 151 135				
STALLATION SCHEDULE:  INPUT* =====>> FY FY FY FY FY FY FY FY FY FY FY FY FY F	PRIOR Y  FY96  /96 AND PRIOR /97 /98 /99 /00 /01 /02 /03 D COMPLETE DTAL /96 AND PRIOR /97 /98 /99 /00	FY97 FY97 14,21,48,60	FY98 43,43,9,0 0,0,23,34	CURRE	FY99 34,33,11,( 0,0,25,37	: 1/97 : 5/98	FY00 38,38,13,0 0,0,23,34	BUDG BUDG	ET YEAF ET YEAF FY01 34,33,11, 0,0,23,34	R 1/98 R 5/99	FY02 35,35,12, 0,0,21,33	0	BUDGET YE BUDGET YE FY03 33,33,11,0 0,0,20,35	EAI 1/99 EAI 5/00	75 205 1,104	ETE	238 135 151 135 139 131 130 205 1,104 2,368 238 135 151 135 139				
INPUT* =====> FY FY FY FY FY FY TC OUTPUT* ====> FY FY FY FY FY FY FY FY FY FY FY FY FY F	PRIOR Y  FY96  (96 AND PRIOR (97 (98 (99 (00) (01 (02 (03 0) COMPLETE DTAL (96 AND PRIOR (97 (98 (99) (00) (01 (01 (02 (03 (03 (03 (03 (03 (03 (03 (03 (03 (03	FY97 FY97 14,21,48,60	FY98 43,43,9,0 0,0,23,34	CURRE	FY99 34,33,11,( 0,0,25,37	: 1/97 : 5/98	FY00 38,38,13,0 0,0,23,34	BUDG BUDG	ET YEAF ET YEAF FY01 34,33,11, 0,0,23,34	R 1/98 R 5/99	FY02 35,35,12, 0,0,21,33	0	BUDGET YE BUDGET YE FY03 33,33,11,0 0,0,20,35	EAI 1/99 EAI 5/00	75 205 1,104	ETE	238 135 151 135 139 131 130 205 1,104 2,368 238 135 151 135 139 131				
STALLATION SCHEDULE:  INPUT* ======> FY FY FY FY FY FY TC TC OUTPUT* ====> FY FY FY FY FY FY FY FY FY FY FY FY FY F	PRIOR Y  FY96  /96 AND PRIOR /97 /98 /99 /00 /01 /02 /03 D COMPLETE DTAL /96 AND PRIOR /97 /98 /99 /00	FY97 FY97 14,21,48,60	FY98 43,43,9,0 0,0,23,34	CURRE	FY99 34,33,11,( 0,0,25,37	: 1/97 : 5/98	FY00 38,38,13,0 0,0,23,34	BUDG BUDG	ET YEAF ET YEAF FY01 34,33,11, 0,0,23,34	R 1/98 R 5/99	FY02 35,35,12, 0,0,21,33	0	BUDGET YE BUDGET YE FY03 33,33,11,0 0,0,20,35	EAI 1/99 EAI 5/00	75 205 1,104	ETE	238 135 151 135 139 131 130 205 1,104 2,368 238 135 151 135 139				
STALLATION SCHEDULE:  INPUT* ======> FY FY FY FY FY FY CTC OUTPUT* ====> FY FY FY FY FY FY FY FY FY FY FY FY FY F	PRIOR Y FY96 /96 AND PRIOR /97 /98 /99 /00 /01 /02 /03 O COMPLETE DTAL /96 AND PRIOR /97 /98 /99 /00 /01 /02 /03 O COMPLETE	FY97 FY97 14,21,48,60	FY98 43,43,9,0 0,0,23,34	CURRE	FY99 34,33,11,( 0,0,25,37	: 1/97 : 5/98	FY00 38,38,13,0 0,0,23,34	BUDG BUDG	ET YEAF ET YEAF FY01 34,33,11, 0,0,23,34	R 1/98 R 5/99	FY02 35,35,12, 0,0,21,33	0	BUDGET YE BUDGET YE FY03 33,33,11,0 0,0,20,35	EAI 1/99 EAI 5/00	75 205 1,104	ETE	238 135 151 135 139 131 130 205 1,104 2,368 238 135 151 135 139 131 130 205 1,104				
STALLATION SCHEDULE:  INPUT* =====>> FY FY FY FY FY FY CTC OUTPUT* ====>> FY FY FY FY FY FY FY FY FY FY FY FY FY F	PRIOR Y FY96  (96 AND PRIOR (97 (98 (99 (00 (01 (02 (03 0) COMPLETE DTAL (96 AND PRIOR (97 (98 (99 (00 (01 (01 (02 (03 (03 (03 (03 (04 (04 (04 (05 (05 (05 (05 (05 (05 (05 (05 (05 (05	FY97 FY97 14,21,48,60	FY98 43,43,9,0 0,0,23,34	CURRE	FY99 34,33,11,( 0,0,25,37	: 1/97 : 5/98	FY00 38,38,13,0 0,0,23,34	BUDG BUDG	ET YEAF ET YEAF FY01 34,33,11, 0,0,23,34	R 1/98 R 5/99	FY02 35,35,12, 0,0,21,33	0	BUDGET YE BUDGET YE FY03 33,33,11,0 0,0,20,35	EAI 1/99 EAI 5/00	75 205 1,104 11 130 205	ETE	238 135 151 135 139 131 130 205 1,104 2,368 238 135 151 135 139 131 130 205				

				NS PROCUREMENT, NAVY TEM JUSTIFICATION SHEET		DATE: (EXHIBIT P-40) FEBRUARY 1997		ARY 1997
NAVMAT FORMA	T 7110/1							
BUDGET ACTIVITY: BA-3: Torpedo and Related Equipment				P-1 ITEM NOMENCLATURE: Torpedo Support Equipment		LI # 330100 C3F8		
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Quantity								
Cost (In Millions)	30.5	22.1	25.5	25.6	22.5	22.6	24.7	25.9

#### ITEM DESCRIPTION/JUSTIFICATION

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, and 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. In FY96 this account provides for the Heavyweight Torpedo Test Equipment Upgrade Program which consolidates MK48 and MK48 ADCAP Test Equipment. This effort supports the consolidation of IMAs from four to two and transforms the IMA infrastructure to one which is appropriate for a smaller submarine force.

DD Form 2454, Jul 88

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

28

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CLASSIFICATION: Unclassified

APPROPRIATION: Weapons Procurement, Navy WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)												
Weapons	s Procurement, Navy	<b>WEAPO</b>	N SYST	EM COST AN	IALYSIS	EXHIBIT (P-	5)		FEBR	UARY 1997		
				_						_		
	ACTIVITY:			P-1 ITEM NOM						SUBHEAD:		
BA-3: To	rpedo and Related Equipment			Torpedo Supp	ort Equipm	nent				C3F8		
COST			l F	Y 1996	F	Y 1997	F	Y 1998	F	Y 1999		
CODE	ELEMENT OF COST	I/C	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST		
			1									
	DEO (UNDERSEA WAREARE)											
	PEO (UNDERSEA WARFARE)											
	Lightweight Support Equipment			\$6,942		\$2,170		\$4,956		\$6,170		
	MK48/ADCAP Support Equipment			\$23,390		\$19,896		\$20,553		\$19,380		
	Wire 16/7 (20) of the Gapport Equipment			Ψ20,000		ψ10,000		Ψ20,000		Ψ10,000		
	Torpedo Support Equipment			\$30,332		\$22,066		\$25,509		\$25,550		
										<u> </u>		
			_	OPPING LIST		PAGE NO.		CLAS	CLASSIFICATION: Unclassific			
			LINE	ITEM NO. 28		2						
				20		2						

CLASSIFICATION: Unclassified

PPROPR Veapons		WEAPON	N SYSTE	M COST AN	IALYSIS	EXHIBIT (P-5	<u>i)</u>		DATE: FEBRU	JARY 1997
	ACTIVITY: rpedo and Related Equipment			P-1 ITEM NOM Lightweight To						SUBHEAD: C3F8
DA-3. 101	pedo and Related Equipment			Lightweight 10	rpedo Supp	on Equipment				CSF6
COST				′ 1996		Y 1997		Y 1998		/ 1999
CODE	ELEMENT OF COST	I/C	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL CC
F8001	Lightweight Support Equipment									
F6001	MK46 Lead Dropper		228	\$50		\$0	453	\$104	694	\$
							400	•		
	MK46 Mod 5 Seawater Battery		460	\$162		\$0		\$0	50	
	MK46 Pressure Cylinder (Long)		181	\$25		\$0		\$0	470	
	MK46 Pressure Cylinder (Short)			\$0		\$0		\$0	176	\$
	MK46 REXTORP Kits			\$0		\$0	198	\$106	1,035	\$
	MK89 Mod 1 Suspension Bands			\$0		\$0	1,420	\$682	1,492	\$
	MK50 Starter Actuator			\$0		\$0		\$0	50	
	MK50 Boiler Assembly		105	\$1,935		\$0		\$0	25	\$
	MK50 Oxidant Start Squib			\$0		\$0		\$0	50	
	MK50 Oxidant Stop Squib		43	\$30		\$0	50	\$37	50	
	MK50 Cutter Assembly			\$0		\$0	61	\$43	50	
	MK50 Oxidant Shutdown Valve		43	\$32		\$0		\$0	50	
	MK50 Thermal Battery			\$0		\$0	50	\$4	50	
	MK50 Gas Injector Assembly		57	\$48		\$0		\$0		
	MK50 Tailnut		343	\$24		\$0		\$0		
	MK50 Cold Start Assembly		0.0	\$0		\$0	50	\$78	50	
	MK50 MK 33 Air Stabilizer			\$0		\$0	228	\$584	141	\$
	MK50 MK 32 Air Stabilizer		424	\$1,055		\$0	289	\$751	196	\$
	MK50 MK 14 Nose Cap		424	\$1,055 \$0		\$0 \$0	16	\$10	196	\$
	Sub-Total			\$3,361		\$0	16	\$2,399	196	\$3,
F8002	Other Equipment Investment									
1 0002	Product Improvement Hardware			\$173		\$153		\$181		\$
	ORDALT Procurement			\$819		\$556		\$595		\$
				·				·		
	Prototype Equipment			\$79		\$71		\$73		
	Sub-Total			\$1,071		\$780		\$849		\$1,
F8830	Production Engineering - In House			\$2,002		\$689		\$989		\$
F8840	Quality Assurance			\$81		\$219		\$224		\$
F8850	Product Improvement			\$54		\$101		\$104		
F8860	Acceptance T & E			\$173		\$171		\$175		\$
F8900	Production Engineering - Contractor			\$200		\$210		\$216		\$
				\$6,942		\$2,170		\$4,956		\$6,
			P-1 SHOPE	PING LIST NO.		PAGE NO.		CLAS	SIFICATION	i: Unclass

#### UNCLASSIFIED CLASSIFICATION

APPROPRIATION WEAPONS PRO	N CUREMENT, NAVY		WEAPON S	SYSTEMS C	OST ANAL	YSIS			DATE FEBRUARY	1997
BUDGET ACTIVI	тү		P-1 ITI	EM NOMENCL	ATURE				SUBHEAD N	0.
3 - TORPEDOES	AND RELATED EQUIPMENT		TOR	RPEDO SUPPO	ORT EQUIPM	ENT MK 48 AD	CAP		C3F8	
COST CODE	ELEMENT OF COST	I/C	FY	′ 96	FY	97	FY	′ 98	FY	99
COST CODE	ELEMENT OF COST	1/C	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
F8100	EXERCISE EXPENDABLES AND COMPONENT REPLACEMENT									
	SUBMARINE WIRE COIL FLEX HOSE(IMPROVED) TORPEDO WIRE COIL OTTO FUEL (1,000 lbs per unit) IGNITER PROPELLANT (New) UMBILICAL CABLE (IMPROVED) ARMING DEVICE		0 0 0 123 1101 1000 362 0	0 0 0 665 146 500 1176	914 523 275 907 1155 1000 556 54	1147 631 452 4341 169 526 1951	0 1400 0 688 760 1,303 225	0 3674 121 706		0 485 0 3260 85 271 1636
	SUBTOTAL			2487		9278		6828		5737
F8101	OTHER EQUIPMENT INVESTMENT									
	PRODUCT IMPROVEMENT FES REPLACEMENT/IMPROVEMENT PROPULSION FUEL TANK SUPPORT EXERCISE FUEL TANK UPGRADE PROGRAM ORDALT MATERIAL ORDALT INSTALLATION CHAMBER & VALVE RELOADS RECOVERY SYSTEMS TIES III EXERCISE SECTION UPGRADE TEST EQUIPMENT UPGRADE			3324 0 915 0 5856 3512 727 0 0		1946 1100 895 0 1500 1703 498 0 441		1700 1443 704 217 3910 1936 460 144 865		1625 1480 715 222 4123 2088 471 79 671
	SUBTOTAL			18392		8219		11509		11598
	PRODUCTION SUPPORT									
F8833 F8843 F8863	PRODUCTION ENGINEERING (IN-HOUSE) QUALITY ASSURANCE ACCEPTANCE TEST & EVALUATION			614 1575 476		272 1580 547		517 1245 454		470 1157 418
	SUBTOTAL			2665		2399		2216		2045
	MK48/ADCAP GROSS COST			23544		19896		20553		19380
DD Form 2446. J	UN 86 Previous editions are o	bsolete	P-1	SHOPPING L	IST	PAGE NO.		Exhibit P-5		<u> </u>

 DD Form 2446, JUN 86
 Previous editions are obsolete
 P-1 SHOPPING LIST
 PAGE NO.
 Exhibit P-5

 UNCLASSIFIED
 ITEM NO.
 UNCLASSIFIED

 CLASSIFICATION
 28
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 CLASSIFICATION

CLASSIFICATION: Unclassified

PPROPR	RIATION:									DATE:				
VEAPONS	S PROCUREMENT, NAVY	PROCUE	REMENT HIST	ORY & PLAN	NING (I	EXHIBIT P	-5A)			FEBRUARY 1	997			
SUDGET A	ACTIVITY:			P-1 ITEM NOMEN	NCLATURE	:				SUBHEAD:				
BA-3: Tor	pedo and Related Equipment			Lightweight Torpe	edo Suppor	t Equipment				C3	F8			
		<u> </u>	1			1		1		ARE SPEC	IF YES,			
COST		CONTRACTOR	METHOD AND	CONTRACTED	AWARD	FIRST	QTY	UNIT COST	AVAIL NOW	REVISIONS	WHEN			
CODE	ELEMENT OF COST	AND LOCATION	TYPE	BY	DATE	DELIVERY			WHEN	REQUIRED?	AVAILABI			
	FY 1996													
F8001	MK46 Lead Dropper	Reisner	PD/C/FFP	NAVICP/IMSD	Jul-96	Jul-97	228	\$219	Yes	No				
	MK46 Mod 5 Seawater Battery	Magne Volt, NC	PD/C/FFP	NAVICP/IMSD	Jul-96	Jul-98	460	\$352	Yes	No				
	MK46 Pressure Cylinder (Long)	CAD, NJ	PD/C/FFP	NAVICP/IMSD	May-96	Dec-96	181	\$140	Yes	No				
	MK50 Boiler Assembly	Sunstrand, IL	WX/SS	NUWC/Newport	May-96	May-98	105	\$18,432	Yes	No				
	MK50 Oxidant Stop Squib	CAD, NJ	PD/C/FFP	NAVICP/IMSD	Sep-96	Sep-98	43	\$704	Yes	No				
	MK50 Oxidant Shutdown Valve	Unknown	PD/C/FFP	NAVICP/IMSD	Nov-96	Nov-98	43	\$736	Yes	No				
	MK50 Gas Injector Assembly	CAD, NJ	PD/C/FFP	NAVICP/IMSD	May-96	Dec-96	57	\$841	Yes	No				
	MK50 Tailnut	Melstrum, NJ	PD/C/FFP	NAVICP/IMSD	May-96	Sep-96	343	\$71	Yes	No				
	MK50 MK 32 Air Stabilizer	Paranetics	PD/C/FFP	NAVICP/IMSD	Sep-96	Sep-98	424	\$2,489	Yes	No				
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P-1 SHOPPING LIST NO.	PAGE NO.
28	5

CLASSIFICATION: Unclassified

CLASSIFICATION: Unclassified

DGET	ACTIVITY:			P-1 ITEM NOME	NCLATURE	<u>:</u>				SUBHEAD:	
A-3: To	rpedo and Related Equipment			Lightweight Torp	edo Suppor	t Equipment				C3	F8
	<u></u>				•						
	FISCAL YEAR		CONTRACT			DATE OF			SPECS	ARE SPEC	IF YES
COST		CONTRACTOR	METHOD AND		AWARD	FIRST	QTY	UNIT COST	AVAIL NOW	REVISIONS	WHE
ODE	ELEMENT OF COST	AND LOCATION	TYPE	BY	DATE	DELIVERY			WHEN	REQUIRED?	AVAILA
	FY 1998	Г		Т	Π	Т				1	
8001	MK46 Lead Dropper	Unknown	PD/C/FFP	NAVICP/IMSD	Jul-98	Jul-99	453	\$229	Yes	No	
6001	MK46 REXTORP Kits	Unknown	PD/C/FFP	NAVICP/IMSD	Jul-98	Jul-99 Jul-00	198	\$533	Yes	No	
	MK89 Mod 1 Suspension Band	Unknown	PD/C/FFP	NAVICE/IMSD	Jul-98	Jul-00	1,420	\$480	Yes	No No	
	MK50 Oxidant Stop Squib	Unknown	PD/C/FFP	NAVICE/IMSD	Jul-98	Jul-00	50	\$735	Yes	No	
	MK50 Cutter Assembly	Unknown	PD/C/FFP	NAVICE/IMSD	Jul-98	Jul-00	61	\$703	Yes	No	
	MK50 Thermal Battery	Unknown	PD/C/FFP	NAVICE/IMSD	Jul-98	Jul-00	50	\$86	Yes	No No	
	MK50 Cold Start Assembly	Unknown	PD/C/FFP	NAVICE/IMSD	Jul-98	Jul-00	50	\$1,569	Yes	No	
	MK50 MK33 Air Stabilizer	Unknown	PD/C/FFP	NAVICE/IMSD	Jul-98	Jul-00	228	\$2,562	Yes	No	
	MK50 MK32 Air Stabilizer	Unknown	PD/C/FFP	NAVICP/IMSD	Jul-98	Jul-00	289	\$2,600	Yes	No	
	MK50 MK14 Nose Cap	Unknown	PD/C/FFP	NAVICP/IMSD	Jul-98	Jul-00	16	\$640	Yes	No	
	mitter mose cup	O I II I I I I I I I I I I I I I I I I	1 5,0,111	10,0017111102	oui oo	oui oo	10	φοιο	100	110	
	FY 1999										
8001	MK46 Lead Dropper	Unknown	PD/C/FFP	NAVICP/IMSD	Jul-99	Jul-00	694	\$234	Yes	No	
600 I	MK46 Mod 5 Seawater Battery	Unknown	PD/C/FFP	NAVICP/IMSD	Jul-99 Jul-99	Jul-00 Jul-01	50	\$23 <del>4</del> \$376	Yes	No No	
	MK46 Pressure Cylinder (Short)	Unknown	PD/C/FFP	NAVICE/IMSD	Jul-99	Jul-01	176	\$612	Yes	No	
	MK46 REXTORP Kits	Unknown	PD/C/FFP	NAVICE/IMSD	Jul-99	Jul-01	1,035	\$545	Yes	No	
	MK89 Mod 1 Suspension Band	Unknown	PD/C/FFP	NAVICE/IMSD	Jul-99	Jul-01	1,492	\$491	Yes	No	
	MK50 Starter Actuator	Unknown	PD/C/FFP	NAVICE/IMSD	Jul-99	Jul-01	50	\$699	Yes	No	
	MK50 Boiler Assembly	Unknown	PD/C/FFP	NAVICP/IMSD	Jul-99	Jul-01	25	\$19,676	Yes	No	
	MK50 Oxidant Start Squib	Unknown	PD/C/FFP	NAVICP/IMSD	Jul-99	Jul-01	50	\$108	Yes	No	
	MK50 Oxidant Stop Squib	Unknown	PD/C/FFP	NAVICP/IMSD	Jul-99	Jul-01	50	\$751	Yes	No	
	MK50 Cutter Assembly	Unknown	PD/C/FFP	NAVICP/IMSD	Jul-99	Jul-01	50	\$718	Yes	No	
	MK50 Oxidant Shutdown Valve	Unknown	PD/C/FFP	NAVICP/IMSD	Jul-99	Jul-01	50	\$786	Yes	No	
	MK50 Thermal Battery	Unknown	PD/C/FFP	NAVICP/IMSD	Jul-99	Jul-01	50	\$88	Yes	No	
	MK50 Cold Start Assembly	Unknown	PD/C/FFP	NAVICP/IMSD	Jul-99	Jul-01	50	\$1,604	Yes	No	
	MK50 MK33 Air Stabilizer	Unknown	PD/C/FFP	NAVICP/IMSD	Jul-99	Jul-01	141	\$2,618	Yes	No	
	MK50 MK32 Air Stabilizer	Unknown	PD/C/FFP	NAVICP/IMSD	Jul-99	Jul-01	196	\$2,657	Yes	No	
	MK50 MK14 Nose Cap	Unknown	PD/C/FFP	NAVICP/IMSD	Jul-99	Jul-01	196	\$654	Yes	No	

P-1 SHOPPING LIST NO. PAGE NO. 28 6

#REF!

WEAPON SYSTEMS COST ANALYSIS  B. APPROPRIATION / BUDGET ACTIVITY  C. P-1 ITEM NOMENCLATURE													
	CTIVITY JAVY / 3 - TORPEDOES AND REL	ATED EQUIP	MENT			-		NCLATURE PORT EQUIF	PMENT MK	48 ADCAP			
LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW?	SPEC REV REQ'D?	IF YES, WHEN AVAILABLE			
SUBMARINE WIRE COIL													
FY 1997	UNKNOWN	C/FFP	IMSD	6/97	9/98	914	1255	YES	NO				
FLEX HOSE													
,	UNKNOWN UNKNOWN UNKNOWN	C/FFP C/FFP C/FFP	IMSD IMSD IMSD	6/97 6/98 6/99	8/98 8/99 8/00	523 1400 448	1207 1051 1082	YES YES YES	NO NO NO				
TORPEDO WIRE COIL													
FY 1997	UNKNOWN	C/FFP	IMSD	6/97	9/98	275	1644	YES	NO				
OTTO FUEL													
FY 1996 FY 1997 FY 1998 FY 1999	INDIAN HEAD, MD INDIAN HEAD, MD INDIAN HEAD, MD INDIAN HEAD, MD	PX PX PX PX	IMSD IMSD IMSD IMSD	2/96 10/96 10/97 10/98	10/97 10/98 10/99 10/00	123 907 688 597	5403 4786 5340 5460	YES YES YES YES	NO NO NO NO				
PROPELLANT (NEW)													
FY 1996 FY 1997 FY 1998 FY 1999	UNKNOWN UNKNOWN UNKNOWN UNKNOWN	C/FFP C/FFP C/FFP	IMSD IMSD IMSD IMSD	1/97 8/97 6/98 6/99	8/98 8/99 8/00 8/01	1000 1000 1,303 486	500 526 542 558	YES YES YES YES	NO NO NO				
D. REMARKS  DD Form 2446-1, JUL 87			P-1 SHOPPI		IPAGE NO.					Exhibit P-5a			

DD Form 2446-1, JUL 87	Previous editions are obsolete	P-1 SHOPPING LIST	PAGE NO.	Exhibit P-5a
		ITEM NO.		UNCLASSIFIED
		28	7	CLASSIFICATION

UNCLASSIFIED CLASSIFICATION		WEAPON SY	STEMS COS	ST ANAL	YSIS				A. DATE FEBRUAR	RY 1997
B. APPROPRIATION / BUDGET AG WEAPONS PROCUREMENT, N	CTIVITY IAVY / 3 - TORPEDOES AND RE	LATED EQUIP	MENT			-		NCLATURE PORT EQUIP	MENT MK	48 ADCAP
LINE ITEM/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW?		IF YES, WHEN AVAILABLE
IGNITER										
FY 1996 FY 1997 FY 1998 FY 1999 ARMING DEVICES	QUANTIC INC., CA UNKNOWN UNKNOWN UNKNOWN	C/FFP C/FFP C/FFP	IMSD IMSD IMSD IMSD	2/96 6/97 6/98 6/99	8/96 8/98 8/99 8/00	1101 1155 760 518	133 146 159 164	YES YES YES YES	NO NO NO NO	
FY 1997	UNKNOWN	C/FFP	IMSD	10/96	1/98	54	1130	YES	NO	
UMBILICAL CABLES (IMPROVED)	)									
FY 1996 FY 1997 FY 1998 FY 1999 D. REMARKS	KEYPORT, WA UNKNOWN UNKNOWN UNKNOWN	C/FFP C/FFP C/FFP C/FFP	NUWC IMSD IMSD IMSD	3/96 6/97 6/98 6/99	5/98 5/99 5/00 5/01	362 556 225 279	3250 3509 3803 5865	YES YES YES YES	NO NO NO	

DD Form 2446-1, JUL 87	Previous editions are obsolete	P-1 SHOPPING LIST	PAGE NO.	Exhibit P-5a
		ITEM NO.		UNCLASSIFIED
		28	8	CLASSIFICATION
		·	-	

(EXHIBIT P - 20)  FY98-FY99  BUDGET ACTIVITY: 3-TORPEDOES AND RELATED EQUIPMENT FOR LIGHTWEIGTH TORPEDOES													DATE:	FEE	BRUARY 19	97								
	/. a TODDI	-DOEC ANI	D DELATE	D FOLUDA	ENT FOR I	LICHTME	OTU TODO	ED0E0	(2)		201													
BUDGET ACTIVITY							SW		MK 31 F	RW AIR	MK 28 F	W AIR	TR11 PR	OPELLER	ww	/93	WW94	SWAY	7W78 EX	KT.SWAY	TW	58	5W48 REX	TORP-46
ELEMENT OF STUDY:	DROF	PPER	BAT	ΓERY	CO2 L		EXHST		STABI	ILIZER	STABI	LIZER	BAF	FLE	STATIO	CLINE	BRACE	E PAD	BRAC	E PAD	CO2 SH	HORT	EXPENDA	
100570	FY98	FY99	FY98	FY99	FY98	FY99	FY98	FY99	FY98	FY99	FY98	FY99	FY98	FY99	FY98	FY99	FY98	FY99	FY98	FY99	FY98	FY99	FY98	FY99
ASSETS On Hand as of March 14, 1996:		906		1146		1141		6086		5256		5991		5074		11624		18838		7842		2493		3340
Due-in with all Prior Years' Funds		228		1508		2570		0		0		0		0		0		0		0		500		0.00
Due-in with FY97 Funds		0		440		0		0		0		0		0		0		0		0		0		C
TOTAL ASSETS:		1134		3094		3711		6086		5256		5991		5074		11624		18838		7842		2993		3340
USAGE (Planned & Projected)	653		700		000	•	653		220		770		770		770		224		224		050		040	
March 14,1996 thru FY97: * TSE	653	0	703	0	898	0	653	0	<b>330</b> 330	0	<b>770</b> 770	0	<b>770</b> 770	0	<b>770</b> 770	0	<b>231</b> 231	0	231 231	0	<b>653</b> 653	0	<b>919</b> 919	
* Maintenance	0	0	703	0	898	0	0	0	0	0	0	0	0	0	0	0	0	0	201	0	0	0	0	Č
* Shelf-Life	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	C
FY98:	432	0	417	0	417	0	432	0	222	0	519	0	519	0	519	0	156	0	156	0	432	0	627	(
* TSE (Fleet Firings) * Maintenance	432	0	417	0	0 417	0	432	0	222	0	519	0	519	0	519	0	156	0	156	0	432	0	627	(
* Shelf-Life	0	0	417	0	417	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FY99:	696	ő	696	ő	417	ő	696	ŏ	364	ŏ	850	ő	850	ő	850	ő	255	ŏ	255	ő	696	ŏ	1039	ò
* TSE (Fleet Firings)	696	0	279	0	0	0	696	0	364	0	850	0	850	0	850	0	255	0	255	0	696	0	1039	(
* Maintenance	0	0	417	0	417	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(
* Shelf-Life FY00:	0	0 <b>694</b>	0 <b>694</b>	0	0 <b>505</b>	0	0 <b>694</b>	0	0 <b>364</b>	0	0 <b>849</b>	0	0 <b>849</b>	0	0 <b>849</b>	0	0 <b>255</b>	0	255	0	0 <b>694</b>	0	0 <b>1038</b>	(
* TSE (Fleet Firings)	0	694	277	0	0	0	694	0	364 364	0	849 849	0	849 849	0	849 849	0	255 255	0	255 255	0	694	0	1038	(
* Maintenance	ő	0	417	0	505	Ö	0	Ö	0	Ö	0	ő	0	0	0	0	0	ō	0	ő	0	0	0	Č
* Shelf-Life	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FY01:	0	0	0	694	0	505	0	694	0	363	0	847	0	847	0	847		254	0	254	0	694	0	1035
* TSE (Fleet Firings)  * Maintenance	0	0	0	277 417	0	505	0	694	0	363	0	847	0	847	0	847	0	254	0	254	0	694	0	103
* Shelf-Life	0	0	0	417	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(
FY02:	ō	Ö	Ō	0	0	Ō	Ō	Ö	Ō	ō	Ō	Ö	ō	Ō	Ö	0	Ō	ō	Ō	ō	Ō	0	Ō	Ċ
* TSE (Fleet Firings)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(
* Maintenance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(
FY03:  * TSE (Fleet Firings)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
* Maintenance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	,
TOTAL USAGE:	1781	2475	2510	3204	2237	2742	2475	3169	1280	1643	2988	3835	2988	3835	2988	3835	897	1151	897		2475	3169	3623	4658
NET ASSETS:	-647	-1341	584	-110	1474	969	3611	2917	3976	3613	3003	2156	2086	1239	8636	7789	17941	17687	6945	6691	518	-176	-283	-1318
PROCUREMENT LEADTIME: (MONTHS) ACTUAL TRAINING EXPENDITURE	14	14	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	
FY96:		387		362		0		526		281		337		337		337		120		490		526		423
FY95:		409		380		0		727		357		466		461		461		390		178		727		1020
FY94:		490		490		0		781		278		705		729		729		478		291		781		1020
FY93: FY92:		370 399		348 375		0		0		0		291 340		291 341		340 350		0		340 350		0		
ACTUAL OTHER THAN TRAINING EXPENDITURE		399		3/5		U		U		U		340		341		350		U		350		U		,
FY96:		75		496		620		0		25		25		25		25		43		0		0		
FY95:		72		620		835		0		32		32		32		32		64		11		0		(
FY94:		86		714		1036		0		78		78		78		78		192		19		0		
FY93: FY92:		24 25		714 714		0		0		191 22		191 22		191 22		191 22		0		22 22		0		,
INVENTORY OBJECTIVE		∠5		/ 14		U	1	U		- 22				- 22		22	1	U			1	0	-	
Number of combat Loads:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(
Assets Required for Combat Loads:	0	0		0	0	0	0	0	_ 0	_ 0	0	0	0	0	0	0	0	0	0	0	0	0	0	
War Reserve Requirements: Maintenance Pipeline (Non-Add to AAO):	0	0	0 417	0 417	0 417	0 417	0	0	525	525	1225	1225	1225	1225	1225	1225	0	0	1225	1225	0	0	0	
Annual Training: (Non-Add to AAO):	400	664	417	417 664	417	417	400	664	216	358	503	834	503	834	503	834	590	590	196	325	400	664	627	103
Annual Testing: (Non-Add to AAO)	32	32	32	32	0	0	32	32	7	7	16	16	16	16	16	16	80	80	16	16	32	32	0	100
Supply Pipeline:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL REQUIREMENT:	432	696	849	1113	417	417	432	696	748	890	1744	2075	1744	2075	1744	2075	670	670	1437	1566	432	696	627	103
APPROVED ACQUISITION OBJECTIVE (AAO) PROCUREMENT REQUIREMENT	0	0	0	0	0	0	0	0	525	525	1225	1225	1225	1225	1225	1225	670	670	1225	1225	0	0	0	
Total FY98 Requirement:		0		0		0		0		525		1225		1225		1225		670		1225		0		
Less Net Assets end of FY98 FDP:		-647		584		1474		3611		3976		3003		2086		8636		17941		6945		518		-28
Required FY98 Procurement:		647		0		0		0		0		0		0		0		0		0		0		28
Planned FY98 Procurement (Total)		453 453		100		100		0		0		0		0		0		0		0		0		19 19
* Planned FY98 Procurement (TSE): * Planned FY98 Procurement (Replen):		453 n		100		100		0		0		0		0		0		0		0		0		19
Revised Net Assets end of FY98 FDP:		-194		684		1574		3611		3976		3003		2086		8636		17941		6945		518		-8
Total FY99 Requirement:		0		0		0		0		525		1225		1225		2550		670		1225		0		
Less Net Assets end of FY99 FDP:		-1341		-110		969		2917		3613		2156		1239		7789		17687		6691		-176		-131
Less FY98 Planned Procurement:		453		100		100		0		0		0		0		0		0		0		0		19
Required FY99 Procurement: Planned FY99 Procurement (Total)		888 694		10 100		100		0		0		0		0		0		0		0		176 176		112 103
* Planned FY99 Procurement (Total)		694		50		0		0		0		0		0		0		0		0		176		103
* Planned FY99 Procurement (Replen):		0		50		100		0		0		0		0		0		0		ő		0		.00
Revised Net Assets end of FY99 FDP:		-194		90		1169		2917		3613		2156		1239		7789		17687		6691		0		-8
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PAGE NO.

CLASSIFICATION: Unclassified	WEAPON PROCUREMENT, NAVY REQUIREMENTS STUDY (EXHIBIT P - 20)  AND RELATED EQUIPMENT FOR LIGHTWEIGTH TORPEDOES													DATE:	FE	BRUARY 19	97							
FY98-FY99 BUDGET ACTIVITY: 3-TORPEDOES ANI									,															
ELEMENT OF STUDY:	5V TAIL FY98	/26 .NUT FY99	5W24 INJECTION FY98	GAS ON ASSY FY99	5W23 EI INITIATOI FY98		5W20 GENER FY98			ILER EMBLY FY99	5W18 CI ASSEM FY98		5W19 S ACTU FY98		5W11 OX START FY98		5W12 OXII STOP SO FY98		START FY98			XIDANT VN VALVE FY99	5W15 THE BATTE FY98	
ASSETS On Hand as of March 14, 1996: Due-in with all Prior Years' Funds Due-in with FY97 Funds TOTAL ASSETS:		158 643 0 801		155 480 0 635		940 0 0 940		953 0 0 953		656 247 55 958		164 0 0 164		998 0 0 998		723 0 92 815		380 114 148 642		644 200 0 844		711 100 41 852		296 0 379 675
USAGE (Planned & Projected) March 14,1996 thru FY97:  * TSE (Fleet Firings)  * Maintenance  * Shelf-Life FY98:  * TSE (Fleet Firings)  * Maintenance  * Shelf-Life FY99:  * TSE (Fleet Firings)  * Maintenance  * Shelf-Life FY00:  * TSE (Fleet Firings)  * Maintenance  * Shelf-Life FY00:  * TSE (Fleet Firings)  * Maintenance  * Shelf-Life FY01:  * TSE (Fleet Firings)  * Maintenance  * Shelf-Life FY02:  * TSE (Fleet Firings)  * Maintenance  * Shelf-Life FY02:  * TSE (Fleet Firings)  * Maintenance  * TSE (Fleet Firings)  * Maintenance  * TOTAL USAGE:  NET ASSETS:  PROCUREMENT LEADTIME: (MONTHS)  ACTUAL TRAINING EXPENDITURE	55 50 00 55 50 00 00 55 50 00 00 00 00 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	88 33 55 00 77 22 55 00 07 77 25 00 00 00 00 00 00 00 00 00 00 00 00 00	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	75 75 75 0 0 0 50 50 0 0 0 283 50 0 0 0 0 0 0 0 0 0 0 458 482 24	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	219 75 144 0 175 50 125 0 125 0 125 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	75 75 75 0 0 50 50 0 0 0 0 0 50 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 744	0 0 0 0 0 0 0 0 0 0 0 0 1255 50 1255 0 0 0 0 0 0 1456 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	219 75 144 0 175 50 125 0 175 50 125 0 0 175 0 0 0 0 0 0 0 0 0 744 -102 24	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	75 75 75 75 75 75 75 75 75 75 75 75 75 7	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	219 75 144 0 175 500 125 0 1755 500 125 0 0 0 0 0 0 0 0 0 744 1088	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	219 75 1444 0 175 50 0 175 50 125 0 175 50 0 175 0 0 0 0 0 0 0 0 0 744 -69 24	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FY96: FY94: FY93: FY92: ACTUAL OTHER THAN TRAINING EXPENDITURE FY96: FY95: FY94: FY93: FY92:		227 158 128 0 0 0		0 0 0 0 0 8 14 22 0		0 0 0 0 0 268 536 438 220 322		0 0 0 0 136 273 426		0 0 0 0 0 179 278 438 220 322		0 0 0 0 29 55 86 0		0 0 0 0 0 179 278 452 220 322		0 0 0 0 0 179 278 452 220 322		0 0 0 0 0 179 278 452 220 322		0 0 0 0 0 179 278 440 220 322		0 0 0 0 179 278 452 220 322		0 0 0 0 0 179 278 452 220 322
INVENTORY OBJECTIVE Number of combat Loads: Assets Required for Combat Loads: War Reserve Requirements: Maintenance pipeline (Non-Add to AAO): Annual Training (Non-Add to AAO): Annual Testing: Supply Pipeline: TOTAL REQUIREMENT: APPROVED ACQUISITION OBJECTIVE (AAO)	0 0 0 0 50 50 50	0 0 0 0 0 50 0 50	0 0 125 0 50 0 175	0	0 0 0 0 0 50 0 50	0 0 0 0 0 50 50	0 0 0 0 0 50 0 50	0 0 0 0 0 50 0 50	0 0 0 125 0 50 0 175	0 0 125 0 50	0 0 0 0 0 50 0 50	0 0 0 0 0 50 50	0	0 0 0 125 0 50 0 175	0 50 0	0 0 0 125 0 50 0 175	0 0 0 125 0 50 0 175	0 0 0 125 0 50 0 175	0 0 0 0 50 50	0 0 0 0 0 50 0 50	0 0 0 125 0 50 0 175	0 0 0 125 0 50 0 175	0 0 0 125 0 50 0 175	0 0 0 125 0 50 0 175
PROCUREMENT REQUIREMENT Total FY98 Requirement: Less Net Assets end of FY98 FDP: Required FY98 Procurement: Planned FY98 Procurement (Total) Planned FY98 Procurement (TSE): Planned FY98 Procurement (Replen): Revised Net Assets end of FY98 FDP:	<u> </u>	0 781 0 0 0 0 781		0 606 0 0 0 0		0 482 0 0 0 0 482	0	0 728 0 0 0 0 728		0 214 0 50 0 50 264	3	0 -61 61 61 0	0	0 42 0 0 0 0 0		0 71 0 0 0 0 71		0 -102 102 102 50 52 0	8	0 619 0 0 0 0		0 108 0 0 0 0	7	0 -69 69 70 50 20
Total FY99 Requirement: Less Net Assets end of FY99 FDP: Less FY98 Planned Procurement: Required FY99 Procurement (Total) Planned FY99 Procurement (Total) Planned FY99 Procurement (TSE): Planned FY99 Procurement (Replen): Revised Net Assets end of FY99 FDP:		776 0 0 0 0 0 0 776		0 507 0 0 0 0 0 0 507		0 70 0 0 0 0 0 0		0 678 0 0 0 0 0 0 678 SHOPPI		0 39 50 0 75 25 50 164	PAGE	0 -111 61 50 50 50 0		0 -133 0 133 133 50 83		104 0 104 104 50 54		0 -277 102 175 175 50 125		0 569 0 0 0 0 0		0 -67 0 67 100 50 50 33	TION: Ung	70 -244 70 174 174 50 124

PAGE NO. 10 CLASSIFICATION: Unclassified

WEAPON PROCUREMENT, NAVY REQUIREMENTS STUDY (EXHIBIT P - 20) DATE: FEBRUARY 1997 FY98-FY99
PURCET ACTIVITY: 2 TORREDOES AND DELATED COLLIDMENT FOR LIGHTWEIGTH TORREDOES

ELMENT OF STUDY:  SEVEL COLD STYSS  TYSS	BUDGET ACTIVITY: 3-TORPEDOES AND R	ELATED EQ	<u>UIPMENT</u> F	OR LIGHTV	<u>VEIGTH T</u> O	RPEDOES									
Section   Column		5W21 START I	COLD HEATER	5W14 MI RW STA	K 33 AIR BILIZER	CWDN M FW STA	BILIZER	NOSE	CAP	SUSPE	N.BAND	SCUTTLI	E VALVE	NOSI	E CAP
Gain of March 14, 1986    62   239   30   149   62   27   77   77   77   78   77   78   78	ASSETS											1			
## PYPE PLUGS ## 1991 ## 1992 ## 1993 ## 1994 ## 1995	On Hand as of March 14, 1996:				239				1494				7		1277
SSETTE PROPOSOTION  Filed Firings  773  784  785  785  785  785  785  785  785	Due-in with all Prior Years' Funds		511		0		871		0		5801		239		C
Figure 25   Projected   Proj	Due-in with FY97 Funds						0		0		U				
4.1996 thus Figs.  Figs. Fings)  Fings Fings  Fings Fings  Fings Fings  Fings Fings  Fings Fings  Fings Fings  Fings Fings  Fings Fings  Fings Fings  Fings	TOTAL ASSETS:		573		239		901		1494		5863		246		1277
Filest Firmings	JSAGE (Planned & Projected)														
Internance	March 14,1996 thru FY97:						0		0			33	0		
Fight Frings    178	* TSE (Fleet Firings)		-	178	-	416	0		0	1694	0		0	178	
Pieter Finniggs    175	* Maintenance	144		0	v	0	0	0	0	0	0	0	0	0	
	* Shelf-Life	475		0	v	0	0	0	0	4440	0	0	0	0	1 9
tenance   125   0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	FY98:	1/5			-		0		Ü		U		U		
File	* Maintanana	50		111		259	0	259	0	1110	0		0	111	
Fleet Firings   175	* Shelf-Life	125		0	0	0	0	0	0	0	0	0	0	0	1 2
	FY99:	175		85	Ŏ	197	ŏ	197	Ŏ	1/05	ŏ	35	ŏ	85	1 6
Interance   125				85 85			0		0		0		0		
Lile	* Maintenance			00		137	0		0	1435	0	0	0	00	il č
Pleat Filings    176	* Shelf-Life	120		ő	_	ő	ő	ő	0	0	ő	Ö	ő	o o	l č
Filest Firings   50	FY00:	175		85		197	ŏ	197	ŏ	1492	ŏ	35	ŏ	85	ا م
tenance	* TSE (Fleet Firings)		-				ñ		n		n		0		
Life	* Maintenance		ő	0	ő	0	ő	0	ő	0	ő	0	Ö	0	ıl c
(Fleet Firings)	* Shelf-Life	0		Ö	Ö	Ö	ō	Ö	Ö	Ō	Ö	Ö	Ō	Ō	i c
(Fleet Finings)   0	FY01:	0	175	0		0	196		196	0	1492	0	35	0	
Lile	* TSE (Fleet Firings)	0	50	0	84	0	196		196	0	1492	0	35	0	
(Fleet Firings)	* Maintenance	0	125	0	0	0	0	-	0	0	0	0	0	0	C
(Fleet Firings)	* Shelf-Life	0	0	0	0	0	0	-	0	0	0	0	0	0	C
tenance	FY02:	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(Fleet Firings)	* TSE (Fleet Firings)	0	0	0	0	0	0	0	0	0	0	0	0	0	<u> </u>
(Fleet Finings)	* Maintenance	0	0	0	0	0	0	0	0	0	0	0	0	0	
Infeance	FY03:	0	•	0	0	0	0	0	0	0	0	0	0	0	_ ~
SAGE   744   919   459   543   1069   1265   1069   1265   5791   7283   1255   160   459   543   585   575   7283   125   160   459   543   585   575   7283   125   160   459   543   585   585   120   121   86   818   734   7		0	0	0	0	0	0	0	0	0	0	0	0	0	
EFS: -171 - 346 - 220 - 304 - 168 - 364 - 425 - 229   72 - 1420 - 121   86 - 818   734   734   74 - 74   74	* Maintenance OTAL USAGE:	744	010	450	543	1060	1265	1060	1265	5701	7202	125	160	450	L 543
REMENT LEADTIME: (MONTHS)	IET ASSETS:				343		1203		1203		1420	123			
TRAINING EXPENDITURE  0							-304		229			24	24		
OTHER THAN TRAINING EXPENDITURE  179		24	0	24	24	24	24	24	0	27	27	24	24	24	
OTHER THAN TRAINING EXPENDITURE    179	FY96:		0		125		195		195		880		13		195
OTHER THAN TRAINING EXPENDITURE  179 179 37 55 56 56 50 115 55 56 50 116 55 56 50 117 462 89 200 45 45 43 43 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	FY95:		-												
OTHER THAN TRAINING EXPENDITURE  179 37 55 55 55 55 55 55 50 115 55 55 55 55 55 55 55 55 55 55 55 55	FY94:		0				0		0		0		0		
OTHER THAN TRAINING EXPENDITURE  179 37 55 58 107 452 89 208 208 54 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	FY93:		0		0		0		0		0		0		C
179	FY92:		0		0		0		0		0		0		C
278	CTUAL OTHER THAN TRAINING EXPENDITURE														
AFE   Regular	FY96:														
220	FY95:														
DRY OBJECTIVE  or of combat Loads:  or or of combat Loads:  or or or or or or or or or or or or or o	FY94:												0		
DRY OBJECTIVE	FY93:						43		43		0		0		43
ro focmbat Loads:	Y92:	ļ	322		75		0		0		0		0		C
Required for Combat Loads: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			_	_	_	_		_		_	_	_	_	^	] _
Serve Requirements:   0   0   105   105   245   245   245   245   245   240   2100   0   0   0   105		0		0	0	0	0	0	0	0	0	0	0	0	] ;
lance Pipeline (Non-Add to AAO):  125		0		105	105	245	245	245	245	2100	2100	0	0	105	100
Training (Non-Add to AAO):    Training (Non-Add to AAO):   0		125		105		240	243	245	245	2100	2100	0	0	105	
Pipeline   0   0   0   0   0   0   0   0   0	Annual Training (Non-Add to AAO):	125		100		234	172	234	172	1053	1438	400	664	100	
Pipeline   0   0   0   0   0   0   0   0   0	Annual Testing:	50				254		254	25			32	32		
IEQUIREMENT:   175   175   216   190   504   442   504   442   3210   3595   432   696   216   190   216   245	Supply Pipeline:	0		, i			20			0		0		n	
RED ACQUISITION OBJECTIVE (AAO)   0   0   105   105   245   245   245   245   240   2100   0   0   105   1	OTAL REQUIREMENT:	175		216	190		442			3210		432		216	
REMENT REQUIREMENT	PPROVED ACQUISITION OBJECTIVE (AAO)	0	0									0			
(98 Requirement:     0     105     245     245     2100     0     105       at Assets end of FY98 FDP:     -171     -220     -168     425     72     121     816       d FY98 Procurement:     171     325     413     0     2028     0     0       d FY98 Procurement (Total)     171     228     289     0     1420     0     0       ad FY98 Procurement (Replen):     50     228     289     0     1420     0     0       at FY98 Procurement (Replen):     121     0     0     0     0     0     0     0       I Net Assets end of FY98 FDP:     0     8     121     425     1492     121     818       (99 Requirement:     0     105     245     245     2100     0     105       14 Assets end of FY99 FDP:     -346     -304     -364     229     -1420     86     734       (99 Planned Procurement     171     228     289     0     1420     0     0       d FY99 Procurement:     175     181     320     16     2100     0     0       d FY99 Procurement (Total)     175     141     196     16     1492     0     0 <t< td=""><td>ROCUREMENT REQUIREMENT</td><td>1</td><td>1</td><td></td><td></td><td>-</td><td>Ť</td><td></td><td></td><td></td><td></td><td>j</td><td></td><td></td><td>1</td></t<>	ROCUREMENT REQUIREMENT	1	1			-	Ť					j			1
at Assets end of FY98 FDP:	Total FY98 Requirement:		0		105		245		245				0		105
d FY98 Procurement: 171 325 413 0 2028 0 0 6 171 228 289 0 1420 0 0 28	Less Net Assets end of FY98 FDP:				-220		-168		425		72		121		818
ad FY98 Procurement (TSE):     50     228     289     0     1420     0     0       ad FY98 Procurement (Replen):     121     0     0     0     0     0     0     0       I Net Assets end of FY98 FDP:     0     8     121     425     1492     121     818       (99 Requirement:     0     105     245     245     2100     0     105       st Assets end of FY99 FDP:     -346     -304     -364     229     -1420     86     734       99 Planned Procurement     171     228     289     0     1420     0     0     0       d FY99 Procurement:     175     181     320     16     2100     0     0     0       d FY99 Procurement (Total)     175     141     196     16     1492     0     0       d FY99 Procurement (TSE):     50     141     196     16     1492     0     0	Required FY98 Procurement:				325		413		0		2028		0		C
ad FY98 Procurement (TSE):     50     228     289     0     1420     0     0       ad FY98 Procurement (Replen):     121     0     0     0     0     0     0     0       I Net Assets end of FY98 FDP:     0     8     121     425     1492     121     818       (99 Requirement:     0     105     245     245     2100     0     106       st Assets end of FY99 FDP:     -346     -304     -364     229     -1420     86     734       99 Planned Procurement     171     228     289     0     1420     0     0       d FY99 Procurement:     175     181     320     16     2100     0     0       d FY99 Procurement (Total)     175     141     196     16     1492     0     0       d FY99 Procurement (TSE):     50     141     196     16     1492     0     0	Planned FY98 Procurement (Total)				228		289		0		1420		0		(
Net Assets end of FY98 FDP:   0   8   121   425   1492   121   818     199 Requirement:   0   105   245   245   2100   0   105     140	* Planned FY98 Procurement (TSE):		50		228		289		0		1420		0		C
/99 Requirement:     0     105     245     245     2100     0     105       st Assets end of FY99 FDP:     -346     -304     -364     229     -1420     86     734       99 Planned Procurement     171     228     289     0     1420     0     0       d FY99 Procurement:     175     181     320     16     2100     0     0       if FY99 Procurement (Total)     175     141     196     16     1492     0     0       ad FY99 Procurement (TSE):     50     141     196     16     1492     0     0	* Planned FY98 Procurement (Replen):		121				0		0		0		0		0
## Assets end of FY99 FDP:  ##	Revised Net Assets end of FY98 FDP:		0		8								121		
/99 Planned Procurement     171     228     289     0     1420     0     0       d FY99 Procurement:     175     181     320     16     2100     0     0       b FY99 Procurement (Total)     175     141     196     16     1492     0     0       ad FY99 Procurement (TSE):     50     141     196     16     1492     0     0	Total FY99 Requirement:		U										0		
d FY99 Procurement: 175 181 320 16 2100 0 175 181 1799 Procurement (Total) 175 141 196 16 1492 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Less Net Assets end of FY99 FDP:								229				86		734
I FY99 Procurement (Total) 175 141 196 16 1492 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Less FY99 Planned Procurement								0				0		(
ed FY99 Procurement (TSE): 50   141   196   16   1492   0   0	Required FY99 Procurement:												0		(
	Planned FY99 Procurement (Total)		175		141		196				1492		0		
	* Planned FY99 Procurement (TSE):						196		16		1492		0		0
	* Planned FY99 Procurement (Replen):		125		0		. 0		.0		0		_0		_ 0
Net Assets end of FY99 FDP:   0   65   121   245   1492   86   734	Revised Net Assets end of FY99 FDP:	<u> </u>	0		65		121		245		1492				734
P-1 SHOPPING LIST NO. PAGE NO. 28 11							L	P	'-1 SHOPPII		).				

Dec-In with PY07 Funds				ROCUR			,								WE	EAPON	PROC	UREM	ENT, N	AVY		L			
### SECORATIO PRIVING INCOMPANIES (1982)   1982   1						DY										(	EXHIB	IT P - 2	:0)			DATE:	FEBRU	JARY 1	.997
ELICHATY OF SITURY    Micro Col.   Micro Col		HEAVY	WEIGH	T TORPI	EDOES									3-TOR	PEDOES	S AND	RELAT	ED EQ	UIPMEN	NT FOR	HEAVY	WEIGH	T TORE	EDOES	
Property   Property		Torp	pedo	Subma	arine							Otto	Fuel					Prope	ellant	Umbi	lical	Umbi	lical	Chamk	oer &
Dot Hand as of Agr 24, 1996;   1996;   1997;   1998;	ELEMENT OF STUDY:											FY98	FY99	FY98	FY99	FY98	FY99								
Damin with all Prior Years' Funds 1909 2266 120 100 100 100 100 100 100 100 100 100			7221		4702		1041		E 0 0 0		160		2222		2262		6027		1400				2174		2202
Prof.   Prof.   Prof.   Prof.     Prof.		l ds					1041		5699		163						6027				897				108
UNADEC   Clammed & Projected   Clamped   Cla									F000		1.01						6007						0005		2201
Test Dags		(53M)		(50M)		(52M)		(52M)		(53M)		(53M)		(52M)		(52M)			3558	(61M)		(49M)		(54M)	(12M)
# Marchen-Depot Mointenance   1037   1046   1352   1079   0.2   557   940   471   473   73   322   3279   748   74	Apr 24, 1996 thru FY97:																								
FYSE    1985		1685		1917		361		1/01		0.3		1092		16/5		1256		419		111				530	
## Narchet Depot Maintenance   1059   1120   372   1076   0.1   534   872   132   741   70   272   272   272   272   272   272   272   273	FY98:																								
### PATE Clause		1037		1063		192		1079		0.2		537		950		475		475		74				232	
#Marshot Depot. Maintenance	FY99:																								
FYOOL Dates		1059		1120		371		1076		0.1		534		872		131		741		70				272	
#Warehot Depot Maintenance		864		724	241	212	23	839	73	0.1		509		763	69			763	69	45	22			207	
# YOUR Damps		864		724	241	212	23	839	73	0.1		509		763	69			763	69	45	22			207	
**YSSE Unage **Warshot Depot Maintenance **YOST MARCE! **Warshot Depot Maintenance **YOST MARCE! **Warshot Depot Maintenance **YOST MARCE! **STRINGS **Warshot Depot Maintenance **YOST MARCE! **STRINGS **TOTAL MARCE! **WARSHOT DEPOT Maintenance **YOST MARCE! **TOTAL MARCE! **T			873		725		426		511		0.1		497		765				765		67			18	193
### Total Unage			873		725				511		0.1		497						765		67				193
**TSE Cleage **Warkshot Depot Maintenance **P13*** **TSE Cleage **Warkshot Depot Maintenance **TOTAL URAGE:** **Markshot Depot Maintenance **TOTAL URAGE:** **Ma																									18
**************************************	* TSE Usage																								18
**TEX Usage **TOTAL NUMBER Depot Maintenance **GASE 873 4823 966 1137 449 4595 584 0.7 0.1 2672 497 4259 835 1652 2390 835 299 80 254 1259 321 **EFT ALTONIA DEPOT ME: (MONTES) **PROCURSHINT LEADTIME: (MONTES) **24 21 21 22 23 23 24 24 25 22 22 22 24 24 25 23 24 24 25 22 24 26 25 22 24 26 25 22 24 26 25 22 24 26 25 24 26 26 24 26 25 24 26 26 26 26 26 26 26 26 26 26 26 26 26																									
TOTAL USAGE:   4646   873   4823   966   1137   449   4505   584   0.7   0.1   2672   497   4259   835   1862   2398   835   229   89   254   1259   212	* TSE Usage																								
NET ASSETS:  PROCUEERIT LEADTIME: (MONTHS)		1616	972	1922	966	1127	110	1605	594	0.7	0 1	2672	197	1250	035	1962		2308	835	200	90	25/		1250	212
ACTUAL TRAINING EXPENDITURE																	4165						2041		1921
FY96: FY95: FY96:		24	24	21	21	23	23	23	23	24	24	24	24	23	23	23	23	23	23	32	32	20	20	25	25
FY94:			452		532		32		500		0.2		234		532		532		532				32		65
## ACTUAL OTHER THAN TRAINING EXPENDITURE FY96: FY96: FY96: FY96: FY97: S153 S129 S129 S133 S170 FY94: S186 S192 S186 S192 S186 S192 S135 S189 S187 S171 S171 S171 S171 S171 S171 S171											0.4														101
FY96: FY95: S353 129 S32 226 FY94: S18 192 S35 129 S36 129 S36 129 S37											1														65 40
FY95: 518 192 335 138 273 273 273 273 275 FY93: 138 279 375 138 275 138 27		TURE																							
FY94:							79																		68 71
Number of combat Loads   Assets Required for Combat Loads   1845   1513   1955   1596   1368   1363   1368   1543   2283   1845   1882   1541   1882   1541   1364   1358   1364   1358   136	FY94:		518		192				335				138		273		273		273				2		74
Number of combat Loads:   Assets Required for Combat Loads   1845   1513   1955   1596   1368   1368   1368   1543     2283   1845   1882   1541   1882   1541   1364   1358   1368			659		216				415				156		308		308		308				1		73
## Reserve Requirements: Annual Training: Annual Training: Maintenance Pipeline: Other - Peacetime Pipeline: Other - Peacetime Pipeline: Other - Peacetime Pipeline: Other - Surveillance/Proofing 19 23 Other - Special Firings 46 54 27 32 9 16 18 16 12 11 11 14 22 72 22 27 1 1 1 1 1 4 5	Number of combat Loads:																								
Annual Training: Annual Training: Annual Training: Annual Training: Annual Training: Annual Training: Annual Training: Annual Training: Annual Training: Annual Testing:  Maintenance Pipeline: Other - Peacetime Pipeline Sid 54 486 482 486 482 241 99 Other - Peacetime Pipeline Sid 54 534 486 482 486 482 486 482 171 77 77 535 535 535 535 535 535 327 339 337 319 535 535 Other - Surveillance/Proofing 19 23 Other - Surveillance/Proofing 19 23 Other - Special Firings Sid 54 64 54 64 64 12 2 2 211 11 TOTAL REQUIREMENT: APPROVED ACQUISITION OBJECTIVE PROQUEMENT: APPROVED ACQUISITION OBJECTIVE PROQUEMENT: Total FY98 Requirement: Less Net Assets end of FY98 FDP: Required FY98 Procurement (Total) Planned FY98 Procurement (Total) Planned FY98 Procurement (Replen): Planned FY98 Procurement (Replen): Revised Net Assets end of FY99 FDP: Less FY98 Planned FY99 Procurement (Total) Planned FY99 Pr		1845	1513	1955	1596	1368	1363	1368	1543			2283	1845	1882	1541	1882	1541	1882	1541	1364	1358	1364	1358	1368	1362
Maintenance Pipeline:	Annual Training:	643	632	756	744	205	304	545	440	0.1	0.1	360	354	756	744	756	744	756	744	20	30	41	30	124	122
Other - Peacetime Pipeline   534   534   486   482   486   482   486   482   486   482   171   171   77   77   77   535		157	162	1 2 2	101	2/1	200	2/1	۵٥															60	6.0
Other - Surveillance/Proofing 19 23 do ther - Special Firings 46 54 27 32 9 16 18 16 1 27 32 54 64 54 64 12 2 2 2 11 11 1 1 1 4 5										171	171	77	77							327	319	327	319		535
TOTAL REQUIREMENT:   3243   2920   3405   3045   2308   2444   2658   2579   171   171   2758   2322   3249   2911   3249   2911   3249   2911   1713   1711   1735   1711   2110   2104   2104   2444   2124   2467   2110   1863   1861   1872   2041   171   171   2738   2328   2493   2167   2493   2167   2493   2167   1693   1680   1694   1680   1918	Other - Surveillance/Proofing		23			_										22		22	27		1	1	1	4	5
APPROVED ACQUISITION OBJECTIVE   2444   2124   2467   2110   1863   1861   1872   2041   171   171   2398   1968   2493   2167   2493   2167   2493   2167   1693   1680   1694   1680   1918	TOTAL REQUIREMENT:	3243	2920	3405	3045		2444	2658	2579			2758	2322	3249	2911	3249	2911	3249	2911	1713			1711	2110	2104
Total FY98 Requirement:	APPROVED ACQUISITION OBJECTIVE	2444	2124	2467	2110	1863	1861	1872		171	171	2398	1968	2493	2167	2493	2167	2493	2167	1693	1680	1694	1680	1918	1915
Less Net Assets end of FY98 FDP: Required FY98 Procurement (Total)			2444		2467		1863		1872		171		2398		2493		2493		2493		1693		1694		1918
Planned FY98 Procurement (Total)   Planned FY98 Procurement (TSE)   Planned FY98 Procurement (TSE)   Planned FY98 Procurement (TSE)   Planned FY98 Procurement (Prod):	Less Net Assets end of FY98 FDP:						461		1204				666		1667				1160		1233				2132
* Planned FY98 Procurement (Prod): * Planned FY98 Procurement (Prod): * Planned FY98 Procurement (Replen): Revised Net Assets end of FY98 FDP: Less Net Assets end of FY99 FDP: Less Net Assets end of FY99 FDP: Less FY98 Planned FY99 Procurement: Required FY99 Procurement: Required FY99 Procurement: Required FY99 Procurement: Required FY99 Procurement Required FY99 Procurement Required FY99 Procurement (Total) * Planned FY99 Procurement (Prod): * Planned FY99 Procurement (Replen): Required FY99 Procurement (Replen): * Planned FY99 Procurement (Replen): Revised Net Assets end of FY99 FDP: * 2384 2213 1861 620 170 169 * Planned FY99 Procurement (Replen): * Planned FY99 Pro									668		1														
* Planned FY98 Procurement (Replen): Revised Net Assets end of FY98 FDP: 3258 3179 1861 1204 170 1368 2453 4165 2489 1463 2041 213  Total FY99 Requirement: Less Net Assets end of FY99 FDP: 2384 2213 13 620 170 169 832 4165 326 1144 2041 192  Less FY98 Planned Procurement: Required FY99 Procurement: Required FY99 Procurement (Total) **Planned FY99 Procurement (Total) **Planned FY99 Procurement (Total) **Planned FY99 Procurement (Replen): Revised Net Assets end of FY99 FDP: 2384 2213 1861 620 170 1479 2158 4165 2163 1657 2041 1923  **Planned FY99 Procurement (Replen): Revised Net Assets end of FY99 FDP: 2384 2213 1861 620 170 1479 2158 4165 2163 1657 2041 1923	* Planned FY98 Procurement (TSE)												688		760				1303		225				
Revised Net Assets end of FY98 FDF: 3258 3179 1861 1204 170 1368 2453 4165 2489 1463 2041 2137  Total FY99 Requirement: 2124 2110 1861 2041 171 1968 2167 2167 2167 1680 1919  Less Net Assets end of FY99 FDF: 2384 2213 13 620 170 169 832 4165 326 1144 2041 1929  Less FY98 Planned Procurement: Required FY99 Procurement (Total) 448 1420 1 1097 549 512 306  Planned FY99 Procurement (Total) 448 6 279 486 279													14		26				26		5				
Less Net Assets end of FY99 FDP: 2384 2213 13 620 170 169 832 4165 326 1144 2041 1921 1825 FY98 Planned Procurement: Required FY99 Procurement (Total) 448 448 48 48 48 48 48 48 48 48 48 48 4	Revised Net Assets end of FY98 FI		0-00				-00-						-000												2132
Less FY98 Planned Procurement: Required FY99 Procurement (Total) Planned FY99 Procurement (Total) **Planned FY99 Procurement (TSE)  **Planned FY99 Procurement (Prod): **Planned FY99 Procurement (Replen): Revised Net Assets end of FY99 FDP: 2384 2213 1861 620 170 1479 2158 4165 2163 1657 2041 192:  P-1 SHOPPING LIST NO.  PAGE NO.  1400 1400 1400 1400 1400 1400 1400 14																									1915
Planned FY99 Procurement (Total)	Less FY98 Planned Procurement:		2384		ZZ13				020		1/0						4105						2041		1921
* Planned FY99 Procurement (TSE)	Required FY99 Procurement:								1420		1								512		306				
* Planned FY99 Procurement (Prod):  * Planned FY99 Procurement (Replen): Revised Net Assets end of FY99 FDP: 2384 2213 1861 620 170 1479 2158 4165 2163 1657 2041 192:  P-1 SHOPPING LIST NO. PAGE NO. P-1 SHOPPING LIST NO.																									
Revised Net Assets end of FY99 FDP: 2384 2213 1861 620 170 1479 2158 4165 2163 1657 2041 192: P-1 SHOPPING LIST NO. PAGE NO. PAGE NO.	* Planned FY99 Procurement (Prod	):																							
P-1 SHOPPING LIST NO. PAGE NO. P-1 SHOPPING LIST NO.			2384		2213		1861		620		170		1479		2158		4165		2163		1657		2041		1921
28   12   28	ACTION NOT ABBOD CHA OF F199 F1	P-1					E NO.		020		1,0		1119		2130				ING LIS	ST NO.	1037		2011		1721
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### <u>UNCLASSIFIED</u> CLASSIFICATION

BUI	OGET ITEM 、	JUSTIFICATI	ON SHEET	DoD EXHIE	BIT P-40		Febru	ary 1997		
APPROPRIATION/BUDGET ACT	TIVITY			P-1 ITEM NOMENCLATURE						
WEAPONS PROCUREMENT, NAVY/B	A 3 - TORPEDO	ES AND RELATE	ED EQUIPMENT	ASW RANGE SUPPORT (83F4)						
	FY 96	FY 97	FY 98	FY 99	FY 00	FY01	FY02	FY03		
QUANTITY										
COST (IN MILLIONS) 17.6 14.5 11.8 14.6 15.3							13.0	13.2		

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). Proofing ranges are Nanoose, Dabob Bay and Quinault.

Pinger Exercise/Proofing Components are placed in weapons and other underwater vehicles for tracking during training exercises and proofing runs, and to insure safe operation and movement of all craft and weapons on the ranges. Additionally, tracking allows analysis of proofing tests and Fleet training exercises. Without this analysis, satisfactory training benefits and weapon performance data would not be realized on the Navy underwater training ranges.

Recovery Equipment is used on proofing ranges for recovering weapons on or buried in the sea floor. Approximately \$70 million of hardware is recovered each year using these devices.

Range Proofing provides for Underwater Weapons Evaluation Facility, range equipment for YTT(Yard Torpedo Tender) test crafts, and other numerous range equipment in support of Test and Evaluation operations on the proofing ranges.

P-1 SHOP	PAGE NO	UNCLASSIFIED
LIST ITEM	1	CLASSIFICATION
NO 29		

## BUDGET ITEM JUSTIFICATION SHEET DoD EXHIBIT P-40

February 1997

APPROPRIATION/BUDGET ACTIVITY
WEAPONS PROCUREMENT, NAVY/BA 3 - TORPEDOES AND RELATED EQUIPMENT

P-1 ITEM NOMENCLATURE ASW RANGE SUPPORT (83F4)

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.

MK 28 Targets are used for conducting Service Weapons Tests (SWT) on in-service and advanced warshot torpedoes. The SWT is the only test the Navy has to test the explosive chain of torpedoes. These funds are used to procure target systems and components expended during SWT operations in addition to improvement and modernization projects.

MK 69 Target is a bottom mounted stationary target used on proofing ranges for weapon Test & Evaluation testing. This funding is for improvement and modernization projects that improve maintenance and operability of the target.

The Over-the-side (OTS) Target is a surface deployed and will test as many weapon performance attributes as practical at the lowest possible procurement, deployment and turnaround costs. This target is needed to fill specific technical requirements for MK 48 ADCAP and MK 50 torpedoes. These funds are used to procure components that improve operability and maintenance of the target.

Production support services will fund support efforts performed by a field activity or contractor during the production phase of these projects.

P-1 SHOF	PAGE NO	UNCLASSIFIED
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NO 29		

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OLLARS	S		
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	COST		
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## CLASSIFICATION: UNCLASSIFIED

DD Form 2454, JUN 86

	BUDG	ET ITEM JU	JSTIFICATI	ON SHEET	•		DATE:		7
			P-40					ry 1997	
APPROPRIATION					P-1 ITEM NO				
Weapons Pro		•					2410		
BA - 3 Torpe							ISPORTAT		<u>/</u> 93T <i>A</i>
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	
QUANTITY									
COST (In Millions)	\$3.9	\$2.6	\$2.0	\$2.0	\$2.0	\$2.1	\$2.1	\$2.2	
initial point of recei	pt for subsequent s	nipment to its d	estination.						
			P-1 SHOPP	ING LIST		CLASSIFICA	TION:		_

PAGE NO. 1

ITEM NO. 30

**UNCLASSIFIED** 

### **CLASSIFICUINCLASSIFIED**

		ONS SY	STEN						DATE Febr	: ruary 1997			
Weap	PRIATION/BUDGET ACTIVITY pons Procurement, Navy Torpedoes and Related Eq	uipmen	it	P-1 ITEM NON		ATURE/SUBHE Destination		ransportation (FDT) / 93TA					
					TOTAL	COST IN THO	COST IN THOUSANDS OF DOLLARS						
COST	ELEMENT OF COST	IDENT CODE		FY 1996		FY 1997		FY 1998		FY 1999			
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COS			
TA001	First Destination Transportation			3,918		2,566		2,008		2,028			
	RM 2446, JUN 86			3,918 NG LIST		2,566		2,008 CLASSIFICAT		2,028			

P-1 SHOPPING LIST
ITEM NO. 30 PAGE NO. 2

**UNCLASSIFIED** 

#### UNCLASSIFIED

EXHIBIT P-1

DEPARTMENT OF THE NAVY

FY 1998/1999 PROCUREMENT PROGRAM

APROPRIATION: 1507N Weapons Procurement, Navy

DATE: 02/04/97

LINE NO ITEM NOMENCLATURE	IDENT	DOLLARS FY1998	FY 19	006	FY 1	007	FY 1		IILLIONS OF I	
LINE NO TEM NOMENCEATORE	CODE	UNIT COST	QUANTITY	COST	QUANTITY	COST	QUANTITY	COST	QUANTITY	COST
BUDGET ACTIVITY 04: Other Weapons										
Guns And Gun Mounts										
31 4129 Small Arms and Weapons	Α			0.	9	0.	9	1.	0	0.9 U
Modification Of Guns And Gun Mounts										
32 4205 CIWS Mods	Α			32.	0	24.	9	10.	0	3.7 U
33 4210 5/54 Gun Mount Mods	Α			2.	5	2.	8	0.	2	0.9 U
34 4213 MK-75 76MM Gun Mount Mods	Α			0.	9	0.	7	-		- U
35 4220 Mods Under \$2 Million	Α			1.	6	1.	6	1.	3	1.3 U
Other										
36 4222 Pioneer				-		-		46.	7	19.9 U
37 4500 Cancelled Account Adjustments				3.	6	-		-		- U
38 4600 Prior Year Deficiencies				0.	1	-		-		- U
TOTAL Other Weapons				41.	6	30.	8	59.	2	26.6

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

Budget Plan (amounts for PROCUREMENT actions programed) \_\_\_\_\_ 1996 actual 1997 est. 1998 est. 1999 est. Identification code 17-1507-0-1-051 \_\_\_\_\_\_ Program by activities: Direct program: 00.0101 Ballistic missiles 508,776 316,332 341,412 319,657 00.0201 Other missiles 802,532 844,202 612,993 910,722 125,607 120,594 95,715 126,284 41,615 30,815 59,230 26,648 00.0301 Torpedoes and related equipment 00.0401 Other weapons 00.0501 Other Ordnance 00.0601 Spares and repair parts 62,167 46,490 26,943 52,429 \_\_\_\_\_ \_\_\_\_\_ 00.9101 Total direct program 1,540,697 1,358,433 1,136,293 1,435,740 01.0101 Reimbursable program 641 74,800 74,800 74,800 \_\_\_\_\_ \_\_\_\_ 10.0001 1,541,338 1,433,233 1,211,093 1,510,540 Total Financing: Offsetting collections from: 11.0001 Federal funds(-) -541 -74,800 -74,800 -74,800 14.0001 Non-Federal sources(-) -100 17.0001 Recovery of prior year obligations Unobligated balance available, start of year: 21.4002 For completion of prior year budget plans 21.4003 Available to finance new budget plans -68,963 21.4009 Reprograming from/to prior year budget plans -19,781 22.1001 Unobligated balance transferred to other accounts 2,500 Unobligated balance available, end of year: 24.4002 For completion of prior year budget plans 25.0001 Unobligated balance expiring 9,093 1,463,546 1,358,433 1,136,293 1,435,740 39.0001 Budget authority \_\_\_\_\_\_ Budget authority: 1,641,505 1,389,913 1,136,293 1,435,740 40.0001 Appropriation 40.3601 Appropriation rescinded (unob bal) -14,600 40.7501 Reduction pursuant to P.L. 104-208 (-), 8037(h) -3,682 41.0001 Transferred to other accounts (-) -193,177 -27,798 42.0001 Transferred from other accounts 43.0001 Appropriation (adjusted) 1,463,546 1,358,433 1,136,293 1,435,740

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

			Obligations							
Identifi	cation code 17-1507-0-1-051	1996 actual	1997 est.	1998 est.	1999 est.					
P	Program by activities:									
	Direct program:									
00.0101	Ballistic missiles	542,059	358,595 889,447	327,492						
00.0201	Other missiles	954,331	889,447	602,197						
00.0301	Torpedoes and related equipment	125,800	121,852	116,946	121,301					
00.0401	Other weapons		29,431	50,823	31,828					
00.0501	Other Ordnance	13,358								
00.0601	Spares and repair parts	58,629	47,853	48,022	48,191					
00.9101	Total direct program	1,742,395	1,447,178	1,145,480	1,385,411					
01.0101	Reimbursable program	663	74,925	74,800	74,800					
10.0001	Total	1,743,058	1,522,103	1,220,280	1,460,211					
F	Financing:									
	Offsetting collections from:									
11.0001	Federal funds(-)	303	-74,800	-74,800	-74,800					
14.0001	Non-Federal sources(-)	14,344								
17.0001	Recovery of prior year obligations	-3,074								
	Unobligated balance available, start of year:									
21.4002	For completion of prior year budget plans	-698,539	-464,823	-375,953	-366,766					
21.4003	Available to finance new budget plans	-68,963								
21.4009	Reprograming from/to prior year budget plans									
22.1001	9	2,500								
	Unobligated balance available, end of year:									
24.4002	For completion of prior year budget plans		375,953	366,766	417,095					
25.0001	Unobligated balance expiring	9,093								
39.0001	Budget authority	1,463,546	1,358,433	1,136,293	1,435,740					
	Budget authority:									
40.0001	Appropriation	1,641,505	1,389,913	1,136,293	1,435,740					
40.3601	Appropriation rescinded (unob bal)	-14,600								
40.7501	Reduction pursuant to P.L. 104-208 (-), 8037(h)		-3,682							
41.0001	Transferred to other accounts (-)	-193,177	-27,798							
42.0001	Transferred from other accounts	29,818								
43.0001	Appropriation (adjusted)	1,463,546	1,358,433	1,136,293	1,435,740					

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

0,1; ----

		Obligation		
Identification code 17-1507-0-1-051	 1996 actual	1997 est.	1998 est.	1999 est.
Relation of obligations to outlays:				
71.0001 Obligations incurred	1,757,705	1,447,303	1,145,480	1,385,411
72.1001 Orders on hand, SOY	-80,181	-37,434	-37,434	-37,434
72.4001 Obligated balance, start of year	4,183,692	3,286,784	2,668,165	2,198,465
74.1001 Orders on hand, EOY	37,434	37,434	37,434	37,434
74.4001 Obligated balance, end of year	-3,286,784	-2,668,165	-2,198,465	-2,141,609
77.0001 Adjustments in expired accounts (net)	12,874			
78.0001 Adjustments in unexpired accounts	-3,074			
90.0001 Outlays (net)	2,621,666	2,065,922	1,615,180	1,442,267

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

Identification code 17-1507-0-1-051	1996 actual	1997 est.	1998 est.	1999 est.
Direct obligations:				
125.101 Advisory and assistance services	35,154	26,777	22,185	25,915
Purchases goods/services (inter/intra) Fed accounts				
125.303 Purchases from revolving funds	105,464	90,331	76,554	87,745
126.001 Supplies and materials	72,491	95,265	61,702	94,453
131.001 Equipment	1,529,286	1,234,805	985,039	1,177,298
199.001 Total Direct obligations	1,742,395	1,447,178	1,145,480	1,385,411
Reimbursable obligations:				
226.001 Supplies and materials		20,768	21,262	21,900
231.001 Equipment	663	54,157	53,538	52,900
299.001 Total Reimbursable obligations	663	74,925	74,800	74,800
999.901 Total obligations	1,743,058	1,522,103	1,220,280	1,460,211

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

	FY 1997 Total Program Requirements Per FY 1997 Budget	FY 1997 Program Requirements Per FY 1998 Budget	Increase (+) or Decrease (-)
Ballistic Missiles	323,149	316,322	-6,817
Other Missiles	738,239	844,202	+105,963
Torpedoes and Related Equipment	110,682	120,594	+9,912
Other Weapons	31,467	30,815	-652
Ammunition	149,355	0*	-149,355
Spares and Repair Parts	47,471	46,490	-981
Subtotal Direct Program	1,400,363	1,358,433	-41,930
Reimbursable	74,800	74,800	-
Total Fiscal Year	1,475,163	1,433,233	-41,930

<sup>\*</sup>Funding appropriated in the Procurement Ammunition, Navy & Marine Corps appropriation.

### Explanation of Changes in FY 1997 Program Requirements

- 1. Ballistic Missiles (-\$6.8 million)
  - Decrease reflects undistributed Congressional reductions.
- 2. Other Missiles (+\$106.0 million)

The overall funding increase reflects the net of undistributed Congressional reductions (-\$19.9 million) and reduced funding for Ordnance Support Equipment (-\$4.6M) offset by Congressional increases for additional Standard Missiles (+\$22.5 million), Tomahawk (+\$11.5 million), AMRAAM (+\$21.9 million), JSOW (+\$15.6 million, Penguin (+\$7 million), Drones and Decoys (+\$17.5 million), Tomahawk modifications (+\$14.4 million), and Harpoon/SLAM (+\$20.1 million).

3. Torpedoes and Related Equipment (+\$9.9 million)

Changes include Congressional undistributed reductions (-\$3.1 million) and additional funding provided by Congress for the Vertical Launch ASROC program (+\$13 million).

4. Other Weapons (-\$0.7 million)

Changes reflect adjustments for Congressional undistributed reductions.

5. Ammunition (-149.4 million)

The FY 1997 President's Budget reflected \$149.355 million for Navy ammunition procurement in the Weapons Procurement, Navy (WPN) appropriation. The Congress transferred this amount to the Procurement of Ammunition, Navy & Marine Corps (PANMC) appropriation. FY 1998 and out funding is now reflected in this appropriation.

6. Spares & Repair Parts (\$-1.0 million)

This funding reduction is due to an undistributed Congressional reduction.

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

	FY 1997 Financing Per FY 1997 Budget	FY 1997 Financing Per FY 1998 Budget	Increase (+) Decrease (-)
Program Requirements (Total) Program Requirements (Direct) Program Requirements (Re imb)		1,433,233 (1,358,433) (74,800)	-41,930 (-41,930) -
Less: Anticipated Reimbursements	74,800	74,800	-
Add:  Unob bal avail, start of year to finance new budget plans Unob bal avail, end of year to finance subseq yr budget pl Reprog, prior year budget	ans		
Appropriation Adjusted	1,400,363	1,358,433	-41,930
Budget Authority: FY 1997 DoD Appropriations Act Appropriation rescinded Reduct Pursuant to P. L. 104-2 Transferred to other accounts		1,389,913 -3,682 -27,798	-10,450 -3,682 -27,798
Appropriation (Adjusted)	1,400,363	1,358,433	-41,930

### Explanation of Changes in Financing

The FY 1997 Weapons Procurement, Navy appropriation financing (\$1,358.4 million for direct and \$74.8 million for reimbursable) was subsumed within the WPN appropriations' Programming and Financing exhibits. The \$41.9 million change in program requirements is the result of Congressional reductions (-\$10.5 million), and Sect. 8037(h) (-\$2,376 thousand), and Sect. 8120 (-\$27,798 thousand) and Sect. 8138 (-\$1,306 thousand) adjustments.

## Comparison of FY 1996 Program Requirements as Reflected in the FY 1997 Budget with FY 1996 Program Requirements as Shown in FY 1998 Budget (In Thousands of Dollars)

	FY 1996 Total Program Requirements Per FY 1997 Budget	FY 1996 Total Progr Requirements Per FY 1998 Budget	or
Ballistic Missiles	505,431	508,776	+3,345
Other Missiles	814,857	802,532	-12,325
Torpedoes and Related Equipment	124,934	125,607	+673
Other Weapons	42,155	41,615	-540
Ammunition	*	*	_
Spares and Repair Parts	61,323	62,167	+844
Subtotal Direct Program	1,548,700	1,540,697	-8,003
Reimbursable	74,800	641	-73,159
Total Fiscal Year	1,623,500	1,541,338	-82,162

<sup>\*</sup>Funding appropriated in the Procurement Ammunition, Navy and Marine Corps appropriation.

### Explanation of Changes in FY 1996 Program Requirements

1. Ballistic Missiles (+\$3.3 million)

Increase reflects minor year of execution adjustments.

2. Other Missiles (-\$12.3 million)

Decrease reflects minor programmatic execution adjustments (-\$11.5 million) and Omnibus Reprogramming action (-\$.8 million).

- 3. Torpedoes and Related Equipment (+\$0.7 million)
  Change reflects minor funding updates.
- 4. Other Weapons (-\$0.5 million)
  Change reflects minor year of execution adjustments.
- 5. Ammunition

Funding realigned to the Procurement Ammunition, Navy & Marine Corps appropriation.

6. Spares & Repair Parts (+\$0.8 million)
Change reflects min or adjustments to reflect year of execution issues.

## Comparison of FY 1996 Financing as Reflected in the FY 1997 Budget with FY 1996 Financing as Shown in FY 1998 Budget (In Thousands of Dollars)

	FY 1996 Financing Per FY 1997 Budget	FY 1996 Financing Per FY 1998 Budget	Increase (+) Decrease (-)
Program Requirements (Total) Program Requirements (Direct) Program Requirements (Reimb)	1,623,500 (1,548,700) (74,800)	1,541,338 (1,540,697) (641)	-82,162 (-8,003) (-73,159)
Less: Anticipated Reimbursements	74,800	641	-73,159
Add: Unob bal avail, start of year to finance new budget plans:	-64,963	-68,963	-4,000
Unob bal transf to other accts Reprogramming from/to prior year budget plans	2,500	2,500 -19,781	- -19,781
Appropriation Adjusted	1,486,237	1,463,546	-22,691
Budget Authority: FY 1996 DoD Appropriations Act Appropriation rescinded Transferred from other accts Transferred to other accounts	1,656,193 -14,600 29,818 -185,174	1,641,505 -14,600 29,818 -193,177	-14,688 - - -8,003
Appropriation (Adjusted)	1,486,237	1,463,546	-22,691

### Explanation of Changes in Financing

The -\$22.7 million change in program financing is the result of the actual FY 1996 Congressional appropriation (-\$14.7 million) and transfers to other accounts (-\$8.0 million).

#### **UNCLASSIFIED**

	DATE:											
	FEBRUARY 1997											
APPROPRIATION/BUDGET ACTIVITY P-1 ITEM NOMENCLATURE BLI - 412900												
Weapons Procurement, Navy/BA-4: Other	Weapons Procurement, Navy/BA-4: Other Weapons						Small Arms and Weapons 84E3					
	1996	1997	1998	1999	2000	2001	2002	2003				
QUANTITY												
COST (In Millions)	\$ .9	\$ .9	\$ 1.0	\$ .9	\$ .9	\$ .9	\$ .9	\$ 1.0				

Item 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.

For the foreseeable future, the small arms procurement funding will be urgently needed to support the SECNAV's physical security upgrade (anti-terrorism) program at all naval shore activities and Middle East force deployments.

FY 1996 FY 1997 FY 1998 FY 1999 FY 2000 FY 2001 FY 2002 FY 2003

Funding Totals \$ 915 \$ 853 \$ 994 \$ 887 \$ 904 \$ 926 \$ 949 \$ 974

P-1 SHOPPING LIST

EXHIBIT P-40

ITEM NO. 31

PAGE NO. 1

UNCLASSIFIED



CLASSIFICATION: UNCLASSIFIED

	I	BUDGET ITEM P-40		DATE:	EBRUARY 1997			
APPROPRIATION/E	BUDGET ACTIVIT	Y		1	P-1 ITEM NOME	ENCLATURE		
							ine Item 420	5
WEAPONS PRO	CUREMENT, N	IAVY/BA: 4 Ot	MK-15 CLOS	SE IN WEAPON	N SYSTEM (M	ODS)		
	FY 96	FY 97	FY 98	FY 99	FY 00	FY 02	FY 03	
QUANTITY								
COST (In Millions)	\$39.2	\$24.9	\$10.0	\$3.7	\$3.1	\$1.0	\$0.5	\$0.0
CURRENT AND PROJECTINCORPORATE A BUILDI THE PHALANX SYSTEM A AGAINST EVOLVING THE THE BUDGET REFLECTS	ING BLOCK TECHNIQU AVAILABLE AND MAINT REATS.	JE TO EVOLVE NEEDE TAINABLE. THE BLOC	ED PERFORMANCE CK 1A (HOLC) PROVI	TO HANDLE THE T IDES MEMORY AND	THREAT AND INTEGE D PERFORMANCE IN	RATE NECESSARY R& MPROVEMENTS REQU	RM FEATURES TO KE	EEP
	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03
DT002 ORMS	22,895	12,559						
DT003 11G2 TRAINER	381	206						
DT801 PROD ENGR SVC	•	3,826						
DT802 PROD SPT SVC	2,080	1,471	129	18	13		23	
DTINS INSTALL DTDSA INSTALL	7,191	6,640 198	9,556 305	3,456 177	3,023 57	963 16	474 0	
TOTAL	39,178	24,900	9,990	3,651	3,093	993	497	C
DD Form 2454. JUN			P-1 SHOPPING FEM NO. 32 F	LIST PAGE 1				

CLASSIFICATION: UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED																		F	ebruary 1997
P3A		INDIVIDUAL	MODIFICATION																
MODIFICATION TITLE:	PHALANX CIWS BLC	CK I ORDALTS (	DT001)																
MODELS OF SYSTEM AFFECTED:	PHALANX CIWS BLOCK 0																		
DESCRIPTION/JUSTIFICATION:	THE BLOCK I MODIF		OV CHADACTERIST	SC INCLUDE	A FOURTEEN	OLD INCOL	. A C E INI C E A D	CH ELEVA	TION										
DESCRIPTION/JUSTIFICATION.									TION										
	ANGLE, A 50% INCRI																		
	MAINTAINABILITY (R							TED											
	ANTISHIP MISSILE (A	ASM) THREATS F	OR WHICH THERE	S NO CURRE	NT MEANS OF	SELF DEFE	NSE.												
DEVELOPMENT STATUS/MAJOR																			
DEVELOPMENT MILESTONES:																			
DEVELOPINIENT MILESTONES.																			
																TO	TO		
		FY 96														COMP	COMP	TOTAL	TOTAL
	QTY	& PRIOR	QTY FY9	' QTY	FY 98	QTY	FY 99	QTY	FY 00	QTY	FY 01	QTY	FY 02	QTY	FY 03	QTY	COST	QTY	COST
FINANCIAL PLAN (IN THOUSANDS)	<u></u>																		
RDT&E		96622.0																0	96622.0
PROCUREMENT	229	284268	0 0	0	0	0	0	0	0	0	0	0	0		0	0	0	229	284268.0
	229	204200	0 0	U	U	U	U	U	U	U	U	U	U		U	U	U		
QUANTITY																		0	0.0
INSTALLATION KITS	229	261276.0																229	261276.0
PRODUCTION ENGINEERING																		0	0.0
SERVICES		13801.0																0	13801.0
PRODUCTION SUPPORT																		0	0.0
SERVICES		9191.0																0	9191.0
		9191.0																	
DATA																		0	0.0
TRAINING EQUIPMENT																		0	0.0
SUPPORT EQUIPMENT																		0	0.0
OTHER																		0	0.0
INTERIM CONTRACTOR SUPPORT																		0	0.0
INSTALLATION OF HARDWARE																			
FY96 EQUIPMENT & PRIOR	184	33576	15 6640	10	9556	8	3456	7	3023	4	963	1	474					229	57688.00
FY97 EQUIPMENT																		0	0.00
FY98 EQUIPMENT																		0	0.00
FY99 EQUIPMENT																		0	0.00
FY00 EQUIPMENT																		0	0.00
FY01 EQUIPMENT																		0	0.00
FY02 EQUIPMENT																		0	0.00
TO COMPLETE			198		305		177		57		16							0	753.00
																		0	0.00
TOTAL INSTALLATION COST		33576	6838		9861		3633		3080		979		474		0		0		58441.0
TOTAL INGUALIZATION GOOT		33370	0000		3001		3033		3000		313		7/7		- 0				30441.0
TOTAL PROCUREMENT COST	229.0	284268.0	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		284268.0
TOTAL COST		317844.0	6838	0	9861.0		3633.0		3080.0		979.0		474.0		0.0		0.0		342709.0
	PRIOR YEAR INSTA																		2 23.0
	FRIOR TEAR INSTA	LEG HNOLUDE BL	OOK I DECONNIN AS	,L10															
METHOD OF IMPLEMENTATION:				ADMINIS	TRATIVE LEAD	TIME: 0 MC	ns				PRODLICTION	JI FADTIME	: 24 MONTHS						
INC. 1.05 S. IWI ELWENTATION.	BLOCK I CONVERSION	ONG WILL BE AG	COMPLICATED AT A					CILITY				· CENDIIIVIE	+	•					
	CONVERSION WILL		HED CONCURRENT			UL OF BLO													
CONTRACT DATE:	PRIOR YEAR: JUL 9				NT YEAR: N/A			BUDGET Y											
PRODUCTION DELIVER DATE:	PRIOR YEAR: JUL 9	7		CURREN	NT YEAR: N/A			BUDGET Y	/EAR: N/A										
WOTALL ATION CONFERNICE																			
INSTALLATION SCHEDULE:																			
INPUT =====>	FY 97	FY 98	FY 9		FY 00	_	FY01	_	FY 02		FY03	_	TC			_			
	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3	4	1, 2, 3, 4		1, 2, 3, 4		1, 2, 3, 4		1, 2, 3, 4		1, 2, 3, 4				TOTAL		
FY 96 & prior 184	02,04,03,06	02,04,04,00	00,06,0		00,03,04,00		00,03,01,00		00,00,01,00		00,00,00,00		00,00,00,00	_			229	_	
FY 97			,		,														
FY 98																			
FY 99																			
FY 00																			
OUTPUT ====>	EV 07	EV 00	E/0	,	EV 00		EV 04		FY 02		EVO2		TO						
OUIPUI =====>	FY 97 1, 2, 3, 4	FY 98 1, 2, 3, 4	FY 9		FY 00 1, 2, 3, 4	-	FY 01 1, 2, 3, 4	•	1, 2, 3, 4		FY03 1, 2, 3, 4	•	1, 2, 3, 4	•		-	TOTAL		
EV on applier the						_										_		-	
FY 96 &PRIOR 180	00,02,08,03	04,02, 00, 06	00,04,0	,04	00,00,03,02		00,02,02,02		00,00,00,01		00,00,00,00		00,00,00,00				229		
FY 97																			
FY 98																			
FY 99																			P-3A
FY 00																			

### UNCLASSIFIED

	DATE:							
				FEBRUARY 1	997			
APPROPRIATION/BUDGET ACTIVITY		P-1 ITEM NOW	IENCLATURE	BLI - 421000				
Weapons Procurement, Navy/B	Weapons Procurement, Navy/BA-4: Other Weapons							A4E5
	1996	1997	1998	1999	2000	2001	2002	2003
QUANTITY								
COST (In Millions)	\$ 2.5	\$ 2.8	\$ .2	\$ .9	\$ 9.9	\$ 10.0	\$ 10.3	\$ 10.5

Item Description/Justification:

E5006 SAFETY/SHOCK ORDALTS - This element is for procurement of gun safety and shock hardening ORDALTS for 5"/54 MK 42 and MK 45 gun mounts.

Safety/Shock ORDALTS	<u>FY 96</u> \$ 2,533	<u>FY 97</u> \$ 2,816	<u>FY 98</u> \$ 241	<u>FY 99</u> \$ 924	<u>FY 00</u> \$ 9,823	<u>FY 01</u> \$ 8,229	<u>FY 02</u> \$ 7,522	<u>FY 03</u> \$ 6,572
Fire Support ORDALTS	\$0	\$0	\$0	\$0	\$74	\$1,786	\$2,736	\$3,955
Total Program	\$2,533	\$2,816	\$241	\$924	\$9,897	\$10,015	\$10,258	\$10,527

P-1 SHOPPING LIST

**EXHIBIT P-40** 

ITEM NO. 33

PAGE NO. 1

UNCLASSIFIED



### **UNCLASSIFIED**

	BUDGET ITE	M JUSTIFICA	ATION SHEE	Т			DATE:								
	P-40														
APPROPRIATION/BUDGET ACTIVIT															
Weapons Procurement, Na	vy/BA-4: Other We	eapons		MK75/76	MM GUN M	OUNT MOD	OS A4DU								
	1996	1997	1998	1999	2000	2001	2002	2003							
QUANTITY															
COST (In Millions)	\$ .9	\$ .7	\$ .0	\$ .0	\$ .0	\$ .0	\$ .0	\$ .0							

Item Description/Justification:

This funding will provide for the procurement of safety/shock ORDALT alterations for the MK75 gun mounts.

The ORDALTS will provide safety improvements for FFG 7, USCG WMEC 270 and USCG WHEC

Installation of Mod Equipment - FY96 and out are turn-key installations.

	<u>FY 96</u>	<u>FY 97</u>	<u>FY 98</u>	FY 99	<u>FY 00</u>	<u>FY 01</u>	<u>FY 02</u>	<u>FY 03</u>
Safety/Shock ORDALTS	\$ 877	\$ 672	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0

P-1 SHOPPING LIST

**EXHIBIT P-40** 

ITEM NO. 34

PAGE NO. 1



#### **UNCLASSIFIED**

	<b>BUDGET ITE</b>	M JUSTIFICA	TION SHEET	-			DATE:								
	DDIATION/DUDGET ACTIVITY														
APPROPRIATION/BUDGET ACTIVITY							BLI - 422000								
Weapons Procurement, Navy/	Weapons Procurement, Navy/BA-4: Other Weapons MODS UNDER \$2 MILLION														
	1996	1997	1997	1997	1997	1997	2002	2003							
QUANTITY															
COST (In Millions)	\$ 1.6	\$ 1.6	\$ 1.6	\$ 1.6	\$ 1.6	\$ 1.6	\$ 1.4	\$ 1.5							

### Item Description/Justification:

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.

Cost Element E6001: This element procures ORDALTS required to improve safety and reliability for minor caliber ordnance much of which is outdated and difficult to support. It provides initial fill kits and replacement of surveyed and outdated minor caliber ordnance for active ships. This element also procures MK11 saluting mounts and related components.

	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
Minor Caliber ORDALTS	\$ 1.600	\$ 1.574	\$ 1.574	\$ 1.574	\$ 1.574	\$ 1.574	\$ 1.438	\$ 1.476

**EXHIBIT P-40** 

### CLASSIFICATION: UNCLASSIFIED

### **INDIVIDUAL MODIFICATION**

P-3	A
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I VA									
MODIFICATION TITLE: MINOR CA	ALIBER ORDN	ANCE - E600	)1						
MODELS OF SYSTEM AFFECTED:	20MM THRO	OUGH 40MM	I GUN SYSTE	MS AND 60M	M AND 81M	IM MORTARS			
DESCRIPTION/JUSTIFICATION: P	PROVIDES FOR	R ORDALTS	, INITIAL FILL	KITS AND M	K 11 SALUT	ING MOUNTS			
DEVELOPMENT STATUS/MAJOR DEV	ELOPMENT MIL	ESTONES:							
FINANCIAL PLAN (in millions)	FY 95 & PRIO	R <u>FY 96</u> QTY \$	<u>FY</u> <u>97</u> QTY \$	<u>FY</u> <u>98</u> QTY \$ Q	<u>FY</u> <u>99</u> ΓY \$ Q1	<u>FY 00                                    </u>	<u>1 FY 02</u> \$ QTY \$	TO COMP QTY \$	L <u>Total</u>
RDT&E	QIY \$	QIY \$	QIY \$	QIY \$ Q	IY Ş QI	IT 5 QIT	\$ QIY \$	QIY \$	
PROCUREMENT									
KIT QUANTITY INSTALLATION KITS	8.	4 1.6	3 1.6	1.3	1.3	1.4	1.4 1.	4 Continuing	Continuing
INSTALLATION KITS	_	+ 1.0	1.0	1.5	1.5	1.4	1.4 1.	+ Continuing	Continuing
EQUIPMENT									
EQUIPMENT NONRECURRING ENGINEERING CHANGE ORDERS									
DATA									
TRAINING EQUIPMENT									
SUPPORT EQUIPMENT OTHER									
INTERIM CONTRACTOR SUPPORT									
INSTALLATION OF HARDWARE	0.2	2							
FY 1995 & PRIOR TOTAL INSTALLATION COST	0.2	•							0.2 0.2
TOTAL INSTALLATION COST TOTAL PROCUREMENT COST	0.2 8.6		1.6	1.3	1.3	1.4	1.4 1.4	Continuing	0.2 Continuing
METHOD OF IMPLEMENTATION:	INSTALLATION	NS ARE MAD	_	CTURING ACT		Р	RODUCTION LE	ADTIME:	
CONTRACT DATE:	Prior Year:	Various	Current	-	rious	Budget Year:	Various		
PRODUCTION DELIVER DATE: INSTALLATION SCHEDULE:	Prior Year:	Various	Current	t Year: Va	rious	Budget Year:	Various		
INPUT									
OUTPUT								_	
				ITEM NO	. 35 PAGE NO	D. 2	CLASSIFI	CATION: UN	CLASSIFIED

DD Form 2454, JUN 86

### UNCLASSIFIED

BU	DGET ITEM		TION SHEE	Т			DATE:								
		P-40					Februa	ry 1997							
APPROPRIATION/BUDGET ACTIVITY	MENCLATUR														
Weapons Procurement, Navy															
BA 4 - Other Weapons	4 - Other Weapons Reconnaissance														
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003							
QUANTITY															
COST (In Millions)	*	**	\$46.7	\$19.9	\$10.9	\$7.9	\$8.0	\$0.0							

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 systems support U.S. Navy operations, including current testing/evaluation and deployment aboard three configured LPD ships; three systems 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 FY1996 procurement funds were used to buy critical spare parts and obsolescence engineering change proposals (ECPs). In FY1997 procurement funds will buy air vehicles, payloads, attrition spares and engineering change proposals such as plotter ECP, TCU air conditioner ECP, PCS autotracking ECP, engine improvements and shipboard antennas. In FY 1998 funds are requested for air vehicles 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 for FY98. 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-1 SHOPPING LIST

ITEM NO. 36 PAGE NO. 1

**UNCLASSIFIED** 

CLASSIFICATION:

<sup>\*</sup> Prior to FY 1997 the Pioneer program was budgeted in the Procurement, Defense-Wide appropriation.

<sup>\*\*</sup> FY 1997 Pioneer is budgeted in the Other Procurement, Navy (OPN) appropriation.

### CLASSIFICUNCLASSIFIED

	WEAPO	NS SY		I COST ANA	LYSIS				DATE <b>Febr</b>	uary 1997
Weap	PRIATION/BUDGET ACTIVITY  Cons Procurement, Navy  - Other Weapons			P-1 ITEM NOM	<b>Pion</b>	ATURE/SUBHE eer UAV Do onnaissand	efens			
				•	TOTAL	COST IN THO	USANE	S OF DOLLAR	S	
COST	ELEMENT OF COST	IDENT CODE		FY 1996		FY 1997		FY 1998		FY 1999
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
	Pioneer System									
	Unit Support Hardware Production Support Air Vehicles Payloads			* * * * * *		** ** **	15 20	16,200 3,400 9,900 2,000		6,000 3,400
	Engineer Change Proposals (ECPs)			*		**		15,185		10,475
*	Prior to FY 1997 the Pioneer program	was bud	dgeted	in the Procurem	nent, De	    efense-Wide app 	ororpria	tion.		
**	FY 1997 Pioneer is budgeted in the O	ther Pro	cureme	ent, Navy (OPN)	approp	priation.				
				0		0		46,685		19,875

	BUDGET PROCU	REMENT	HISTORY AN				-	•	A. DATI	≣ ary 1997
B. APPROPRIATION/BU Weapons Procure BA 4 - Other Wea	ement, Navy			Pioneer	UAV Def	ense Airb Program	orne	SUBHEAD		BD
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 AVAILABL
Pioneer UAV										
FY1998 - Payloads	Pioneer UAV, Inc. Hunt Valley, MD	SS/FFP	UAV-JPO	Jan 98	Jun 98	20	100	Yes		
FY1998 - Air Vehicles	Pioneer UAV, Inc. Hunt Valley, MD	SS/FFP	UAV-JPO	Jan 98	Sep 98	15	660	Yes		
D. REMARKS		<u> </u>	1	l				1		

998/99 BUDGET PRO	DUC	CTIO	N SCI	IEDI	P-1 I	TEM	MOM	ENCI	ATU	RE										DAT	ГЕ								
								Pio	ne	er l	J۸۱	V D	AR	P	- T	BD				Fe	ebr	ua	ry	19	97				
ITEM / MANUFACTURER/			ACCEP.	BAL.					FI	SCA	L YE	AR	1997											199					
PROCUREMENT YEAR	S	PROC.		DUE		1996	6				CA	LEN	DAR	YEA	R 19	997						CALE	END	AR Y	EAR	1998	3		L
	E R	QTY	TO 1 OCT	AS OF	0	N	D	J	F	М	Α	М	J	J	Α	s	0	N	D	J	F	М	Α	М	J	J	Α	S	A T
	V		001	1 OC	C T	0 V	E C	A N	E B	A R	P R	A Y	U N	U L	U G	E P	C T	0 V	E	A N	E B	A R	P R	A Y	U N	U L	U G	E P	E
					H	V		14	D	IX	11		IV	Ė	0		H	V	C	14		IX	11	'	14	-	U		R
FY 1998 Payload		20	0	20																Α					5	5	5	5	0
FY 1998 Air Vehicle		15	0	15																Α								3	12
1 1 1000 / til Verliele		10		-10																-									
TOTAL	0	35	0	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	5	8	12
TOTAL	Ľ	33	_	33	0	N	D	J	F	M	A	М	J	J	A	S	0	N	D	J	F	M	A	M	J	J	A	S	12
					C T	0 V	E C	A N	E B	A	P R	A	U	U	U	E	C T	0 V	E	A N	E B	A R	P R	A	U	U	U G	E	
	PROD	UCTIO	N RATES	KCIT		V	C	N	В					NT L	EAD			V	C	N	В	K		MARI			G	Р	
NUFACTURER'S NAME AND LOCATI	1.16.4		MAXIMUM									A	DMIN	۱ L				M	ANU-		T	OTAL							
				<u> </u>									TIME PRIC	_		AFTI		FACT	TURII	,	AFTE	R							
Pioneer UAV, Inc.	N/A	N/A	N/A								1	OC	т	1	1 00	Т		TIME			1 OC	т							
Hunt Valley, MD																													
					Initial Air Vehicles							0			3			8			11								
	-				REO	RDER F	ΣΔΥΙΛ	ΔΔ.				0			3			5			8		•						
					KEU	יחבו ו	ATLU	MU				U			3			0			0								

Y 1998/99 BUDG	ΕT	PF	₹0	Dι	IC.	TIC	N	SC	CH	ED	UL	Ε	P-1	ITEM	INON	/ENC	CLAT	URE										DAT	E							
															P	ior	iee	r U	IA۱	/ D	AR	P	- 1	ВІ	)			Fe	eb	rua	ary	1	99	7		
					FISC	CAL	YEA	R 19	999							F	ISC	AL Y	ΈΑF	R 20	000							F	ISC/	AL YI	EAR	200	)1			
ITEM/MANUFACTURER/		1998	В				CAL	END	DAR	YEA	AR 1	999							CAL	ENE	DAR	YEA	R 2	000					С	ALE	NDA	R YI	EAR	200	1	
PROCUREMENT YEAR	O C T	N O V	D E C	J A N	F E B	M A R	Р	M A Y	JUN	U	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	JUN	JUL	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	Р	M A Y	JUN	JUL	A U G	S E P
Y 1998 Air Vehicle	3	3	3	3																																
		<u></u>																																		
TOTAL	3	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	O C T	N O V		J A N	F E B	M A 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	JUL	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	JUZ	$J \cup L$	A U G	S E P

DD Form 2445, JUL 87 Previous editions are obsolete P-1 SHOPPING LIST ITEM NO 36 PAGE NO. 5 Page of Pages
311/244 4-70 Exhibit P-21 Production Schedule



### **UNCLASSIFIED**

		BUDGET ITI P-40		CATION S	HEET		DATE: FEBRUAR	Y 1997							
APPROPRIATION/BUDGET ACTIVITY WEAPONS PROCUREMENT, NAV BA-4 OTHER WEAPONS	EAPONS PROCUREMENT, NAVY(WPN)														
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003							
QUANTITY															
COST (In Millions)	* \$3.6	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0							

THIS LINE ITEM PROVIDES REPROGRAMMED FUNDS TO COVER COSTS ASSOCIATED WITH PROGRAMS IN CANCELLED FISCAL YEARS.

PAYMENTS AGAINST CANCELLED FISCAL YEARS:

FY 1983 5
FY 1984 1847
FY 1985 837
FY 1986 866
FY 1987 5
FY 1988 143
TOTAL 3703

P-1 SHOPPING LIST

CLASSIFICATION:

ITEM NO.-

PAGE NO. 1

**UNCLASSIFIED** 

DD Form 2454, JUN 86

<sup>\*</sup> There is \$148K funding mistakenly identified under P-1 #38 "Prior Year Deficiencies" due to a computer miscalculation. These funds should be included in this line item.

### **UNCLASSIFIED**

		WEAF	PON S	YSTEM	COST	ANAL	YSIS.			DATE: FEBRU	ARY 1997
APPRO	OPRIATION/BUDGET ACTIVITY					P-1 IT	EM NOMENCL	ATURI	E/SUBHEAD		
WPN/E	BA-4 OTHER WEAPONS						CANCELLE	D AC	COUNT ADJ	USTME	NTS X4PY/7
						TOTA	L COST IN TH	DUSAN	IDS OF DOLLAR	RS	
COST	ELEMENT OF COST	IDENT CODE		FY 1996			FY 1997		FY 1998	FY 1	999
			QTY	TOTAL	COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
840EP 84FE1 85FE1 860EH 86FE1 87FE1	Harpoon FY 83 Sidewinder Mods FY 84 Standard Missile FY 84 Standard Missile FY 85 Harpoon FY 86 Standard Missile FY 86 Standard Missile FY 87 Standard Missile FY 88				5 478 1,369 837 28 838 5 143	* *					
	* These amounts are mistakenly identific	ed unde	r P-1 #	38 "Prior \	∕ear De	l eficienci	es" due to a cor	nputer	miscalculation.		
TOTAL		1			3,703		0		0		o d

**DD FORM 2446, JUN 86** 

P-1 SHOPPING LIST

ITEM NO. PAGE NO.

37

2

**UNCLASSIFIED** 

CLASSIFICATION:

### **UNCLASSIFIED**

		BUDGET I P-40	TEM JUSTI	FICATION	SHEET		DATE: FEBRUAR	Y 1997
APPROPRIATION/B WEAPONS PROG BA-4 OTHER WI	CUREMENT		PN)			MENCLATUR		
	FY 1997	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (In Millions)	\$0.1	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0

\*

This budget line item was created by a computer miscalculation, funds should have been identified as: Cancelled Account Adjustments - P-1 line item 37

P-1 SHOPPING LIST

**CLASSIFICATION:** 

DD Form 2454, JUN 86 **ITEM NO.-**

PAGE NO. 1

### **UNCLASSIFIED**

		WEAF	PON S	YSTEM COST	ANAL	YSIS			DATE: FEBRU	ARY 1997
APPRO	OPRIATION/BUDGET ACTIVITY				P-1 IT	EM NOMENCL	ATURE	SUBHEAD		
WPN/E	BA-4 OTHER WEAPONS							FICIENCIES	X4P	W
					TOTA	L COST IN THO	DUSAN	IDS OF DOLLAF	RS	
COST		IDENT CODE		FY 1996		FY 1997		FY 1998		FY 1999
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST
	Shown in P-1 #37 "Cancelled Accoun	nts Adju	ıstmen	148						
TOTAL	RM 2446, JUN 86	P-1 SF	IOPPIN	148 IG LIST		0		0 CLASSIFICATION	ON-	0

**DD FORM 2446, JUN 86** 

P-1 SHOPPING LIST

ITEM NO. PAGE NO.

38

#### UNCLASSIFIED

### EXHIBIT P-1

#### DEPARTMENT OF THE NAVY FY 1998/1999 PROCUREMENT PROGRAM

APROPRIATION: 1507N Weapons Procurement, Navy DATE: 02/04/97 **DOLLARS** MILLIONS OF DOLLARS ---- FY 1998 ---- FY 1999 ----LINE NO ITEM NOMENCLATURE **IDENT** FY1998 ---- FY 1996 -------- FY 1997 ----UNIT COST QUANTITY COST QUANTITY COST QUANTITY COST CODE BUDGET ACTIVITY 06: Spares and Repair Parts Spares and Repair Parts 39 6120 Spares and Repair Parts 62.2 52.4 U Α 46.5 26.9 TOTAL Spares and Repair Parts 62.2 46.5 26.9 52.4

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

Budget Plan (amounts for PROCUREMENT actions programed) \_\_\_\_\_ 1996 actual 1997 est. 1998 est. 1999 est. Identification code 17-1507-0-1-051 \_\_\_\_\_\_ Program by activities: Direct program: 00.0101 Ballistic missiles 508,776 316,332 341,412 319,657 00.0201 Other missiles 802,532 844,202 612,993 910,722 125,607 120,594 95,715 126,284 41,615 30,815 59,230 26,648 00.0301 Torpedoes and related equipment 00.0401 Other weapons 00.0501 Other Ordnance 00.0601 Spares and repair parts 62,167 46,490 26,943 52,429 \_\_\_\_\_ \_\_\_\_\_ 00.9101 Total direct program 1,540,697 1,358,433 1,136,293 1,435,740 01.0101 Reimbursable program 641 74,800 74,800 74,800 \_\_\_\_\_ \_\_\_\_ 10.0001 1,541,338 1,433,233 1,211,093 1,510,540 Total Financing: Offsetting collections from: 11.0001 Federal funds(-) -541 -74,800 -74,800 -74,800 14.0001 Non-Federal sources(-) -100 17.0001 Recovery of prior year obligations Unobligated balance available, start of year: 21.4002 For completion of prior year budget plans 21.4003 Available to finance new budget plans -68,963 21.4009 Reprograming from/to prior year budget plans -19,781 22.1001 Unobligated balance transferred to other accounts 2,500 Unobligated balance available, end of year: 24.4002 For completion of prior year budget plans 25.0001 Unobligated balance expiring 9,093 1,463,546 1,358,433 1,136,293 1,435,740 39.0001 Budget authority \_\_\_\_\_\_ Budget authority: 1,641,505 1,389,913 1,136,293 1,435,740 40.0001 Appropriation 40.3601 Appropriation rescinded (unob bal) -14,600 40.7501 Reduction pursuant to P.L. 104-208 (-), 8037(h) -3,682 41.0001 Transferred to other accounts (-) -193,177 -27,798 42.0001 Transferred from other accounts 43.0001 Appropriation (adjusted) 1,463,546 1,358,433 1,136,293 1,435,740

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

			Obligations	3	
Identifi	cation code 17-1507-0-1-051	1996 actual	1997 est.	1998 est.	1999 est.
P	Program by activities:				
	Direct program:				
00.0101	Ballistic missiles	542,059	358,595 889,447	327,492	
00.0201	Other missiles	954,331	889,447	602,197	
00.0301	Torpedoes and related equipment	125,800	121,852	116,946	121,301
00.0401	Other weapons		29,431	50,823	31,828
00.0501	Other Ordnance	13,358			
00.0601	Spares and repair parts	58,629	47,853	48,022	48,191
00.9101	Total direct program	1,742,395	1,447,178	1,145,480	1,385,411
01.0101	Reimbursable program	663	74,925	74,800	74,800
10.0001	Total	1,743,058	1,522,103	1,220,280	1,460,211
F	Financing:				
	Offsetting collections from:				
11.0001	Federal funds(-)	303	-74,800	-74,800	-74,800
14.0001	Non-Federal sources(-)	14,344			
17.0001	Recovery of prior year obligations	-3,074			
	Unobligated balance available, start of year:				
21.4002	For completion of prior year budget plans	-698,539	-464,823	-375,953	-366,766
21.4003	Available to finance new budget plans	-68,963			
21.4009	Reprograming from/to prior year budget plans				
22.1001	9	2,500			
	Unobligated balance available, end of year:				
24.4002	For completion of prior year budget plans		375,953	366,766	417,095
25.0001	Unobligated balance expiring	9,093			
39.0001	Budget authority	1,463,546	1,358,433	1,136,293	1,435,740
	Budget authority:				
40.0001	Appropriation	1,641,505	1,389,913	1,136,293	1,435,740
40.3601	Appropriation rescinded (unob bal)	-14,600			
40.7501	Reduction pursuant to P.L. 104-208 (-), 8037(h)		-3,682		
41.0001	Transferred to other accounts (-)	-193,177	-27,798		
42.0001	Transferred from other accounts	29,818			
43.0001	Appropriation (adjusted)	1,463,546	1,358,433	1,136,293	1,435,740

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

0,1; ----

		Obligation	S	
Identification code 17-1507-0-1-051	 1996 actual	1997 est.	1998 est.	1999 est.
Relation of obligations to outlays:				
71.0001 Obligations incurred	1,757,705	1,447,303	1,145,480	1,385,411
72.1001 Orders on hand, SOY	-80,181	-37,434	-37,434	-37,434
72.4001 Obligated balance, start of year	4,183,692	3,286,784	2,668,165	2,198,465
74.1001 Orders on hand, EOY	37,434	37,434	37,434	37,434
74.4001 Obligated balance, end of year	-3,286,784	-2,668,165	-2,198,465	-2,141,609
77.0001 Adjustments in expired accounts (net)	12,874			
78.0001 Adjustments in unexpired accounts	-3,074			
90.0001 Outlays (net)	2,621,666	2,065,922	1,615,180	1,442,267

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

Identification code 17-1507-0-1-051	1996 actual	1997 est.	1998 est.	1999 est.
Direct obligations:				
125.101 Advisory and assistance services	35,154	26,777	22,185	25,915
Purchases goods/services (inter/intra) Fed accounts				
125.303 Purchases from revolving funds	105,464	90,331	76,554	87,745
126.001 Supplies and materials	72,491	95,265	61,702	94,453
131.001 Equipment	1,529,286	1,234,805	985,039	1,177,298
199.001 Total Direct obligations	1,742,395	1,447,178	1,145,480	1,385,411
Reimbursable obligations:				
226.001 Supplies and materials		20,768	21,262	21,900
231.001 Equipment	663	54,157	53,538	52,900
299.001 Total Reimbursable obligations	663	74,925	74,800	74,800
999.901 Total obligations	1,743,058	1,522,103	1,220,280	1,460,211

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

	FY 1997 Total Program Requirements Per FY 1997 Budget	FY 1997 Program Requirements Per FY 1998 Budget	Increase (+) or Decrease (-)
Ballistic Missiles	323,149	316,322	-6,817
Other Missiles	738,239	844,202	+105,963
Torpedoes and Related Equipment	110,682	120,594	+9,912
Other Weapons	31,467	30,815	-652
Ammunition	149,355	0*	-149,355
Spares and Repair Parts	47,471	46,490	-981
Subtotal Direct Program	1,400,363	1,358,433	-41,930
Reimbursable	74,800	74,800	-
Total Fiscal Year	1,475,163	1,433,233	-41,930

<sup>\*</sup>Funding appropriated in the Procurement Ammunition, Navy & Marine Corps appropriation.

### Explanation of Changes in FY 1997 Program Requirements

- 1. Ballistic Missiles (-\$6.8 million)
  - Decrease reflects undistributed Congressional reductions.
- 2. Other Missiles (+\$106.0 million)

The overall funding increase reflects the net of undistributed Congressional reductions (-\$19.9 million) and reduced funding for Ordnance Support Equipment (-\$4.6M) offset by Congressional increases for additional Standard Missiles (+\$22.5 million), Tomahawk (+\$11.5 million), AMRAAM (+\$21.9 million), JSOW (+\$15.6 million, Penguin (+\$7 million), Drones and Decoys (+\$17.5 million), Tomahawk modifications (+\$14.4 million), and Harpoon/SLAM (+\$20.1 million).

3. Torpedoes and Related Equipment (+\$9.9 million)

Changes include Congressional undistributed reductions (-\$3.1 million) and additional funding provided by Congress for the Vertical Launch ASROC program (+\$13 million).

4. Other Weapons (-\$0.7 million)

Changes reflect adjustments for Congressional undistributed reductions.

5. Ammunition (-149.4 million)

The FY 1997 President's Budget reflected \$149.355 million for Navy ammunition procurement in the Weapons Procurement, Navy (WPN) appropriation. The Congress transferred this amount to the Procurement of Ammunition, Navy & Marine Corps (PANMC) appropriation. FY 1998 and out funding is now reflected in this appropriation.

6. Spares & Repair Parts (\$-1.0 million)

This funding reduction is due to an undistributed Congressional reduction.

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

	FY 1997 Financing Per FY 1997 Budget	FY 1997 Financing Per FY 1998 Budget	Increase (+) Decrease (-)
Program Requirements (Total) Program Requirements (Direct) Program Requirements (Re imb)		1,433,233 (1,358,433) (74,800)	-41,930 (-41,930) -
Less: Anticipated Reimbursements	74,800	74,800	-
Add:  Unob bal avail, start of year to finance new budget plans Unob bal avail, end of year to finance subseq yr budget pl Reprog, prior year budget	ans		
Appropriation Adjusted	1,400,363	1,358,433	-41,930
Budget Authority: FY 1997 DoD Appropriations Act Appropriation rescinded Reduct Pursuant to P. L. 104-2 Transferred to other accounts		1,389,913 -3,682 -27,798	-10,450 -3,682 -27,798
Appropriation (Adjusted)	1,400,363	1,358,433	-41,930

### Explanation of Changes in Financing

The FY 1997 Weapons Procurement, Navy appropriation financing (\$1,358.4 million for direct and \$74.8 million for reimbursable) was subsumed within the WPN appropriations' Programming and Financing exhibits. The \$41.9 million change in program requirements is the result of Congressional reductions (-\$10.5 million), and Sect. 8037(h) (-\$2,376 thousand), and Sect. 8120 (-\$27,798 thousand) and Sect. 8138 (-\$1,306 thousand) adjustments.

## Comparison of FY 1996 Program Requirements as Reflected in the FY 1997 Budget with FY 1996 Program Requirements as Shown in FY 1998 Budget (In Thousands of Dollars)

	FY 1996 Total Program Requirements Per FY 1997 Budget	FY 1996 Total Progr Requirements Per FY 1998 Budget	or
Ballistic Missiles	505,431	508,776	+3,345
Other Missiles	814,857	802,532	-12,325
Torpedoes and Related Equipment	124,934	125,607	+673
Other Weapons	42,155	41,615	-540
Ammunition	*	*	_
Spares and Repair Parts	61,323	62,167	+844
Subtotal Direct Program	1,548,700	1,540,697	-8,003
Reimbursable	74,800	641	-73,159
Total Fiscal Year	1,623,500	1,541,338	-82,162

<sup>\*</sup>Funding appropriated in the Procurement Ammunition, Navy and Marine Corps appropriation.

### Explanation of Changes in FY 1996 Program Requirements

1. Ballistic Missiles (+\$3.3 million)

Increase reflects minor year of execution adjustments.

2. Other Missiles (-\$12.3 million)

Decrease reflects minor programmatic execution adjustments (-\$11.5 million) and Omnibus Reprogramming action (-\$.8 million).

- 3. Torpedoes and Related Equipment (+\$0.7 million)
  Change reflects minor funding updates.
- 4. Other Weapons (-\$0.5 million)
  Change reflects minor year of execution adjustments.
- 5. Ammunition

Funding realigned to the Procurement Ammunition, Navy & Marine Corps appropriation.

6. Spares & Repair Parts (+\$0.8 million)
Change reflects min or adjustments to reflect year of execution issues.

## Comparison of FY 1996 Financing as Reflected in the FY 1997 Budget with FY 1996 Financing as Shown in FY 1998 Budget (In Thousands of Dollars)

	FY 1996 Financing Per FY 1997 Budget	FY 1996 Financing Per FY 1998 Budget	Increase (+) Decrease (-)
Program Requirements (Total) Program Requirements (Direct) Program Requirements (Reimb)	1,623,500 (1,548,700) (74,800)	1,541,338 (1,540,697) (641)	-82,162 (-8,003) (-73,159)
Less: Anticipated Reimbursements	74,800	641	-73,159
Add: Unob bal avail, start of year to finance new budget plans:	-64,963	-68,963	-4,000
Unob bal transf to other accts Reprogramming from/to prior year budget plans	2,500	2,500 -19,781	- -19,781
Appropriation Adjusted	1,486,237	1,463,546	-22,691
Budget Authority: FY 1996 DoD Appropriations Act Appropriation rescinded Transferred from other accts Transferred to other accounts	1,656,193 -14,600 29,818 -185,174	1,641,505 -14,600 29,818 -193,177	-14,688 - - -8,003
Appropriation (Adjusted)	1,486,237	1,463,546	-22,691

### Explanation of Changes in Financing

The -\$22.7 million change in program financing is the result of the actual FY 1996 Congressional appropriation (-\$14.7 million) and transfers to other accounts (-\$8.0 million).

#### UNCLASSIFIED

		BUDGET ITEI P-40		TION SHEET			DATE: February 1	997
	TION WEAPO		•		P-1 ITEM N SPARES A	NOMENCLA ND REPAIR	_	
	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003
QUANTITY								
COST (In Millions)	62.2	46.5	26.9	52.4	48.7	49.8	49.9	46.8

Ballistic Missiles Spares and Repair Parts (BA1): Funds are required to maintain inventories of missiles and missile ground support equipment to insure maximum readiness of the Fleet Ballistic Missile (FBM) System. To meet this requirement, both initial and replenishment spares and repair parts are procured in support of TRIDENT II (D-5) missile program.

Other Missiles Spares and Repair Parts (BA2): Funding is required for the initial outfitting and repair of missiles or components which fail or are damaged while in the Fleet, and for expendable items, such as guided missiles and non-recoverable target drones. For recoverable target drones, additional spares and repair parts are required to repair damage incurred in flight and recovery operations, and for control and telemetry equipment.

Torpedoes and Related Equipment Spares and Repair Parts (BA3): Funding provides for interim initial outfitting and replenishment spares during the maintenance cycle to support Anti-Submarine Warfare weapons and support equipment.

Other Weapons Spares and Repair Parts (BA4): Funds procure initial and replenishment spares in support of Navy surface ordnance consisting of all guns, associated equipment (hoists, shields, etc.) and related material support.

P-1 SHOPPING LIST ITEM # 39 PAGE NO. 1 **CLASSIFICATION:** 

### CLASSIFICATION: UNCLASSIFIED

	BUDGET ITEM 、	JUSTIFICATION S	HEET CONTINU	ATION	DATE: February 1	997
	RIATION WEAPONS PROCUR ACTIVITY 6 SPARES AND RE		P-1 ITEM NO SPARES AN		_	
all spares	et activity provides all WPN Spar and repair parts and assemblies ply System material support date	for all equipment i	equiring support b	by the acqui	sition activities	•
nitial spares			FY 96	FY 97	FY 98	FY 99
a. opa. oo	Ballistic Missiles	(BA1)	3498	3368	2684	7602
	Other Missiles	(BA2)	30179	20807	9312	23698
	Torpedo and Related Equipme	(BA3)	5440	5077	2427	2511
	Other Weapons	` ,				
	Other Weapons	(BA4)	2779	616	0	436
	Total Initial	(BA4)	2779 41896	616 29868	0 14423	436 34247
Replenishme	Total Initial	(BA4)			-	
Replenishme	Total Initial	(BA4)			-	
Replenishme	Total Initial ent Spares	,	41896	29868	14423	34247
Replenishme	Total Initial ent Spares Ballistic Missiles	(BA1)	41896 441	29868 440	14423 1342	34247 1342
Replenishme	Total Initial ent Spares Ballistic Missiles Other Missiles	(BA1) (BA2)	41896 441 8457	29868 440 4307	14423 1342 4211	34247 1342 7307
₹eplenishme	Total Initial  ent Spares Ballistic Missiles Other Missiles Torpedo and Related Equipme	(BA1) (BA2) (BA3) (BA4)	41896 441 8457 9427	29868 440 4307 10493	14423 1342 4211 4930	34247 1342 7307 8281

P-1 SHOPPING LIST ITEM # 39 CLASSIFICATION:

### **UNCLASSIFIED**

	P-18A															DATE: February 1997				
APPROPRIATION/BUDGET ACTIVITY Veapons Procurement, Navy / BA: 6 Spare	s & Repai	r Parts					Initial Sp	ares / X	6JC											
CO ELEMENT OF COST	DENT End	l Item	FY 1996 Initial Spares		End It	em	FY 199 Initial Sp	-	End It	em	FY 1998 Initial Spares		End Item		FY 1999 Initial Spa					
	Qty	Cost	Value	%	Qty	Cost	Value	%	Qty	Cost	Value	%	Qty	Cost	Value	%				
INITIAL SPARES																				
TRIDENT II TOTAL SSPO (BA1)	6	506,625	3,498 <b>3,498</b>	0.69%	7	314,277	3,368 <b>3,368</b>	1.07%	7	339,269	2,684 <b>2,684</b>	0.79%	7	117,454	7,602 <b>7,602</b>	6.47%				
TOMAHAWK AERIAL TARGETS HARPOON MODS TOTAL NAVAIR, PEO CU (BA2)	107	112,078	5,691 8,005 5,907 <b>19,603</b>	5.08%	155	103,396	7,287 859 3,530 <b>11,676</b>	7.05%	65	136,573	2,397 300 497 <b>3,194</b>	1.76%			4,339 578 1,367 <b>6,284</b>					
AMRAAM SPARROW MODS SIDEWINDER JSOW	115	68,757	1,165 0 1,094 0	1.69%	100	56,425 78,232	2,305 0 0	4.09%		57,066 58,665	378 0 0 0	0.66%		66,024 130,214	696 0 0 351	1.05% 0.27%				
TOTAL NAVAIR, PEO T (BA2)			2,259				2,305				378				1,047					
STANDARD MISSILE RAM VLS CANISTERS TOTAL NAVSEA, PEO TAD (BA2)	22 210	,		6.08% 0.83%	127 125	173,224 47,180	4,516 1,155 1,155 <b>6,826</b>			185,138 53,112	3,441 1,675 624 <b>5,740</b>	1.86% 3.15%		221,649 60,420	14,132 2,235 0 16,367	6.38% 3.70%				
OTAL BA:2 TACTICAL MISSILE			30,179				20,807				9,312				23,698					

### **UNCLASSIFIED**

P-18A														DATE: February 1997			
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy / BA: 6 Spares &	Repair	Parts	3					Initial Sp	ares /	X6JC	)						
COST ELEMENT OF COST	IDENT	End Item		FY 1996 Initial Spares		End Item		FY 1997 Initial Spares		End Item		FY 1998 Initial Spares		End Item		FY 1999 Initial Spares	s
		Qty	Cost	Value	%	Qty	Cost	Value	%	Qty	Cost	Value	%	Qty	Cost	Value	%
MK 50 AWLT MK48 ADCAP MODS MK 46 TORPEDO MODS VLASROC TOTAL NAVSEA, PEO USW (BA	3)	13	9,751	0 4,507 757 0 <b>5,264</b>	0.00%			0 4,913 164 0 <b>5,077</b>				0 1,599 828 0 <b>2,427</b>				0 1,941 570 0 <b>2,511</b>	
ASW RANGE SUPPORT TOTAL NAVSEA (BA3) TOTAL BA:3 TORPEDOES AND RE	LATE	D EG	QUIPME	176 <b>176</b> <b>5,440</b>				0 <b>0</b> 5,077				0 <b>0</b> 2,427				0 <b>0</b> <b>2,511</b>	
CIWS MODS TOTAL NAVSEA, PEO TAD (BA	<b>4)</b>			2,568 <b>2,568</b>				451 <b>451</b>				0 <b>0</b>				436 <b>436</b>	
5"/54 GUN MOUNT MODS MK-75 76MM GUN MOUNT M TOTAL NAVSEA PEO-SC-AP (BA				69 142 <b>211</b>				165 0 <b>165</b>				0 0 <b>0</b>				0 0 <b>0</b>	
FOTAL BA:4 OTHER WEAPONS				2,779				616				0				436	
FOTAL INITIAL SPARES (BA:1,2,3,4	)			<b>41,896</b> P-1 SHC				29,868				14,423				34,247	

													DATE:					
														February 1997				
APPROPRIATION/BUDGET ACTIVITY Veapons Procurement, Navy / BA: 6 Spares & Re	epair Pa	rts					Replenishr	ment S	pares	/ X6JC								
COST ELEMENT OF COST DE	DENT End Item		FY 1996 Replen Spares		End Item		FY 1997 Replen Spares		End Item		FY 1998 Replen Spares		End Item		FY 1999 Replen Spa	ıres		
	Qty	Cost	Value	%	Qty	Cost	Value	%	Qty	Cost	Value	%	Qty	Cost	Value	%		
REPLENISHMENT																		
FLEET BALLISTIC MISSILE (SSPO)	,		441				440				1,342				1,342			
4E REPLENISHMENT (NAVAIR)			0				267				472				1,869			
FLTSATCOM (SPAWAR)			100				94				94				94			
RAM			469				770				2,645				1,750			
STANDARD MISSILE			7,888				3,176				1,000				3,594			
TOTAL REPLENISHMENT (PEO TAD)	)		8,357				3,946				3,645				5,344			
6T COG MINES			3,269				3,195				2,214				4,197			
MINES REPLENISHMENT (PEO MINES	5)		3,269				3,195				2,214				4,197			
LIGHTWEIGHT TORPEDO			4,175				1,674				0				1,906			
HEAVYWEIGHT TORPEDO (MK-	48 & A	DCAP)	1,269				4,955				2,673				1,899			
VLA			714				471				0				0			
TOTAL REPLENISHMENT (PEO USW	)		6,158				7,100				2,673				3,805			
5"/54 GUN REPLENISHMENT			0				129				770				0			
MK 75 GUN REPLENISHMENT			1,946				1,253				1,267				1,252			
TOTAL REPLENISHMENT (PEO SC-AI	P)		1,946				1,382				2,037				1,252			
ASW RANGE REPLENISHMENT			0				198				43				279			
TOTAL REPLENISHMENT (NAVSEA)	)		0				198				43				279			
TOTAL REPLENISHMENT			20,271				16,622				12,520				18,182			
TOTAL SPARES AND REPAIRS PAI			62,167				46,490				26.943				52,429			

Page 5
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