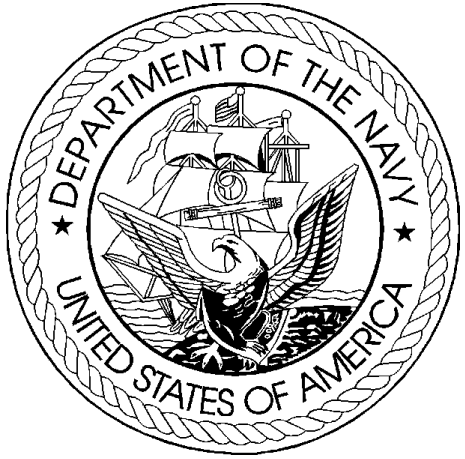
DEPARTMENT OF THE NAVY
FISCAL YEAR (FY) 2002
AMENDED BUDGET SUBMISSION



JUSTIFICATION OF ESTIMATES
JUNE 2001

WEAPONS PROCUREMENT, NAVY

DEPARTMENT OF THE NAVY

FY 2002 PROCUREMENT PROGRAM

SUMMARY
($ IN MILLIONS)

JUN 2001

APPROPRIATION: WEAPONS PROCUREMENT, NAVY

ACTIVITY	FY 2000	FY 2001	FY 2002
01. BALLISTIC MISSILES	487.0	440.6	576.0
02. OTHER MISSILES	727.9	791.1	644.7
03. TORPEDOES AND RELATED EQUIPMENT	116.0	99.8	116.8
04. OTHER WEAPONS	40.2	61.6	47.2
06. SPARES AND REPAIR PARTS	46.4	53.0	48.8
TOTAL WEAPONS PROCUREMENT, NAVY	**1,417.6**	**1,446.1**	**1,433.5**

DEPARTMENT OF THE NAVY
FY 2002 PROCUREMENT PROGRAM

EXHIBIT P-1

APPROPRIATION: 1507N WEAPONS PROCUREMENT, NAVY

DATE: JUN 2001

MILLIONS OF DOLLARS

LINE NO	ITEM NOMENCLATURE	IDENT CODE	FY 2000 QUANTITY	FY 2000 COST	FY 2001 QUANTITY	FY 2001 COST	FY 2002 QUANTITY	FY 2002 COST	SEC
	BUDGET ACTIVITY 01: BALLISTIC MISSILES								
	BALLISTIC MISSILES								
1	TRIDENT II	A	12	(494.0)	12	(481.2)	12	(568.5)	U
	LESS: ADVANCE PROCUREMENT (PY)			(-60.5)		(-51.3)		(-9.4)	U
				433.6		**429.9**		**559.0**	
2	TRIDENT II ADVANCE PROCUREMENT (CY)			51.3		9.4		8.7	U
	(FY 2000 FOR FY 2001) (MEMO)			(51.3)					
	(FY 2001 FOR FY 2002) (MEMO)					(9.4)			
	(FY 2002 FOR FY 2003) (MEMO)							(8.7)	
	SUPPORT EQUIPMENT AND FACILITIES								
3	MISSILE INDUSTRIAL FACILITIES	A		2.2		1.2		1.3	U
	THEATER BALLISTIC MISSILE DEFENSE								
4	NAVY AREA MISSILE DEFENSE	A						7.0	U
	TOTAL BALLISTIC MISSILES			**487.0**		**440.6**		**576.0**	
	BUDGET ACTIVITY 02: OTHER MISSILES								
	STRATEGIC MISSILES								
5	TOMAHAWK	A					34	50.1	U
6	ESSM	A		11.6	34	39.6	38	45.0	U
	TACTICAL MISSILES								
7	AMRAAM	A	91	45.8	63	38.6	57	40.0	U
8	SIDEWINDER	A					105	27.3	U
9	JSOW	B	454	113.8	104	181.8			U
10	SLAM-ER	A	64	47.1	30	27.6	30	26.2	U
11	STANDARD MISSILE	A	86	196.4	86	168.8	91	195.4	U
12	RAM	A	90	43.9		22.9	90	43.0	U

DEPARTMENT OF THE NAVY
FY 2002 PROCUREMENT PROGRAM

EXHIBIT P-1

APPROPRIATION: 1507N WEAPONS PROCUREMENT, NAVY

DATE: JUN 2001

MILLIONS OF DOLLARS

LINE NO	ITEM NOMENCLATURE	IDENT CODE	FY 2000 QUANTITY	FY 2000 COST	FY 2001 QUANTITY	FY 2001 COST	FY 2002 QUANTITY	FY 2002 COST	SEC
13	HELLFIRE	A	225	19.9	248	19.8			U
14	PENGUIN	A		9.9					U
15	AERIAL TARGETS	A		45.2		58.4		66.3	U
16	DRONES AND DECOYS	A		9.9		14.9			U
17	OTHER MISSILE SUPPORT	A		12.6		14.8		15.8	U
	MODIFICATION OF MISSILES								
18	SIDEWINDER MODS	A			63	27.3		.8	U
19	HARM MODS	A	270	89.1					U
20	STANDARD MISSILES MODS	A		41.2		50.2		35.4	U
	SUPPORT EQUIPMENT AND FACILITIES								
21	WEAPONS INDUSTRIAL FACILITIES	A		27.7		29.2		17.2	U
22	FLEET SATELLITE COMM (MYP) (SPACE)	A		9.6					U
23	FLEET SATELLITE COMM FOLLOW-ON	A				94.7		77.8	U
	ORDNANCE SUPPORT EQUIPMENT								
24	ORDNANCE SUPPORT EQUIPMENT	A		4.1		2.7		4.2	U
TOTAL OTHER MISSILES				**727.9**		**791.1**		**644.7**	
BUDGET ACTIVITY 03: TORPEDOES AND RELATED EQUIPMENT									
	TORPEDOES AND RELATED EQUIP.								
25	ASW TARGETS	A		2.0		3.2		15.3	U
	MOD OF TORPEDOES AND RELATED EQUIP								
26	MK-46 TORPEDO MODS	A		28.5		7.1		7.4	U
27	MK-48 TORPEDO ADCAP MODS	A		45.0		43.5		42.4	U
28	QUICKSTRIKE MINE	B				1.9		3.9	U

DEPARTMENT OF THE NAVY
FY 2002 PROCUREMENT PROGRAM

EXHIBIT P-1

APPROPRIATION: 1507N WEAPONS PROCUREMENT, NAVY

DATE: JUN 2001

MILLIONS OF DOLLARS

LINE NO	ITEM NOMENCLATURE	IDENT CODE	FY 2000 QUANTITY	FY 2000 COST	FY 2001 QUANTITY	FY 2001 COST	FY 2002 QUANTITY	FY 2002 COST	SEC
	SUPPORT EQUIPMENT								
29	TORPEDO SUPPORT EQUIPMENT	A		23.1		23.5		30.0	U
30	ASW RANGE SUPPORT	A		15.1		18.8		14.9	U
	DESTINATION TRANSPORTATION								
31	FIRST DESTINATION TRANSPORTATION	A		2.4		1.8		2.8	U
	TOTAL TORPEDOES AND RELATED EQUIPMENT			**116.0**		**99.8**		**116.8**	
	BUDGET ACTIVITY 04: OTHER WEAPONS								
	GUNS AND GUN MOUNTS								
32	SMALL ARMS AND WEAPONS	A		2.4		2.4		.9	U
	MODIFICATION OF GUNS AND GUN MOUNTS								
33	CIWS MODS	A		3.0		25.7		40.5	U
34	5/54 GUN MOUNT MODS	A		28.8					U
35	MK-75 76MM GUN MOUNT MODS	A		2.0					U
36	GUN MOUNT MODS	A				29.5		5.7	U
37	MODS UNDER $2 MILLION	A		1.8		4.0			U
	OTHER								
38	PIONEER	A		.5					U
39	CANCELLED ACCOUNT ADJUSTMENTS	A		1.2					U
40	CANCELLED ACCOUNT ADJUSTMENTS	A		.6					U
41	PRIOR YEAR DEFICIENCIES	A		*					U
42	CANCELLED ACCOUNT ADJ (88)	A		*					U
43	CANCELLED ACCOUNT ADJ (89)	A		.1					U
	TOTAL OTHER WEAPONS			**40.2**		**61.6**		**47.2**	

DEPARTMENT OF THE NAVY
FY 2002 PROCUREMENT PROGRAM EXHIBIT P-1

APPROPRIATION: 1507N WEAPONS PROCUREMENT, NAVY DATE: JUN 2001

MILLIONS OF DOLLARS

LINE NO	ITEM NOMENCLATURE	IDENT CODE	FY 2000 QUANTITY	FY 2000 COST	FY 2001 QUANTITY	FY 2001 COST	FY 2002 QUANTITY	FY 2002 COST	SEC
BUDGET ACTIVITY 06: SPARES AND REPAIR PARTS									
	SPARES AND REPAIR PARTS								
44	SPARES AND REPAIR PARTS	A		46.4		53.0		48.8	U
TOTAL SPARES AND REPAIR PARTS				**46.4**		**53.0**		**48.8**	
TOTAL WEAPONS PROCUREMENT, NAVY				**1,417.6**		**1,446.1**		**1,433.5**	

BUDGET ITEM JUSTIFICATION SHEET

DATE: JUNE 2001

APPROPRIATION/BUDGET ACTIVITY
WEAPONS PROCUREMENT, NAVY / BUDGET ACTIVITY 1 BALLISTIC MISSILES

P-1 ITEM NOMENCLATURE
TRIDENT II MISSILE UGM-133A (D-5)

$ in Millions	Prior Years	FY 00	FY 01	FY 02	FY 03	FY 04	FY 05	FY06	FY07	To Complete	Total Program
QUANTITY	360	12	12	12							
End Cost	$13,160.8	$468.3	$467.7	$611.7							
Less: Prior Year Adv. Proc.	($1,552.7)	($34.7)	($37.8)	($52.7)							
Current Year Full Funding	$11,608.1	$433.6	$429.9	$559.0							
Plus: Current Year Adv. Proc.	$2,411.0	$51.3	$9.4	$8.7							
Plus: Initial Spares	$35.4	$0.0	$0.0	$0.0							
Total New Obligational Authority	$14,054.5	$484.9	$439.3	$567.7							
Missile Flyaway Unit Cost 1/	$14.6	$23.1	$22.9	$24.0							

The TRIDENT II missile is carried on OHIO CLASS Fleet Ballistic Missile Submarines, ensuring that the United States continues to maintain a highly survivable strategic deterrent well into the 21st century. Deployment of the TRIDENT II missile (1) enhances Fleet Ballistic Missile Submarine survivability by increasing Sea Launched Ballistic Missile range at full payload to exploit the total patrol area available to the TRIDENT submarine, (2) minimizes total weapon system costs by increasing Sea Launched Ballistic Missile payload to the level permitted by the size of the TRIDENT submarine launch tube, thereby allowing mission capability to be achieved with fewer submarines, and (3) balances the Triad by adding efficient hard target kill capability to the Sea Launched Ballistic Missile.

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

The FY 2002 full funding request of $559.0 million includes $415.3 million to procure missiles at the minimum sustaining rate of 12 per year necessary to mainain weapon system quality, reliability, safety, and affordability and $143.7 million for D-5 life extension to sustain production of D-5 missile motors and other critical components. The $415.3 million funding request will support the production of 12 TRIDENT II missiles, additional reentry systems hardware, continued support required to maintain SWFLANT's TRIDENT II missile processing capability, and 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. The $143.7 million D-5 life extension funding request procures D-5 missile motors and other critical components required to support the extended 44-year SSBN hull life.

The Department requests the addition of specific language in the FY 2002 DoD Appropriations Bill as follows: "The Weapons Procurement, Navy appropriation includes $9.469 million of cash payments to be deposited in the UK Trust Fund under the terms of the 28 July 1998 Secretary of Defense Memorandum of Understanding (MOU) with the United Kingdom." The financial addendum to the MOU specifies annual payments totaling $51.0 million for FY 2001 - FY 2005 subject to Congressional authorization and appropriation. These funds purchase D-5 missile components required for the U.S. program and are included within the full funding request for airframe and motor flyaway costs.

1/ Unit cost shown is flyaway airframe and motor unit cost of which $4.4M for FY 2002 was funded in prior years' Advance Procurement. Costs shown in the Total New Obligational Authority line include guidance systems, warhead components, flight test instrumentation, arms control and recurring production support costs.

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)	A. WEAPONS PROCUREMENT, NAVY BUDGET ACTIVITY 1	B. UGM-133A TRIDENT II (D-5) MISSILE (31DL)	C. LOCKHEED MARTIN MISSILES AND SPACE CO. SUNNYVALE, CA	D. JUNE 2001

WEAPON SYSTEM COST ELEMENTS	Ident. Code	FY 00 Unit cost	FY 00 Qty	FY 00 TOTAL COST	FY 01 Unit cost	FY 01 Qty	FY 01 TOTAL COST	FY02 Unit cost	FY02 Qty	FY02 TOTAL COST
MISSILE H/W - RECURRING							1/			1/
1 **AIRFRAME & MOTOR FLYAWAY COST**		**23,100**	**12**	277,200	**22,900**	**12**	274,800	**24,034**	**12**	288,400
2 GUIDANCE FLYAWAY COST		10,425	4	41,700	10,590	4	42,360			0
3 SUBTOTAL MISSILE AND GUIDANCE FLYAWAY COST				318,900			317,160			288,400
LESS: PRIOR YEAR ADVANCE PROCUREMENT				**(34,725)**			**(37,808)**			**(52,724)**
4 SUBTOTAL MISSILE AND GUIDANCE NEW OBLIGATIONAL AUTHORITY (NOA)				284,175			279,352			235,676
SUPPORT COSTS										
5 WARHEAD COMPONENTS				15,184			11,454			16,200
6 SPECIAL PURPOSE INSTRUMENTATION				25,850			25,200			40,400
7 SPECIAL PURPOSE TOOLING & TEST EQUIPMENT				13,650			12,750			13,400
8 INF TREATY SUPPORT				7,400			5,600			0
9 ARMS CONTROL				5,200			0			2,900
10 CONTAINERS				40			40			40
11 SYSTEM INTEGRATION & PLANNING				11,600			11,800			12,150
12 SWFLANT PRODUCTION SUPPORT				12,071			12,000			13,000
13 SUPPORTABILITY MODS				15,959			8,050			8,250
14 GUIDANCE PARTS PROCUREMENT				6,050			6,100			6,426
15 SWFPAC PRODUCTION SUPPORT				16,100			12,600			12,100
16 EOP MISSILE AND GUIDANCE COSTS				7,750			0			38,000
17 PIGA				12,550			12,300			16,800
18 D5 LIFE EXTENSION				0			32,703			143,699
SUBTOTAL SUPPORT COST NOA				149,404			150,597			323,366
CURRENT YEAR FULL FUNDING				**433,579**			**429,949**			**559,042**
PLUS: CURRENT YEAR ADVANCE PROCUREMENT				**51,260**			**9,414**			**8,727**
NET TRIDENT II COST				484,839			439,363			567,769
PLUS: INITIAL SPARES				**0**			**0**			**0**
TOTAL NEW OBLIGATIONAL AUTHORITY				**484,839**			**439,363**			**567,769**

1/ Includes payments for FY 2001 and FY 2002 of $5,155 and $9,469 to the UK Trust Fund.

P-1 Shopping List Item No. 1

Page No. 2

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)

DATE: JUNE 2001

B. WEAPONS PROCUREMENT NAVY
BUDGET ACTIVITY 1

P-1 ITEM NOMENCLATURE:
TRIDENT II MISSILE UGM-133A (D-5)

COST ELEMENT/ FISCAL YEAR	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	CONTRACTED BY	AWARD DATE	DATE OF FIRST DELIVERY	QUANTITY	UNIT COST	SPECS AVAILABLE NOW	SPEC REV REQ'D	IF YES, WHEN AVAILABLE
1. TRIDENT II MSL.										
FY 2000	LOCKHEED MARTIN MISSILES AND SPACE CO. (LMMS) SUNNYVALE, CA	SS/CPIF	STRATEGIC SYSTEMS PROGRAMS (SSP)	10/99	10/01	12	23,100	YES	NO	
FY 2001	LMMS	SS/CPIF	SSP	10/00	10/02	12	22,900	YES	NO	
FY 2002	LMMS	SS/CPIF	SSP	10/01	10/03	12	24,034	YES	NO	

D. REMARKS

FY 01 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE: TRIDENT II MISSILE UGM - 133A (D-5)

DATE: JUNE 2001

ITEM/MANUFACTURER PROCUREMENT YEAR	SERV	PROC QTY	ACCEP. PRIOR TO 1 OCT	BALANCE DUE AS OF 1 OCT	FISCAL YEAR 2002 / CALENDAR YEAR 2002 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	FISCAL YEAR 2003 / CALENDAR YEAR 2003 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	LATER
TRIDENT II MISSILE																													
FY2000		12	-	12	1	1	1	1	1	1	1	1	1	1	1	1													0
FY2001		12	-	12													1	1	1	1	1	1	1	1	1	1	1	1	0
FY 2002		12	-	12																									12
TOTAL		36	0	36	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	12

MANUFACTURER'S NAME AND LOCATION	PRODUCTION RATES MINIMUM SUST.	1-8-5	MAXIMUM	REACHED D +
LOCKHEED MARTIN MISSILES AND SPACE COMPANY, SUNNYVALE, CA	12 PER YR	12 PER YR	12 PER YR	

PRODUCTION LEAD TIME	ADMIN LEADTIME PRIOR 1 OCT	AFTER 1 OCT	MANUFACTURING TIME	TOTAL AFTER 1 OCT
INITIAL 1987	31 MO	5 MO	30 MO	35 MO
REORDER 1989	9 MO		24 MO	24 MO

REMARKS

DD FORM 2445, JUL 87

P-1 SHOPPING LIST ITEM NO. 1 PAGE NO. 4

EXHIBIT P-21 PRODUCTION SCHEDULE

FY 01 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE:
TRIDENT II MISSILE UGM - 133A (D-5)

DATE: JUNE 2001

ITEM/MANUFACTURER PROCUREMENT YEAR	FISCAL YEAR 2004													FISCAL YEAR 2005												FISCAL YEAR 2006												LATER
	CALENDAR YEAR 2004													CALENDAR YEAR 2005												CALENDAR YEAR 2006												
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
TRIDENT II MISSILE FY 2002	1	1	1	1	1	1	1	1	1	1	1	1																									0
TOTAL	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

REMARKS

TRIDENT II PROCUREMENT ANNEX

	2000	2001	2002
WEAPON SYSTEM COST	468,304	467,757	611,766
ADVANCE PROCUREMENT (PY)	(34,725)	(37,808)	(52,724)
CURRENT YEAR PROGRAM	433,579	429,949	559,042
ADVANCE PROCUREMENT (CY)	51,260	9,414	8,727
TOTAL	484,839	439,363	567,769

FY OF FUNDING	$	FY00	FY01	FY02
1985	24,400	0	0	0
1986	235,713	0	0	0
1987	264,385	0	0	0
1988	309,578	2,830	2,830	1,030
1989	228,063	2,200	2,200	600
1990	216,131	1,500	1,500	500
1991	176,665	1,300	1,300	300
1992	218,000	1,400	1,400	600
1993	223,000	1,100	1,100	500
1994	116,262	1,600	1,600	500
1995	53,376	245	245	32,745
1996	185,379	800	800	800
1997	57,934	0	0	0
1998	49,533	5,750	2,550	2,000
1999	52,625	16,000	1,550	2,150
2000	51,260		20,733	1,585
2001	9,414			9,414
2002	8,727			
TOTAL	2,480,445	34,725	37,808	52,724

BUDGET ITEM JUSTIFICATION SHEET

DATE: JUNE 2001

APPROPRIATION/BUDGET ACTIVITY
WEAPONS PROCUREMENT, NAVY / BUDGET ACTIVITY 1 BALLISTIC MISSILES

P-1 ITEM NOMENCLATURE
TRIDENT II ADVANCE PROCUREMENT

	Prior Years	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	To Complete	Total Program
QUANTITY	N/A	N/A	N/A	N/A							
Cost (in millions)	$2,411.0	$51.3	$9.4	$8.7							
Initial Spares	N/A	N/A	N/A	N/A							
Total (in Millions)	$2,411.0	$51.3	$9.4	$8.7							
Unit Cost (in Millions)	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 and MK-6 guidance systems. 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 2002 request will provide $8.7 million for the advance procurement of long lead items required to support the FY 2003 full funded manufacture of D-5 missiles.
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UNCLASSIFIED

WEAPON SYSTEM ADVANCE PROCUREMENT EXHIBIT (P-10) (PROCUREMENT OF ADVANCE DESIGN AND MATERIAL) (TOA, Dollars in tenths of Millions)					FY 2000 FOR FY 2001 DATE: JUNE 2001	
Weapon System Type - UGM 133A TRIDENT II MISSILE		First System Award Date FY 1987		First System Completion Date FY 1989		Interval Between System Completions
		End Item				
Advance Procurement/Advance Funding Items	Quantity	Date Contract Award Planned/Required	Delivery Date of First Equipment Required	Production Lead Time in Months (Adm/Prod)-Total	Unit Cost	Total Cost
1. CFE						
AIRFRAME AND MOTOR LONG LEAD	12	10/00 *	10/02 *	9/24	1.6	19.2
AIRFRAME PRODUCTION CONTINUITY						32.1
TOTAL						51.3

Narrative Description

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

Production continuity funds are required for life-of-type procurements and to maintain continuous production for critical components at the lowest sustaining rate consistent with quality, reliability, safety and cost.

* Long Lead procurements are awarded in the preceding year. The dates shown pertain to the full funded D-5 missiles to which the Long Lead will be applied.

UNCLASSIFIED

WEAPON SYSTEM ADVANCE PROCUREMENT EXHIBIT (P-10) (PROCUREMENT OF ADVANCE DESIGN AND MATERIAL) (TOA, Dollars in tenths of Millions)					FY 2001 FOR FY 2002 DATE: JUNE 2001	
Weapon System Type - UGM 133A TRIDENT II MISSILE		First System Award Date FY 1987		First System Completion Date FY 1989		Interval Between System Completions
		End Item				
Advance Procurement/Advance Funding Items	Quantity	Date Contract Award Planned/Required	Delivery Date of First Equipment Required	Production Lead Time in Months (Adm/Prod)-Total	Unit Cost	Total Cost
1. CFE AIRFRAME AND MOTOR LONG LEAD	12	10/01 *	10/03 *	9/24	0.8	9.4
TOTAL						9.4

Narrative Description

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

* Long Lead procurements are awarded in the preceding year. The dates shown pertain to the full funded D-5 missiles to which the Long Lead will be applied.

P-1 Shopping List Item No. **2**

Page No. **3**

UNCLASSIFIED

WEAPON SYSTEM ADVANCE PROCUREMENT EXHIBIT (P-10) (PROCUREMENT OF ADVANCE DESIGN AND MATERIAL) (TOA, Dollars in tenths of Millions)					FY 2002 FOR FY 2003 DATE: JUNE 2001	
Weapon System Type - UGM 133A TRIDENT II MISSILE		First System Award Date FY 1987		First System Completion Date FY 1989		Interval Between System Completions
		End Item				
Advance Procurement/Advance Funding Items	Quantity	Date Contract Award Planned/Required	Delivery Date of First Equipment Required	Production Lead Time in Months (Adm/Prod)-Total	Unit Cost	Total Cost
1. CFE AIRFRAME AND MOTOR LONG LEAD	12	10/02 *	10/03 *	9/24	0.7	8.7
TOTAL						8.7

Narrative Description

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

* Long Lead procurements are awarded in the preceding year. The dates shown pertain to the full funded D-5 missiles to which the Long Lead will be applied.

P-1 Shopping List Item No. **2**

Page No. **4**

BUDGET ITEM JUSTIFICATION SHEET

DATE: JUNE 2001

APPROPRIATION/BUDGET ACTIVITY
WEAPONS PROCUREMENT, NAVY / BUDGET ACTIVITY 1 BALLISTIC MISSILES

P-1 ITEM NOMENCLATURE
MISSILE INDUSTRIAL FACILITIES

	Prior Years	FY 00	FY 01	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	To Complete	Total Program
QUANTITY	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cost (in millions)	N/A	$2.2	$1.2	$1.3	$1.3	$1.4	$1.4	$1.4	$1.4	N/A	N/A
Initial Spares	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total (in Millions)	N/A	$2.2	$1.2	$1.3	$1.3	$1.4	$1.4	$1.4	$1.4	N/A	N/A
Unit Cost (in Millions)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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

Projects planned in FY 2000 through FY 2002 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.

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5)		A. WEAPONS PROCUREMENT, BUDGET ACTIVITY 1			B. MISSILE INDUSTRIAL FACIL			C. LOCKHEED MARTIN MISSIL AND SPACE CO. SUNNYVALE, CA			JUNE 2001	
WEAPON SYSTEM COST ELEMENTS	**Ident. Code**	**FY 00 Unit cost**	**Qty**	**TOTAL COST**	**FY 01 Unit cost**	**Qty**	**TOTAL COST**	**FY 02 Unit cost**	**Qty**	**TOTAL COST**		
CAPITAL MAINTENANCE				2,174			1,220			1,275		
TOTAL MISSILE INDUSTRIAL FACILITIES				2,174			1,220			1,275		

P-1 Shopping List Item No. **3**

Page No. **2**

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: June 2001
APPROPRIATION/BUDGET ACTIVITY: **Weapons Procurement, Navy/ BA-1**	P-1 ITEM NOMENCLATURE: **Navy Area Theater Ballistic Missile Defense BLI:140000**
Program Element for Code B Items:	Other Related Program Elements: **0205676N**

	Prior Years	ID Code	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Program
QUANTITY											
COST ($M)				$7.0							

PROGRAM DESCRIPTION/JUSTIFICATION:

The Navy Area Theater Ballistic Missile Defense (MD) program provides ballistic missile defense against short to medium range threat missiles. Navy Missile Defense builds on the national investment in AEGIS ships, AEGIS Weapon Systems (AWS), and Navy Standard Missile II (SM-2) Block IV missiles. Two classes of ships continue to be deployed with the AEGIS combat system: the CG-47 TICONDEROGA-class cruisers and the DDG-51 ARLEIGH BURKE-class destroyers. Navy Missile Defense will take advantage of the attributes of naval forces including overseas presence, mobility, flexibility, and sustainability in order to provide lower tier protection to debarkation ports, coastal airfields, amphibious objective areas, Allied forces ashore, and other high value sites. Navy assets will provide an option for initial Theater Ballistic Missile Defense (TBMD) allowing the insertion of additional land-based TBMD assets and other expeditionary forces in an opposed environment. Navy Missile Defense is designed to be fully interoperable within the Theater Missile Defense (TMD) Family of Systems (FoS) architecture.

Funds will provide for modifications to the AEGIS Combat System (ACS) and production of the Theater Ballistic Missile Defense (TBMD) version of the SM-2 missile. The AEGIS Combat System includes modifications to the command and decision system, the AEGIS Display System (ADS), and the Radar System (AN/SPY-1B/D), which will be installed on 79 AEGIS Combatants. The SM-2 Block IVA will be capable of engaging Tactical Ballistic Missiles in the endoatmosphere, while retaining the SM-2 Blk IV capability of engaging Anti-Air Warfare threats.

NOTE: Navy Area Theater Ballistic Missile Defense transfers from the BMDO to the Navy in FY 2002 as a preliminary result of the Strategy Review.

BUDGET ITEM JUSTIFICATION SHEET
P-40

DATE: **June 2001**

APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy

P-1 ITEM NOMENCLATURE
TOMAHAWK (J2EL)(PEO(W))(BLI: 210100)

Program Element for Code B Items:
BA2/OTHER MISSILES P.E. # 0204229N

Other Related Program Elements

	Prior Years	ID Code	FY2000	FY2001	FY2002							
QUANTITY	4,201	B	0	0	34							
COST ($M)	$7,939.9		$0.0	$0.0	$50.1							
Initial Spares ($M)	$312.5		$1.1	$0.0	$0.0							
Total ($M)	$8,252.4		$1.1	$0.0	50.1							
Unit Cost ($M)	1.964				1.474							

Tomahawk provides an attack capability against targets on land (Tomahawk Land Attack Missile (TLAM)), and can be launched from both surface ships (RGM) and submarines (UGM).

Tomahawk consists of five 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; (5) RGM/UGM-109E, Tactical Tomahawk. The Land Attack Nuclear and Antiship versions are no longer in Fleet use. The land-attack version in the Fleet is used for precision destruction of targets at long range.

Production of the Tactical Tomahawk missile begins with Low Rate Initial Production (LRIP) of 34 missiles in FY2002. Full rate production (FRP) will commence in FY 2004. It is anticipated that FRP will be under a Multi-Year Procurement, and the program has been priced accordingly.

Characterstics and dimensions (approximate)
Weight (with booster and capsule) (UGM-109): 4,300 pounds
Weight (with booster and canister) (RGM-109): 4,000 pounds
Length (with booster): 20.5 feet
Wing Span: 8.6 feet
Cruise Speed: High Subsonic

Contractor: Raytheon Missiles Systems Company

WEAPONS PROCUREMENT, NAVY
FY 2002/2003 PRESIDENT'S BUDGET
MISSILE COST ANALYSIS
EXHIBIT P-5
(Dollars in Thousands)

Missile Nomenclature & Popular Name: TOMAHAWK (J2EL)(PEO(W)) (BLI: 210100) Date: June 2001

Cost Elements	Prior Years Total Cost	**FY 2000** Quantity	Quantity Unit Cost	Total Cost	**FY 2001** Quantity	Quantity Unit Cost	Total Cost	**FY 2002** Quantity	Quantity Unit Cost	Total Cost
Missile Hardware										
Previous Tomahawk Production	5,611,035									
Tactical Tomahawk	0	0	0	0	0	0	0	34	1,111	37,776
Remanufacture (Block III)	592,217	0	0	0	0	0	0	0	0	0
Total Hardware	6,203,252	0	0	0	0	0	0	34	1,111	37,776
Procurement Support										
Product Improvement	378,947			0			0			0
Systems Engineering Integration	278,645			0			0			4,852
Production Engineering	604,201			0			0			4,236
Total Procurement Support	1,261,793			0			0			9,088
Total Flyaway Cost	7,465,045			0			0			46,864
Other Hardware										
CCLS Submarine Capsules	0	0	0	0	0	0	0	0	0	0
Fleet Support										
Theater Mission Planning Center	255,044			0			0			0
Support Equipment	113,281			0			0			1,158
Training Equipment	78,019			0			0			1,579
Documentation	28,534			0			0			500
Total Fleet Support	474,878			0			0			3,237
EOQ/Termination Liability	0			0			0			0
Weapon System Cost	7,939,923			0			0			50,101
				0			0			0
Initial Spares	312,470			1,062			0			0
Total Program Cost	8,252,393			1,062			0		1,474	50,101

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System TOMAHAWK	A. DATE June 2001
B. APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy BA2/Other Missiles	C. P-1 ITEM NOMENCLATURE Tomahawk (PEO(W)) (BLI: 210100)	SUBHEAD J2EL

COST ELEMENT/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
All-Up-Round 01000/FY02	34	1,111	NAVAIR	06/14/01	SS/FFP	Raytheon Missile Systems Co., Tucson, AZ	Jun 02	Dec 03	YES	N/A

D. REMARKS

FY 2002/2003 PRESIDENT'S BUDGET PRODUCTION SCHEDULE, P-21 | DATE June 2001

APPROPRIATION/BUDGET ACTIVITY: **Weapons Procurement, Navy** | Weapon System: **TOMAHAWK** | P-1 ITEM NOMENCLATURE: **Tomahawk (PEO(W))(BLI: 210100)**

		Production Rate			Procurement Leadtimes					
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
Remanufactured Tomahawk	Raytheon Missiles Systems Co.									
	Tucson, AZ	N/A	20	75	6	3	18		21	Each
Tactical Tomahawk	Raytheon Missiles Systems Co.									
	Tucson, AZ	N/A	26	40	4	9	18	18	27	Each

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2001												FISCAL YEAR 2002										BAL
						2000			CALENDAR YEAR 2001												CALENDAR YEAR 2002									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Remanufacture of Existing TLAM																													
Missiles into Block III Config	1999		424	20	404	8	24	19	19	21	10	8	44	9	10	10	10	10	16	42	42	42	30	30					0
Remanufacture of Existing TASM																													
Missiles into Block III Config	1999		200	0	200														2	2	2	2	3	3	33	33	28	26	26	40
Tactical Tomahawk	2002		34	0	34																					A				34

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2003												FISCAL YEAR 2004										BAL
						2002			CALENDAR YEAR 2003												CALENDAR YEAR 2004									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Remanufacture of Existing TASM																													
Missiles into Block III Config	1999		200	160	40	20	20																						0
Tactical Tomahawk	2002		34	0	34															2	3	3	3	3	4	4	5	5	2	0

Remarks:

BUDGET ITEM JUSTIFICATION SHEET
P-40

DATE: **JUNE 2001**

APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy/BA-(2) Other Missiles

P-1 ITEM NOMENCLATURE
Evolved Seasparrow Missile (ESSM) (LI#230700)

Program Element for Code B Items:
0604755N, Proj. 20173

Other Related Program Elements

	Prior Years	ID Code	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Program
QUANTITY				29	31							
COST ($M)	$25.3	B	$11.6	$39.6	$45.0							
Initial Spares ($M)												

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" use in the MK41 Vertical Launching System.

ESSM is a cooperative effort among ten NATO Seasparrow nations (Australia, Canada, Denmark, Germany, Greece, Netherlands, Norway, Spain, Turkiye, and the U.S.). An addendum to the NATO Seasparrow Surface Missile System Memorandum of Understanding (MOU), covering the Engineering and Manufacturing Development (EMD) phase of the ESSM was signed in June 1995. The MOU for the cooperative production of ESSM was signed 27 December 1997. Authority to enter into Low Rate Initial Production (LRIP) was was granted 07 March 2001.

The FY 01 request will support a Low Rate Initial Production buy of 29 missiles and the U.S. share of support as defined in the MOU. The FY-02 request will support the procurement of 31 missiles plus associated production support (U.S. share) in accordance with the MOU. Additionally, the U.S. is required to pay its share of non-recurring investment for performance characterization studies.

WEAPONS PROCUREMENT, NAVY
FY 2002 DEPARTMENT OF THE NAVY BUDGET
MISSILE COST ANALYSIS
EXHIBIT P-5
(Dollars in Millions)

Missile Nomenclature & Popular Name: Evolved Seasparrow Missile (ESSM) (LI#230700) Date: JUNE 2001

Cost Elements	Prior Years Total Cost	FY 2000 Quantity	FY 2000 Quantity Unit Cost	FY 2000 Total Cost	FY 2001 Quantity	FY 2001 Quantity Unit Cost	FY 2001 Total Cost	FY 2002 Quantity	FY 2002 Quantity Unit Cost	FY 2002 Total Cost	Quantity	Quantity Unit Cost	Total Cost
Missile Hardware													
All Up Round					29	708	20,521	31	642	19,912			
AEGIS S-Band Uplink/Downlink					29	82	2,378	31	82	2,542			
Warhead Compatible Telemeter					20	75	1,500	12	75	900			
MK 25 Quadpack Canisters					9	272	2,448	8	292	2,336			
Total Hardware							26,847			25,690			
Procurement Support													
Tooling and Test Equipment	14,022			3,464									
Peformance Characterization Non-recurring										6,000			
MOU Average Unit Cost Adjustment													
Production Engineering	11,213			8,130			12,787			13,327			
Total Procurement Support	25,235			11,594			12,787			19,327			
Total Flyaway Cost	25,235			11,594			39,634			45,017			
Fleet Support													
Total Fleet Support													
Weapon System Cost	25,235												
Total Program Cost	25,235			11,594			39,634			45,017			

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE JUNE 2001
B. APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-(2) Other Missiles**	C. P-1 ITEM NOMENCLATURE **Evolved Seasparrow Missile (ESSM) (LI#230700)**	SUBHEAD **12ES**

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FISCAL YEAR - 2001										
All Up Round	29	708	NAVSEA	June 1999	SS/FPI Option	Raytheon Systems Co., Tucson, AZ	July 01	May 03	Yes	Mar 00
AEGIS S-Band	29	82	NAVSEA	June 1999	SS/FPI Option	Raytheon Systems Co., Tucson, AZ	July 01	May 03	Yes	Mar 00
Warhead Compatable Telemeter	20	75	NAVSEA	June 1999	SS/FPI Option	Raytheon Systems Co., Tucson, AZ	July 01	May 03	Yes	Mar 00
MK 25 Canister	9	272	NAVSEA		SS/Option	United Defense, Minneapolis, /MN	Feb 01	Sep 02	Yes	
FISCAL YEAR - 2002										
All Up Round	31	642	NAVSEA	June 1999	SS/FPI Option	Raytheon Systems Co., Tucson, AZ	Feb 02	Feb 04	Yes	Mar 00
AEGIS S-Band	31	82	NAVSEA	June 1999	SS/FPI Option	Raytheon Systems Co., Tucson, AZ	Feb 02	Feb 04	Yes	Mar 00
Warhead Compatable Telemeter	12	75	NAVSEA	June 1999	SS/FPI Option	Raytheon Systems Co., Tucson, AZ	Feb 02	Feb 04	Yes	Mar 00
MK 25 Canister	8	292	NAVSEA		SS/Option	United Defense, Minneapolis, /MN	Jan 02	Aug 03	Yes	

D. REMARKS

Missiles/Canister Requirements for the U.S. are placed on contract with International Partners to achieve the best economical Price.

FY 2002 BUDGET PRODUCTION SCHEDULE, P-21 | DATE JUNE 2001

APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy/BA-(2) Other Missiles

Weapon System

P-1 ITEM NOMENCLATURE

Item	Manufacturer's Name and Location	Production Rate MSR	1-8-5	MAX	Procurement Leadtimes ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
EVOLVED SEASPARROW MISSILE	RMSC, Tucson, AZ	120	300	576	8	4	24	24	36	E
MK 25 CANISTER	United Defense, Minneapolis	120	330	480	3	3	24	21	27	E

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2000 / 1999 OCT	NOV	DEC	CALENDAR YEAR 2000 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	FISCAL YEAR 2001 OCT	NOV	DEC	CALENDAR YEAR 2001 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	BAL
EVOLVED SEASPARROW MISSILE	01	N	29		29																				A					29
MK 25 CANISTER	01	N	9		9																	A								9

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2002 / 2001 OCT	NOV	DEC	CALENDAR YEAR 2002 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	FISCAL YEAR 2003 OCT	NOV	DEC	CALENDAR YEAR 2003 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	BAL
EVOLVED SEASPARROW MISSILE	01	N	29		29																									29
MK 25 CANISTER	01	N	9		9												2													7
EVOLVED SEASPARROW MISSILE	02	N	31		31					A																				31
MK 25 CANISTER	02	N	8		8				A																					8

Remarks:

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: June 2001
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA 2 Other Missiles**	P-1 ITEM NOMENCLATURE **AMRAAM**
Program Element for Code B Items:	Other Related Program Elements

	Prior Years	ID Code	FY 2000	FY 2001	FY 2002							
QUANTITY	1,383		91	63	57							
COST ($M)	$1,011.7		$45.8	$38.6	$40.0							
Initial Spares ($M)	$24.9		$0.2	$0.2	$0.4							
Total ($M)	$1,036.6		$46.0	$38.8	$40.4							
Unit Cost ($M)	$0.750		$0.506	$0.615	$0.709							

MISSION AND DESCRIPTION:

The Advanced Medium Range Air-to-Air Missile (AMRAAM) is the next generation all-weather, all-environment radar guided missile developed by the Air Force and Navy . 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.

FY2002 PROGRAM JUSTIFICATION:

57 missiles will be procured in FY 2002 along with non-recurring support costs such as; government field activity technical, test, and logistics support, procurement of test articles, test equipment to support the AIM-120C configuration, and procurement of peculiar support equipment.

WEAPONS PROCUREMENT, NAVY
FY 2002 PRESIDENT'S BUDGET SUBMISSION
MISSILE COST ANALYSIS
EXHIBIT P-5
(Dollars in Millions)

Missile Nomenclature & Popular Name: **AMRAAM** Date: **June 2001**

Cost Elements	Prior Years Total Cost	**FY 2000** Quantity	Quantity Unit Cost	91 Total Cost	**FY 2001** Quantity	Quantity Unit Cost	63 Total Cost	**FY 2002** Quantity	Quantity Unit Cost	57 Total Cost
Missile Hardware										
Guidance & Control	583.748	91	0.322	29.288	63	0.354	22.291	57	0.301	17.181
Propulsion	51.889	91	0.029	2.603	63	0.031	1.981	57	0.027	1.527
Warhead	12.972	91	0.007	0.651	63	0.008	0.495	57	0.007	0.382
ECO	19.324			0.985			0.578			0.859
Production Tech Support	148.531			5.389			6.773			9.570
ST&TE	40.120			0.000			0.000			0.000
Containers	2.230			0.000			0.000			0.000
Production Test	49.922			4.589			2.717			6.535
Total Flyaway Cost	908.736	91	0.478	43.505	63	0.553	34.836	57	0.633	36.054
Fleet Support										
Test Equipment	56.749			0.311			0.731			0.803
Handling Equipment	0.795			0.000			0.000			0.000
Training Equipment	4.183			0.030			0.064			0.165
ILS	39.148			1.898			2.846			2.903
Data & Pubs	2.053			0.081			0.108			0.103
Total Fleet Support	102.928			2.320			3.749			3.974
Weapon System Cost	1,011.664	91	0.504	45.825	63	0.612	38.585	57	0.702	40.028
Modifications										
Initial Spares	24.875			0.196			0.181			0.361
Total Program Cost	1,036.539	91	0.506	46.021	63	0.615	38.766	57	0.709	40.389

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)						Weapon System: AMRAAM		A. DATE: June 2001		
B. APPROPRIATION/BUDGET ACTIVITY: Weapons Procurement, Navy / BA 2 Other Missiles					C. P-1 ITEM NOMENCLATURE: AMRAAM				SUBHEAD: Y2GB	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	TECHNICAL DATA PACKAGES AVAILABLE NOW	IF NO WHEN AVAILABLE
FY 2000	91	368	Eglin AFB, Fl	10-1-99	SS/FP	Lot XIV CONTRACTOR	3/15/00	09/01	YES	
FY 2001	63	402	Eglin AFB, Fl	10-1-00	SS/FP	Lot XV CONTRACTOR	4/30/01	08/02	YES	
FY 2002	57	350	Eglin AFB, Fl	10-1-01	SS/FP	Lot XVI CONTRACTOR	3/31/02	08/03	YES	

D. REMARKS

FY 2002 BUDGET PRODUCTION SCHEDULE, P-21 | DATE June 2001

APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy/BA 2 Other Missiles

Weapon System
AMRAAM

P-1 ITEM NOMENCLATURE
AMRAAM

		Production Rate			Procurement Lead-times					
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
AMRAAM	Raytheon	450	960	1200	0 mo	6 mo	21 mo	18 mo	24 mo	E

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2000												FISCAL YEAR 2001										BAL
						1999			CALENDAR YEAR 2000									CALENDAR YEAR 2001										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
AMRAAM FY 1999 (Lot 13)			597	0	597																							
Raytheon Systems Co.	99	AF	180	0	180																			29	28	31	35	57		0
Raytheon Systems Co.	99	N	100	0	100																		3	24	28	25	20			0
Raytheon Systems Co.	99	FMS	317	0	317											24	48	64	67	37	30	20	2	3		1	21			0
Raytheon Systems Co.	99	OTH	1	0	1																					1				0

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2001												FISCAL YEAR 2002										BAL
						2000			CALENDAR YEAR 2001									CALENDAR YEAR 2002										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
AMRAAM FY 2000 (Lot 14)			535	0	535																								
Raytheon Systems Co.	00	AF	163	0	163												16	18	17	16	15	15	15	19	20	8	4			0
Raytheon Systems Co.	00	N	91	0	91												8	10	10	8	8	8	8	8	8	7	8			0
Raytheon Systems Co.	00	FMS	281	0	281												27	23	24	4	28	28	28	24	23	35	37			0
AMRAAM FY 2001 (Lot 15)			426	0	426																								
Raytheon Systems Co.	01	AF	170	0	170																							12	12	146
Raytheon Systems Co.	01	N	63	0	63																								8	55
Raytheon Systems Co.	01	FMS	193	0	193																				2			24	17	150

Remarks:

FY 2002 BUDGET PRODUCTION SCHEDULE, P-21			DATE June 2001	
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA 2 Other Missiles**		Weapon System **AMRAAM**	P-1 ITEM NOMENCLATURE **AMRAAM**	

		Production Rate			Procurement Lead-times					
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
AMRAAM	Raytheon	450	960	1200	0 mo	6 mo	21 mo	18 mo	24 mo	E

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2003												FISCAL YEAR 2004												BAL
						2002			CALENDAR YEAR 2003									CALENDAR YEAR 2004												
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
AMRAAM FY 2001 (Lot 15)			426	75	351																								
Raytheon Systems Co.	01	AF	170	24	146	12	16	8	8	12	12	12	16	20	30															0
Raytheon Systems Co.	01	N	63	8	55	4	4	4	8	4	4	4	8	15																0
Raytheon Systems Co.	01	FMS	193	43	150	22	18	16	20	20	20	20	14																	0
																														0
AMRAAM FY 2002 (Lot 16)			847	0	847																									
Raytheon Systems Co.	02	AF	190	0	190											16	16	16	16	16	16	16	16	16	15	15				0
Raytheon Systems Co.	02	N	57	0	57											4	4	4	5	5	5	5	5	5	5	5				0
Raytheon Systems Co.	02	FMS	600	0	600											50	50	50	50	50	50	50	50	50	50	50				0

Remarks:

BUDGET ITEM JUSTIFICATION SHEET P-40												DATE: June 2001
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy**								P-1 ITEM NOMENCLATURE **AIM-9 Sidewinder**				
Program Element for Code B Items:								Other Related Program Elements **0207161N**				
	Prior Years	ID Code	FY 2000	FY 2001	FY 2002							
QUANTITY			0	0	105							
COST ($M)			0	0	$27.310							
Initial Spares ($M)			0	0	$0.978							
Total ($M)			0	0	$28.288							
Unit Cost ($M)			0	0	$0.269							

The AIM-9X (Sidewinder) short range air-to-air missile is a long-term evolution of the AIM-9 series of fielded missiles. The AIM-9X missile program provides 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 short-range air-to-air missile arena is essential and includes first shot, first kill opportunity against an enemy employing IR countermeasures. The AIM-9X employs several components common with the AIM-9M. Anti-Tamper features are being incorporated to protect improvements inherent in this design. AIM-9X has been designated an Acquisition Category IC (ACAT-IC) joint-service program with Navy lead for LRIPs 2 & 3 and MS III FRP.

AIM-9X starts production with FY 2001 funds. The following Congressional language resulted from the FY 2001 Appropriations Conference - "The conferees directed that future Navy Air Force budget requests for AIM-9X be included in the new procurement sections of the Missile Procurement Air Force and Weapons Procurement Navy budget accounts rather than the current practice of budgeting AIM-9X as a modification." As a result, FY 2001 procurement actions are addressed in a P3A and the remainder of the program is detailed in a P5. The AIM-9X is a long-term evolution to the AIM-9 which provides improvements in missile seeker and kinematics by retrofitting components to current missiles to the maximum extent possible. Retrofitting components will extend the operational effectiveness of existing inventories at an affordable cost while continuing the evolution of the AIM-9 series. Anti-Tamper features will be incorporated to protect improvements inherent to this design. The Defense Acquisition Board (DAB) approved the Low Rate Initial Production (LRIP) acquisition strateg December 1996 as part of the MS II decision. This strategy includes a pricing agreement with Raytheon for the first three production lots, and sustainment activities to include depot level repair. On September 8, 2000 AIM-9X conducted a DAB at which time the program received approval to enter Low-Rate Initial Production (LRIP) in accordance with the established LRIP acquisition strategy. The modeling and simulation suite was accredited by the program manager for use in specification compliance and to support the LRIP DAB. The AIM-9X program has been designated an ACAT-1C program with the milestone decision authority delegated to the Navy Acquisition Executive.

FY 2002 Program Justification: Lot 2 LRIP option to be executed in FY2002 after Service Acquisition Executive (SAE) program review. The total quantity of missiles produced will be a combination of All up Rounds (AUR) and Captive Air Training Missiles (CATM).

WEAPONS PROCUREMENT, NAVY
FY 2002 PRESIDENT BUDGET SUBMISSION
MISSILE COST ANALYSIS
EXHIBIT P-5
(Dollars in Millions)

Missile Nomenclature Popular Name: AIM 9X SIDEWINDER

Cost Elements	Prior Years Total Cost	FY 2002 Quantity	Quantity Unit Cost	Total Cost
Missile Hardware				
All Up Round		60	0.187	11.218
Captive Air Training Missile		45	0.151	6.779
Missile containers				0.244
Engineering Change Orders (ECO)				0.792
Special Test/Special Tooling Equipment				0.102
Non-Recurring				
Government SE/PM				1.934
Total Flyaway Cost		105	0.201	21.069
Fleet Support Cost				
Support Equipment				2.497
Training				
Training Support				0.326
Training Equipment				
DATM				0.427
PEST				
CEST				
Airborne Test Equipment (ATE)				1.296
Data				0.046
Production Tech Support				1.649
Total Fleet Support *				6.241
Prior Year Cost				
Weapons System Cost		105	0.260	27.310
Other Procurement Costs				
Initial Spares				0.978
Total Program Cost				28.288

* Higher total fleet support cost in FY02 based on user's training requirements and initial fielding of missile.

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System		A. DATE June 2001			
B. APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy**					C. P-1 ITEM NOMENCLATURE **AIM-9X Sidewinder**				SUBHEAD Y2EP	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FY00 No Procurement										
FY01 AIM-9X LRIP 1 See Note 1										
FY02 AIM-9X LRIP 2 See Note 2, 3	105	0.174	NAVAIR	May-96	Competitive-FPI	Raytheon System Co. Tucson, AZ	Nov 01	Aug-03	Yes	

D. REMARKS

Note:

1. FY01 procurement of 63 missiles is under the Sidewinder Mods line item.
2. Unit cost calculation assumes US Air Force procurement of 138 (102 AUR, 36 CATM) missiles in FY02. Unit Cost consists of AUR, CATM and container.
3. The following Congressional language resulted from the FY01 Appropriations Conference - "The conferees direct that future Air Force and Navy budget requests for AIM-9X be included in the new procurement sections of the Missile Procurement Air Force and Weapons Procurement Navy budget accounts rather than the current practice of budgeting AIM-9X as a modification."

CLASSIFICATION: **UNCLASSIFIED**

FY 2000/01 BUDGET PRODUCTION SCHEDULE, P-21					DATE June 2001					
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy**			Weapon System		P-1 ITEM NOMENCLATURE **Sidewinder AIM-9X**					
		Production Rate			Procurement Leadtimes					
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
AIM-9X (Sidewinder) Lot II *	Raytheon Systems Co.	100	332	800		2 wks	21 months			Months
	Tucson, AZ									

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2000												FISCAL YEAR 2001										BA
						1999			CALENDAR YEAR 2000									CALENDAR YEAR 2001										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2002												FISCAL YEAR 2003										BA
						2001			CALENDAR YEAR 2002									CALENDAR YEAR 2003										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
AIM-9X Sidewinder (Lot 2)																													
Raytheon Systems Co.	02	N	105	0	105		A																				8	8	89
Raytheon Systems Co.	02	AF	138	0	138		A																				8	12	118

Remarks: *Assumes joint Navy/Air Force production rates.
** FY01/LRIP I procurement of 63 missiles under Sidewinder Mods line item

CLASSIFICATION: **UNCLASSIFIED**

FY 2000/01 BUDGET PRODUCTION SCHEDULE, P-21					DATE June 2001					
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy**			Weapon System		P-1 ITEM NOMENCLATURE **AIM-9X Sidewinder**					
		Production Rate			Procurement Leadtimes					
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
AIM-9X (Sidewinder) Lot II *	Raytheon Systems Co.	100	332	800		2 wks	21 months			Months
	Tucson, AZ									

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2004												FISCAL YEAR 2005												BA
						2003	CALENDAR YEAR 2004												CALENDAR YEAR 2005												
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
AIM-9X Sidewinder (Lot 2)																													
Raytheon Systems Co	02	N	105	16	89	8	12	12	12	12	16	17																	
Raytheon Systems Co	02	AF	138	20	118	16	16	16	16	16	18	20																	

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2006												FISCAL YEAR 2007												BA
						2005	CALENDAR YEAR 2006												CALENDAR YEAR 2007												
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Remarks: * Assumes joint Navy/Air Force production rates
** FY01/LRIP I procurement of 63 missiles under Sidewinder Mods line item

TY$

CLASSIFICATION: **UNCLASSIFIED** Date: June 2001

BUDGET ITEM JUSTIFICATION SHEET
P-40

APPROPRIATION/BUDGET ACTIVITY	P-1 ITEM NOMENCLATURE
Weapons Procurement, Navy/BA-2 Other Missiles	**Joint Standoff Weapon (JSOW) (J2JS)**
Program Element for Code B Items:	Other Related Program Elements
Code B - P.E. 0604727N	**0604727F, 27324F**

	Prior Years	ID Code	FY 2000	FY 2001*	FY 2002							
QUANTITY	563	B	454	104	0							
COST ($M)	$285.58		$113.80	$181.78	$0.00							
Initial Spares ($M)	$0.35		$0.06	$0.33	$0.00							
Total ($M)	$285.93		$113.86	$182.11	$0.00							
Unit Cost ($M)	0.508		0.251	1.751	N/A							

Joint Standoff Weapons (JSOW) is a joint USN/USAF program; USN is lead service. JSOW is an air-to-ground glide weapon 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 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/Inertial Navigation System will allow several target kills per aircraft sortie. The Joint Mission Planning System (FY 00-03) provides a common USN/USAF mission planning system. The JSOW-A will be integrated on USN and USAF aircraft, with a Joint planned inventory of 11,800 units. USN will procure 8,800 All-Up-Rounds (AURs) for integration on F/A-18 aircraft, and the USAF will procure 3,000 AURs for integration on F-16C/D, F-15E, B-1B, B-52 and B-2 aircraft. JSOW-A completed EMD testing, including initial Operational Test, with an exceptional test success rate of 91.3% (52 of 57). JSOW-A full Operational Testing (OPEVAL) was completed in July 1997. The JSOW-B will be integrated on USN and USAF aircraft with a joint (USAF/USN) inventory of 4,314. USN will procure an inventory of 1,200 AURs, and the USAF will procure an inventory of 3,114 AURs. JSOW-B Developmental Testing is completed. Multi-Operational Test & Evaluation will commence in FY03 following completion of an 18-month control section ECP effort. The Navy will procure 3000 JSOW-C Unitary AURs, which will incorporate the UK Broach warhead, beginning in FY 2003. JSOW-A commenced Full Rate Production (FRP) in FY 99 and the JSOW-B commenced Low Rate Initial Production (LRIP) in FY 01.

* Note: There is no funding in FY 2002 because the program is being restructured due to manufacturing and technical issues. The FY FY 2001 budget of $181.78M finances the procurement of 104 weapons (77 JSOW-As and 27 JSOW-Bs), the non-recurring cost to complete the 18-month ECP for the control section, costs to extend the JSOW production line in order to avoid gap/requalification costs, Fleet support items, and support funding through FY 2002.

TY$

Missile Nomenclature & Popular Name: Joint Standoff Weapons (JSOW) **Date: June 2001**
AGM-154

Cost Elements	Prior Years Total Cost	**FY 2000** Quantity	Quantity Unit Cost	Total Cost	**FY 2001** Quantity	Quantity Unit Cost	Total Cost	**FY 2002** Quantity	Quantity Unit Cost	Total Cost
Missile Hardware										
All Up Round (AUR)	164.070	454		89.320	104		46.545	0.000		0.000
Contractor (Warranty/ECO/Data)	9.115			4.477			66.282			0.000
Total Hardware	173.185	454	0.207	93.797	104	1.085	112.827	0.000	-	0.000
Procurement Support										
LC GEU/Control	11.233			0.000			0.000			0.000
JMPS INTEGRATION	0.000			0.217			4.112			0.000
Gov't In-house/Prod Supt	17.591			8.757			21.827			0.000
Special Tools and Test Equip	56.406			2.599			15.577			0.000
Containers	9.334			4.121			1.463			0.000
Telemetry	4.487			1.074			7.800			0.000
Command & Launch/ST&E/Mssion/SW	3.194			2.380			14.647			0.000
Total Procurement Support	102.245			19.148			65.427			0.000
Total Flyaway Cost	275.430	454	0.249	112.945	104	1.714	178.254	0.000	-	0.000
Fleet Support										
ILS/Support	7.849			0.853			3.524			0.000
Total Fleet Support	7.849			0.853			3.524			0.000
Weapons System Cost	283.279	454	0.251	113.798	104	1.748	181.778	0.000	-	0.000
LRIP-2 Acceleration	2.300									
Net P-1 Cost	285.579			113.798			181.778			0.000
Modifications										
Initial Spares	0.346			0.064			0.331			0.000
Total Program Cost	285.925	454	0.251	113.862	104	1.751	182.109	0.000	-	0.000

TY$

Missile Nomenclature & Popular Name: Joint Standoff Weapons (JSOW) AGM-154A

Date: June 2001

Cost Elements	Prior Years Total Cost	**FY 2000** Quantity	Quantity Unit Cost	Total Cost	**FY 2001** Quantity	Quantity Unit Cost	Total Cost	**FY 2002** Quantity	Quantity Unit Cost	Total Cost
Missile Hardware										
All Up Round (AUR)	164.070	454		89.320	77		23.386	0		0.000
Contractor (Warranty/ECO/Data)	9.115			4.477			66.155			0.000
Total Hardware	173.185	454	0.207	93.797	77	1.163	89.541	0	-	0.000
Procurement Support										
LC GEU/Control	11.233			0.000			0.000			0.000
JMPS INTEGRATION	0.000			0.217			4.112			0.000
Gov't In-house/Prod Supt	17.591			8.757			21.677			0.000
Special Tools and Test Equip	52.506			2.599			10.479			0.000
Containers	9.334			4.121			1.023			0.000
Telemetry	4.487			1.074			7.800			0.000
Command & Launch/ST&E/Mssion/SW	3.194			2.080			14.647			0.000
Total Procurement Support	98.345			18.848			59.738			0.000
Total Flyaway Cost	271.530	454	0.248	112.645	77	1.939	149.279	0	-	0.000
Fleet Support										
ILS/Support	7.849			0.853			3.524			0.000
Total Fleet Support	7.849			0.853			3.524			0.000
Weapons System Cost	279.379	454	0.250	113.498	77	1.984	152.803			0.000
LRIP-2 Acceleration	2.300									
Net P-1 Cost	281.679			113.498			152.803			0.000
Modifications										
Initial Spares	0.346			0.064			0.331			0.000
Total Program Cost	282.025	454	0.250	113.562	77	1.989	153.134			0.000

TY$

Missile Nomenclature & Popular Name: Joint Standoff Weapons (JSOW) AGM-154B

Date: June 2001

Cost Elements	Prior Years Total Cost	**FY 2000** Quantity	Quantity Unit Cost	Total Cost	**FY 2001** Quantity	Quantity Unit Cost	Total Cost	**FY 2002** Quantity	Quantity Unit Cost	Total Cost
Missile Hardware										
All Up Round (AUR)	0.000	0		0.000	27		23.159	0		0.000
Contractor (Warranty/ECO/Data)	0.000			0.000			0.127			0.000
Total Hardware	0.000	0	-	0.000	27	0.862	23.286	0	-	0.000
Procurement Support										
LC GEU/Control										
JMPS INTEGRATION										
Gov't In-house/Prod Supt	0.000			0.000			0.150			0.000
Special Tools and Test Equip	3.900			0.000			1.228			0.000
Containers	0.000			0.000			0.441			0.000
Telemetry	0.000			0.000			0.000			0.000
Command & Launch/ST&E/Mssion/SW	0.000			0.300			0.000			0.000
Total Procurement Support	3.900			0.300			1.819			0.000
Total Flyaway Cost	3.900	0	-	0.300	27	0.930	25.105	0	-	0.000
Fleet Support										
ILS/Support	0.000			0.000			0.000			0.000
Total Fleet Support	0.000			0.000			0.000			0.000
Weapons System Cost	3.900	0	-	0.300	27	0.930	25.105	0.000	-	0.000
Net P-1 Cost	3.900			0.300			25.105			0.000
Modifications										
Initial Spares	0.000			0.000			0.000			0.000
Total Program Cost	3.900	0	-	0.300	27	0.930	25.105	0.000	-	0.000

TY$

Missile Nomenclature & Popular Name: Joint Standoff Weapons (JSOW) **Date: June 2001**
AGM-154C

Cost Elements	Prior Years Total Cost	**FY 2000** Quantity	Quantity Unit Cost	Total Cost	**FY 2001** Quantity	Quantity Unit Cost	Total Cost	**FY 2002** Quantity	Quantity Unit Cost	Total Cost
Missile Hardware										
All Up Round (AUR)	0.000	0		0.000	0		0.000	0		0.000
Contractor (Warranty/ECO/Data)	0.000			0.000			0.000			0.000
Total Hardware	0.000	0	-	0.000	0	-	0.000	0	-	0.000
Procurement Support										
LC GEU/Control										
JMPS INTEGRATION										
Gov't In-house/Prod Supt	0.000			0.000			0.000			0.000
Special Tools and Test Equip	0.000			0.000			3.870			0.000
Containers	0.000			0.000			0.000			0.000
Telemetry	0.000			0.000			0.000			0.000
Command & Launch/ST&E/Mssion/SW	0.000			0.000			0.000			0.000
Total Procurement Support	0.000			0.000			3.870			0.000
Total Flyaway Cost	0.000	0	-	0.000	0	-	3.870	0	-	0.000
Fleet Support										
ILS/Support	0.000			0.000			0.000			0.000
Total Fleet Support	0.000			0.000			0.000			0.000
Weapons System Cost	0.000	0	-	0.000	0	-	3.870	0	-	0.000
Net P-1 Cost	0.000			0.000			3.870			0.000
Modifications										
Initial Spares	0.000			0.000			0.000			0.000
Total Program Cost	0.000	0	-	0.000	0	-	3.870	0.000	-	0.000

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System JSOW	DATE: June 2001

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Weapons Procurement, Navy B.A. 2-Other Missiles	Joint Standoff Weapon Systems	J2JS

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)*	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
Missile H/W										
FY-00 AGM-154A	454	207	NAVAIR	Aug 99	SS/FFP	RAYTHEON SYSTEMS (Tucson, AZ)	Dec 99	Aug 01	YES	N/A
FY-01 AGM-154A	77	1163	NAVAIR	Jan 02	SS/FFP	RAYTHEON SYSTEMS (Tucson, AZ)	Apr 02	Sep 03	YES	N/A
FY-01 AGM-154B	27	862	NAVAIR	Jan 02	SS/FFP	RAYTHEON SYSTEMS (Tucson, AZ)	Apr 02	Sep 03	YES	N/A

D. REMARKS

* UNIT COST REPRESENTS THE AUPC

DD Form 2446-1, JUL 87

FY 2000/01 BUDGET PRODUCTION SCHEDULE, P-21			DATE June 2001
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-2 OTHER Missiles**		Weapon System **JSOW**	P-1 ITEM NOMENCLATURE JOINT STANDOFF WEAPONS (JSOW)

		Production Rate			Procurement Leadtimes					
Item	Manufacturer's Name and Location	MSR	All variants 2-8-5*	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
Joint Standoff Weapons (JSOW)	Raytheon Company	1130	1680	1930		3	14	14	17	E
	Tucson, AZ									
AGM-154A										

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2001												FISCAL YEAR 2002										BAL
						2000			CALENDAR YEAR 2001									CALENDAR YEAR 2002										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
JSOW/Raytheon Systems	1999	USN	328	64	264	23	34	15	21	20	19	35	36	36	25														0
	2000	USN	454	0	454			A								20	19	19	18	18	18	18	18	18	18	18	18	18	198
	2001	USN	77	0	77																			A					77
	2002	USN	0	0	0																								

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2003												FISCAL YEAR 2004										BAL
						2002			CALENDAR YEAR 2003									CALENDAR YEAR 2004										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
JSOW/Raytheon Systems	2000	USN	454	256	198	18	18	18	18	18	18	18	18	18	18	18													0
	2001	USN	77	0	77												9	9	13	12	17	17							0

Remarks: All variants, A, B, and C, have a common truck

* Assumes a 2-8-5 shift and contractor has achieved a stable running rate

FY 2000/01 BUDGET PRODUCTION SCHEDULE, P-21			DATE June 2001	
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-2 OTHER Missiles**		Weapon System **JSOW**	P-1 ITEM NOMENCLATURE JOINT STANDOFF WEAPONS (JSOW)	

		Production Rate			Procurement Leadtimes					
Item	Manufacturer's Name and Location	MSR	All Variants 2-8-5*	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
Joint Standoff Weapons (JSOW)	Raytheon Company	1130	1680	1930		3	14	14	17	E
	Tucson, AZ									
AGM-154B										

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2001												FISCAL YEAR 2002										BAL
						2000			CALENDAR YEAR 2001										CALENDAR YEAR 2002										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
JSOW/Raytheon Systems	2002	USN	27	0	27																			A						27

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2003												FISCAL YEAR 2004										BAL
						2002			CALENDAR YEAR 2003										CALENDAR YEAR 2004										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
JSOW/Raytheon Systems	2002	USN	27	0	27												4	4	4	5	5	5							0

Remarks: All variants, A, B, and C, have a common truck

* Assumes a 2-8-5 shift and contractor has achieved a stable running rate

CLASSIFICATION:

BUDGET ITEM JUSTIFICATION SHEET P-40												DATE: JUNE 2001
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA2-Other Missiles**					P-1 ITEM NOMENCLATURE **SLAM-ER (J2SL) (PEO-W) (BLI: 223100)**							
Program Element for Code B Items: **N/A**					Other Related Program Elements **0604603N**							
	Prior Years	ID Code	FY 2000	FY 2001	FY 2002							
QUANTITY	177*		64	30	30							
COST ($M)	$122.4		$47.1	$27.6	$26.2							

MISSION AND DESCRIPTION: The SLAM-Expanded Response (SLAM ER) missile modification program provides funds for Engineering Change Proposals (ECPs) and other improvements to the SLAM weapons components which are already in the inventory and requires retrofit activity to produce the SLAM ER missile. Additionally, exercise sections are procured to meet fleet training requirements. The SLAM ER missile with the addition of Automatic Target Acquisition (ATA), Automated Mission Planning, Real Time Target Capability, Increased Range and Flight Envelope and Increased Warhead Penetration has matured into a permanent Standoff Outside Area Defense (SOAD) weapon.

* Includes 41 missiles procured with FY 1999 Kosovo Supplemental Funds.

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION** Date: June 2001

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

DESCRIPTION/JUSTIFICATION:

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

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

	FY 2000		FY 2001		FY 2002	
	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)						
RDT&E		2.8		2.6		12.9
INSTALLATION KITS (1) (2) (3) (4) (5)	64	33.3	30	19.8	30	20.1
		0.520		0.660		0.670
INSTALLATION KITS NONRECURRING						
EQUIPMENT		2.0		2.0		0.0
EQUIPMENT NONRECURRING						
ENGINEERING CHANGE ORDERS		1.6		0.8		0.6
DATA		0.6		0.0		0.0
TRAINING EQUIPMENT (Exercise Sectio	8	1.1	3	0.4	6	0.8
SUPPORT EQUIPMENT (Containers)	64	0.8	30	0.4	30	0.4
PCM TRAYS		0.2		0.1		0.2
OTHER (Field Activity Support)		5.1		4.0		4.0
INTERIM CONTRACTOR SUPPORT		0.0		0.0		0.0
INSTALL COST						
SAASM INTEGRATION		0.0		0.0		0.0
ATA RETROFIT	64	2.5	0	0.0	0	0.0
TOTAL PROCUREMENT	64	47.1	30	27.6	30	26.2

Note(s):

(1) Kit consists of GFE SLAM AUR, and GFE components.
(2) Installations cost are included in the Installation Kits line since kit costs and installation are non-severable.
(3) Estimates cost for installation kits/installation of Hardware is effected by concurrent FMS production (Harpoon). FMS assumptions include 100 units in FY 99-TC. Actual FMS FY00 procurement was 4 Harpoon Missi
(4) Block II HARPOON provides common engineering and guidance hardware with SLAM ER starting in FY00.
(5) FY00 Qty includes Kosovo supplemental funds to buy 12 replacements.

* In FY 1998 and prior SLAM-ER is budgeted under Weapons Procurement, Navy (WPN), Budget Activity 2, Budget Line Item 232600 (Harpoon Mods). Under Budget Line Item 232600, 60 SLAMs were modified and 10 Exercise Sections were procured in FY 1997 at a total cost of $40.1 million and 22 SLAMs were modified in FY 1998 at a total cost of $20.7 million.

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)** Date: June 2001

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

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION:
ADMINISTRATIVE LEADTIME: 7 Months PRODUCTION LEADTIME: 12 Months
CONTRACT DATES: FY 2000: **May-00** FY 2001: **Feb-01** FY 2002: **Dec-01**
DELIVERY DATE: FY 2000: **May-01** FY 2001: **Feb-02** FY 2002: **Dec-02**

($ in Millions)

Cost:	Prior Years		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																								
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
FY 2004 EQUIPMENT																								
FY 2005 EQUIPMENT																								
FY 2006 EQUIPMENT																								
FY 2007 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE: /1

	FY 2000 & Prior	FY 2001				FY 2002				FY 2003				FY 2004			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
In	100	0	71*	0	0	30	0	0	0	-	-	-	-	-	-	-	-
Out	-	12	12	22	21	22	21	18	18	20	15	8	8	4	-	-	-

1/ Input schedule reflects delivery of fleet baseline SLAM missiles to the conractor's site for modification.
* Includes 41 missiles procured in FY 2001 with FY 1999 Kosovo Supplemental funding.

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: June 2001
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/ BA-2**	P-1 ITEM NOMENCLATURE **STANDARD MISSILE (SM-2 MR/ER) A2FE BLI:223400**
Program Element for Code B Items:	Other Related Program Elements

	Prior Years	ID Code	FY 2000	FY 2001	FY 2002						To	Total
QUANTITY	10,384	A	86	86	96							
COST ($M)	$6,827.7	A	$196.4	$168.8	$195.4							
Initial Spares ($M)	$161.7	A	$12.8	$14.9	$12.4							

(U) PROGRAM OVERVIEW;

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

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

Date: June 2001

Exhibit MYP-1, Multiyear Procurement Criteria

Program: Standard Missile (SM-2 MR/ER) A2FE, BLI: 223400
MK45 Target Detection Device (TDD)

1. Multiyear Procurement Description

The proposed MYP covers the purchase of 610 Mk 45 Target Detection Devices (TDDs), starting in FY2002 and ending in FY2004 by using one or more multiyear procurement contracts. The proposed MYP will be funded through the Standard Missile Program. The procurement quantities to be funded under Standard Missile (SM-2 MR/ER), A2FE/A2FK/A6JC, BLI: 223400/235600 are:

	FY 2002			
Mk 45 TDD Production	96	106	147	349
Mk 45 TDD Modification Kits	58	92	87	237
Mk 45 Initial Spares	8	8	8	24
Totals	**162**	**206**	**242**	**610**

Termination Liability (TL) will be negotiated and determined during the MYP contract award process and is planned to be wholly contained in the annual funding amounts of the MYP. Nonrecurring costs are not expected as the Mk 45 TDD will be manufactured on established production lines.

2. Benefit to the Government

a. Savings and Cost Avoidance: The proposed MYP will save the Government approximately $6.9M over annual procurement. This estimate was based on historic performance of similar Standard Missile procurements. For example, TDDs are currently procured utilizing a MYP contract with Motorola (N00024-99-C-5374).

b. Stability of Requirement: The Standard Missile has been the Navy's primary surface-to-air fleet defense weapon since the early 1970's and has been in continuous production. The SM-2 Block IIIB configuration, which adds infrared guidance capability to the Block IIIA baseline, is being phased in to replace existing SM-2 Block II, III and IIIA variants as the fleet's deployed and inventoried production version. The SM-2 Block IIIB is expected to continue in this role well into the 21st century. The production rate, fiscal year phasing, and total quantities for the Mk 45 TDD, which supports the SM-2 program, is expected to remain unchanged during the MYP contract period.

c. Stability of Funding: There is high expectation that the SM-2 program will be funded at the required level throughout the MYP contract period. Navy and DOD support for the Standard Missile program dates back to the SM-1 in the 1960's. From initial development and through several upgrades the funding profile for Standard Missile has been very stable. This stability is reflected in the amounts currently shown on the Future Year Defense Plan (FYDP).

d. Stabile Configuration: The design of the Mk 45 TDD is stable and no major changes are foreseen during the MYP contract period. Starting with the Mk 45 MOD 9, the MK 45 TDD has been in continuous production since FY 1992.

e. Realistic Cost Estimates: There is high confidence that the projected contract cost estimates are realistic based on cost performance from definitive TDD procurement contracts since FY92. During There is high confidence that the projected contract cost estimates are realistic based on cost performance from definitive TDD procurement contracts since FY92. During that time, Motorola has produced and delivered 847 TDDs and is currently in the process of producing and delivering an additional 900 TDDs. This establishes Motorola as the premier manufacturer of TDDs for the Navy and should give high confidence in Motorola's ability to produce and deliver TDDs as well as providing a well-established information base of cost and pricing information resident in the Standard Missile Project Office and its associated contract negotiating team. The current TDD production contract (N00024-99-C-5374) is a MYP that has proven beneficial for both the Navy and the contractor in terms of stabilization of cost and providing the contractor a degree of confidence in requirement stability.

f. National Security: The STANDARD Missile is the Navy's primary surface-to-air fleet defense weapon. Current versions of STANDARD Missile are in the Fleet (Blocks IIIB and IV), with other variants in development, e.g., SM-2 Block IVA. All variants of STANDARD Missile include variations of the MK45 Target Detection Device as an integral part of their configuration. Maintaining a stable, secure vendor base for the production of TDDs is essential to the long-term health of the STANDARD Missile and ultimately National Security.

Exhibit MYP-1, Multiyear Procurement Criteria (Continued)

Program: Standard Missile (SM-2 MR/ER) A2FE, BLI: 223400
MK45 Target Detection Device (TDD)

3. Source of Savings

Source of Savings and Cost Avoidance	$ in Millions	Percent Amount
Vendor Procurement	$3.5 M	50%
Manufacturing	$1.1 M	15%
Elimination of Parts Obsolescence w/one time buy	$2.4 M	35%
Total	**$ 6.9 M**	**100%**

4. Advantages of the MYP

Use of the multiyear procurement will not only result in savings to the Navy, but will also build increased confidence in the vendor that will lead to positive impacts on the manufacturing process. The positive effects would include use of economies of scale for purchasing and producing TDDs and, based on a more stable requirement (as compared to annual procurement), the vendor is more likely to provide his best efforts and resources to the production of TDDs.

5. Impact on Defense Industrial Base

a. Improved Competition: MYP has the potential to promote increased competition at the subcontractor level by taking advantage of Economic Order Quantity (EOQ) procurement.

b. Enhanced Investment: MYP provides a stable business base for the contractor and subcontractors needed to retain economic production capabilities. Up front investment at the prime vendor level in EOQ procurements will improve production efficiency and achieve cost reductions over the multiyear period. MYP will facilitate improved production planning and scheduling, leading to increased production efficiencies that result in further cost savings.

c. Improvement in Vendor Skill Levels: MYP will stabilize the entire prime and subcontract workforce, allow for long range skill level training in critical trades and crafts, as well as enhance the professional development of all levels of management. Use of multiyear contracting should result in higher retention rates, increased skill levels, and enhanced productivity at the vendor during the contract performance. These potential benefits are reflected in the MYP savings projected in these exhibits.

d. Training Program: MYP promotes expanded training at all levels. Supervisors and managers can be selected and trained to meet workforce requirements as well as to implement production improvements. Apprenticeship and trainee programs become more cost effective for a longer procurement program. Additionally, multiyear contracting should enable contractors to offer greater job security to employees, particularly at the subcontractor or vendor level. This should reduce employee turnover rates, improve skill levels, and reduce costs to hire and train new employees.

e. Progress Payment(s): The procurement of EOQ materials and resources will accelerate the funding flow through progress payments to the vendors and subcontractors.

f. Use of Multiyear Contracts (Vendors): The government will enter into multiyear contracts with the prime contractor for advanced procurement of selected EOQ materials and production resources.

g. Increased Production Capacity: The production rates during the multiyear period are within the contractor's existing capacity. No increase in production capacity is required.

The current MYP contract with Motorola (N0024-99-C-5374, FY98-FY01) gives high confidence that all of the above will again be realized with the continued use of MYP for procurement of the MK45 TDD.

Date: June 2001

Exhibit MYP-1, Multiyear Procurement Criteria

Program: Standard Missile (SM-2 MR/ER) A2FE, BLI: 223400
MK45 Target Detection Device (TDD)

6. Multiyear Procurement Summary:

	Annual Contracts	Multiyear Contract
SM-2 MK 45 TDD MOD 9/10/11		
Quantity	610	610
Total Contract Price (in thousands)	$70,949	$64,008
Cancellation Ceiling (highest point)		
Funded	N/A	$15,074
Unfunded	N/A	N/A
$ Cost Avoidance Over Annual	N/A	$6,941
% Cost Avoidance Over Annual	N/A	9.8%

UNCLASSIFIED

Exhibit MYP-2 Total Program Funding Plan ($ in Thousands)				Date	June 2001
Appropriation (Treasury) Code /CC/BA/BSA/Item Control No Weapon Procurement, Navy/BA-2				P-1 Line Item Nomenclature SM2 MR/ER 12FE BLI: 223400	
	2002	2003	2004		
	Budget Year 1	Budget Year 2	Budget Year 3		TOTAL
Annual Procurement					
Proc Qty*	96	106	147		349
Gross Cost (P-1)**	$180,345	$238,242	$354,153		$772,740
Less PY Adv Proc	$0	$0	$0		$0
Plus CY Adv Proc	$0	$0	$0		$0
Net Proc (= P-1)	$180,345	$238,242	$354,153		$772,740
Multiyear Proc					
Proc Qty*	96	106	147		349
Gross Cost (P-1)**	$179,637	$235,974	$350,188		$765,799
Less PY Adv Proc	$0	$0	$0		$0
Plus CY Adv Proc	$0	$0	$0		$0
Net Proc (=P-1)	$179,637	$235,974	$350,188		$765,799
Multiyear Savings ($)	$708	$2,268	$3,965		$6,941
Multiyear Savings (%)	0.4%	1.0%	1.1%		0.9%
Cancellation Ceiling-Funded	$0	$15,074	$5,617		
Cancellation Ceiling-Unfunded	$0	$0	$0		
OUTLAYS					
Annual	$180,345	$238,242	$354,153		$772,740
Multiyear	$179,637	$235,974	$350,188		$765,799
Savings	$708	$2,268	$3,965		$6,941
Remarks *Quantity represents quantity of BLK IIIB and IVA AURs **Gross Cost includes Hardware, modifications, and initial spares cost (does not contain support costs)					

P-1 SHOPPING LIST - Item No. 11

Exhibit MYP-2, Total Program Funding Plan

Exhibit MYP-3 Contract Funding Plan ($ in Thousands)				Date	June 2001
Appropriation (Treasury) Code /CC/BA/BSA/Item Control No Weapon Procurement, Navy/BA-2				P-1 Line Item Nomenclature Mk 45 TDD	
	2002	2003	2004		
	Budget Year 1	Budget Year 2	Budget Year 3		TOTAL
Annual Procurement					
Proc Qty*	162	206	242		610
Gross Cost (P-1)	$17,704	$23,880	$29,365		$70,949
Less PY Adv Proc	$0	$0	$0		$0
Plus CY Adv Proc	$0	$0	$0		$0
Net Proc (= P-1)	$17,704	$23,880	$29,365		$70,949
Multiyear Proc					
Proc Qty*	162	206	242		610
Gross Cost (P-1)	$16,996	$21,612	$25,400		$64,008
Less PY Adv Proc	$0	$0	$0		$0
Plus CY Adv Proc	$0	$0	$0		$0
Net Proc (=P-1)	$16,996	$21,612	$25,400		$64,008
Multiyear Savings ($)	$708	$2,268	$3,965		$6,941
Multiyear Savings (%)	4.0%	9.5%	13.5%		9.8%
Cancellation Ceiling-Funded	$0	$15,074	$5,617		
Cancellation Ceiling-Unfunded	$0	$0	$0		
OUTLAYS					
Annual	$17,704	$23,880	$29,365		$70,949
Multiyear	$16,996	$21,612	$25,400		$64,008
Savings	$708	$2,268	$3,965		$6,941

Remarks

*The quantities shown are for production, initial spares, and weapon system modifications.

Exhibit MYP-4 Present Value Analysis Dollars in Thousands				**Date**	June 2001
Appropriation Weapon Procurement, Navy/BA-2				**P-1 Line Item Nomenclature** Mk 45 TDD	
	2002	2003	2004		TOTAL
	Budget Year 1	Budget Year 2	Budget Year 3		
Annual Proposal					
Then Year Cost*	$17,704	$23,880	$29,365		$70,949
Constant Year Cost	$16,208	$21,440	$25,847		$63,495
Present Value**	$15,615	$19,899	$23,111		$58,625
Multiyear Proposal					
Then Year Cost	$16,996	$21,612	$25,400		$64,008
Constant Year Cost	$16,554	$20,707	$23,924		$61,185
Present Value	$15,948	$19,219	$21,391		$56,558
Difference					
Then Year Cost	$708	$2,268	$3,965		$6,941
Constant Year Cost	-$346	$733	$1,923		$2,310
Present Value	-$333	$680	$1,720		$2,067
Multiyear Savings ($)	$708	$2,268	$3,965		$6,941
Multiyear Savings (%)	4.0%	9.5%	13.5%		9.8%

Remarks
*Using 2001 as the Budget Year
**Using DoD Instruction 7041.3 as a guide and discount rates from OMB Circular A-94, 1998 rates.

Exhibit MYP-4, Present Value Analysis
(MYP, Page 6 of 6)

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System	DATE: June 2001
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-2**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **STANDARD MISSILE (SM-2 MR/ER)/A2FE**

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years	FY 2000			FY 2001			FY 2002					
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost			
	Missile Hardware														
FE001	GC&A/MK 72														
	AEGIS BLK IIIB			75	521.35*	39,101	75	619.31	46,448	75	573.75	43,031			
	AEGIS BLK IV			N/A **	N/A**	8,605	N/A **	N/A**	2,100			0			
	AEGIS BLK IVA			11	3,420.48	37,625	11	3,829.82****	42,128	21	3,241.96	68,081			
FE009	MK104 DTRM Mod 2			75	72.68	5,451	75	91.75*****	6,881	75	80.20	6,015			
FE009	MK104 DTRM Mod 3			11	82.19	904	11	99.00*****	1,089	21	87.63	1,840			
FE003	MK 54 S&A Device			86	9.45	813	86	10.98******	944	96	9.83	944			
FE005	MK 45 TDD Mod 9/10			86	109.85***	9,447	86	Var*******	5,659	96	104.91	10,072			
FE006	MK 125 Warhead			86	15.07	1,296	86	19.08	1,640	96	19.39	1,861			
	Total Missile Hardware					**103,242**			**106,889**			**131,844**			
	Procurement Support														
FE830	Contract Engineering					19,042			13,780			17,498			
FE830	Government In-House Engineering					8,748			6,104			3,786			
FE840	Quality Assurance					3,776			2,176			2,708			
FE954	Documentation					3,116			971			1,234			
FE955	Production Proof					6,574			3,516			5,502			
FE860	Eval Svc & Mat'l					13,099			10,889			8,898			
FE957	Containers					1,053			590			517			
FE950	Tools and Test Equipment					13,151			7,460			6,772			
FE850	Comp Improv					10,285			7,962			3,504			
	Total Procurement Support					**78,844**			**53,448**			**50,419**			
	Fleet Support														
FE970	Installation and Checkout Equip					3,878			2,310			4,789			
FE971	Special Handling Equip					1,004			770			381			
FE972	Training Material Exp and Non Exp					5,669			3,128			5,889			
FE973	Fleet Documentation					2,708			1,146			985			
FE980	ILS					1,015			1,110			1,097			
	Total Fleet Support					**14,274**			**8,464**			**13,141**			
	Modifications					41,240			50,225			35,353			
	Initial Spares					12,758			14,899			12,440			
	* FY00 BLK IIIB unit cost includes one-time lot of Government Furnished Equipment (GFE) provided.														
	** Raytheon Blk IV overrun on N00024-96-C-5337														
	*** FY00 MK 45 TDD MOD 9/10 unit cost includes Engineering Change Proposals (ECPs).														
	**** BLK IVA unit cost increase in FY01 includes $4.5M for vendor requalification and parts obsolesence.														
	***** FY01 MK 104 DTRM cost includes Denier Rayon buyout used in the MK 104 exit cone and aft closure due to the shut-down of the line producing carbonizable continuous filament rayon yarn for aerospace applications.														
	****** FY01 MK 54 S&A device cost includes Kaman life of type buy.														
	******* FY01 MK 45 TDD cost includes a mix of TDD assembly kits, new TDDs and Mod 11 ECP. Excess TDDs in inventory were utilized with assembly kits.														
	NOTE: The total line does not include Modifications and Initial Spares.														
						196,360			**168,801**			**195,404**			

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System			A. DATE June 2001		
B. APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-2**					C. P-1 ITEM NOMENCLATURE **STANDARD MISSILE**				SUBHEAD **A2FEA2FE**	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
UNIQUE SM-2 MR/ER HARDWARE										
FE001 GC&A/MK72										
BOOSTER										
FY00 BLK IIIB AEGIS	75	521.35*	NAVSEA		SS/FFP/IF	RAYCO-TUCSON,AZ	05/00	08/02	YES	
FY00 BLK IVA AEGIS	11	3,420.48	NAVSEA		SS/CPIF/AF	RAYCO-TUCSON,AZ	12/00	03/03	YES	
FY01 BLK IIIB AEGIS	75	619.31	NAVSEA		SS/FFP/IF	RAYCO-TUCSON,AZ	03/01	02/03	YES	
FY01 BLK IVA AEGIS	11	3,829.82**	NAVSEA		SS/CPIF/AF	RAYCO-TUCSON,AZ	12/00	08/03	YES	
FY02 BLK IIIB AEGIS	75	573.75	NAVSEA		SS/FFP/IF	RAYCO-TUCSON,AZ	01/02	01/04	YES	
FY02 BLK IVA AEGIS	21	3,241.96	NAVSEA		SS/CPIF/AF	RAYCO-TUCSON,AZ	01/02	01/04	YES	
FE009 DTRM MK104										
FY00 MOD 2	75	72.68	NAVSEA		SS/FFP/AF	ARC-Camden,AR	07/00	10/01	YES	
FY00 MOD 3	11	82.19	NAVSEA		SS/FFP/AF	ARC-Camden,AR	07/00	10/01	YES	
FY01 MOD 2	75	91.75***	NAVSEA		SS/FFP/AF	ARC-Camden,AR	03/01	10/02	YES	
FY01 MOD 3	11	99.00***	NAVSEA		SS/FFP/AF	ARC-Camden,AR	03/01	10/02	YES	
FY02 MOD 2	75	80.20	NAVSEA		SS/FFP/AF	ARC-Camden,AR	03/02	10/03	YES	
FY02 MOD 3	21	87.63	NAVSEA		SS/FFP/AF	ARC-Camden,AR	03/02	10/03	YES	

D. REMARKS

* FY00 BLK IIIB unit cost includes one-time lot of GFE provided.

** FY01 BLK IVA unit cost includes $4.5M for vendor requalification and parts obsolescence.

*** FY01 MK 104 DTRM cost includes Denier Rayon buyout used in the MK 104 exit cone and aft closure due to the shut-down of the line producing carbonizable continuous filament rayon yarn for aerospace applications.

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE June 2001
B. APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-2**	C. P-1 ITEM NOMENCLATURE **STANDARD MISSILE**	SUBHEAD **A2FE**

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
COMMON HARDWARE										
FE003 SAFETY & ARMING DEVICE										
FY00 MK54	86	9.45	NAVSEA		SS/FFP	KAMAN- Middletown,CT	03/00	10/01	YES	
FY01 MK54	86	10.98*	NAVSEA		SS/FFP	KAMAN- Middletown,CT	05/01	10/02	YES	
FY02 MK54	96	9.83	NAVSEA		SS/FFP	KAMAN- Middletown,CT	03/02	10/03	YES	
FE005 ORDNANCE MK45 TDD										
FY00 MOD 9/10	86	109.85**	NAVSEA		MYP/SS/FFP/AF	MOTOROLA-Scottsdale,AZ	12/99	10/01	YES	
FY01 MOD 9/10	86	Various ***	NAVSEA		MYP/SS/FFP/AF	MOTOROLA-Scottsdale,AZ	03/01	10/02	YES	
FY02 MOD 9/10	96	104.91	NAVSEA		MYP/SS/FFP/AF	MOTOROLA-Scottsdale,AZ	03/02	10/03	YES	
FE006 WARHEAD MK125										
FY00 MK125	86	15.07	NAVSEA		SS/FFP	AlliantTech-Magna,UT	04/00	10/01	YES	
FY01 MK125	86	19.08	NAVSEA		SS/FFP	AlliantTech-Magna,UT	06/01	10/02	YES	
FY02 MK 125	96	19.39	NAVSEA		SS/FFP	AlliantTech-Magna,UT	04/02	10/03	YES	
FY02 MK 125	106	19.75	NAVSEA		SS/FFP	AlliantTech-Magna,UT	04/03	10/04	YES	

D. REMARKS

* FY01 MK 54 S&A device cost includes Kaman life of type buy.

** MK 45 TDD MOD 9/10 unit cost in FY00 includes Engineering Change Proposals (ECPs) in process.

*** FY01 MK 45 TDD cost includes a mix of TDD assembly kits, new TDDs and Mod 11 ECP. Excess TDDs in inventory were utilized with assembly kits.

FY 2002 BUDGET PRODUCTION SCHEDULE, P-21				DATE June 2001
APPROPRIATION/BUDGET ACTIVITY **WEAPONS PROCUREMENT, NAVY/BA-2**		Weapon System		P-1 ITEM NOMENCLATURE **Standard Missile/2234**

		Production Rate			Procurement Leadtimes					
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
SM-2 BLOCK IIIB	RMSC/TUCSON, AZ	75	250	500	-	3	24	24	27	EA
SM-2 BLOCK IVA	RMSC/TUCSON, AZ	TBD	TBD	TBD	-	3	24	24	27	EA

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2001												FISCAL YEAR 2002												BAL
						2000			CALENDAR YEAR 2001									CALENDAR YEAR 2002												
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
RAYCO	1995		188	188	0																									
RAYCO (FMS)	1995		104	104	0																									
RAYCO	1996		22	22	0																									
RAYCO	1997		127	106	21								6	5	5	5														
RAYCO (FMS)	1997		42	42	0																									
RAYCO	1998		88	0	88									6	7	8	9	9	7	12	13	12	5							
RAYCO (FMS)	1998		15	14	1									1																
RAYCO	1999		114	0	114																		13	20	20	21	21	6	6	7
RAYCO(FMS)	1999		16	0	16														4	4	4	4								
RAYCO	2000		86	0	86																							13	13	60
RAYCO (FMS)	2000		89	0	89																		9	9	9	9	9	9	9	26

Remarks: WPN QTY ONLY INCLUDES BOTH SM-2 BLOCK IIIB AND IVA.

BUDGET ITEM JUSTIFICATION SHEET
P-40

DATE: **JUNE 2001**

APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy/BA-2

P-1 ITEM NOMENCLATURE
ROLLING AIRFRAME MISSILE (RAM) **224200**

Program Element for Code B Items: 0604755N

Other Related Program Elements

	Prior Years	ID Code	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Program
QUANTITY		B	90	0	90							
COST ($M)			$43.9	$22.9	$43.0							
Initial Spares ($M)			$1.7	$2.5	$2.3							

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 Block 1 production, Milestone III was granted on 20 January 2000

FY00 funds procured 90 Block 1 Missiles.
FY01 funds procured 95 Block 1 Ordalts.
FY02 and FY03 funds will procure 90 Block 1 Missiles

FY00 Block 1 Missiles and canisters were priced together in the FY00 production contract. In the out years, the Block 1 Missiles and canisters will be priced separately.

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 Gerneral Dynamics by Hughes Aircraft Company was approved, making Hughes Missile Systems Co. the US prime contractor. In January 1998, Raytheon acquired Hughes Missile Systems Co., making Raytheon the US prime contractor. The US has approved for signature & GE government is currently staffing the Block 1 Production MOU with signature expected by June 2001.

WEAPONS PROCUREMENT, NAVY
FY 2002/03 DEPARTMENT OF THE NAVY BUDGET
MISSILE COST ANALYSIS
EXHIBIT P-5
(Dollars in Millions)

Missile Nomenclature & Popular Name: ROLLING AIRFRAME MISSILE (RAM) Date: JUNE 2001
224200

Cost Elements	FY 2000 Quantity	Quantity Unit Cost	Total Cost	FY 2001 Quantity	Quantity Unit Cost	Total Cost	FY 2002 Quantity	Quantity Unit Cost	Total Cost	FY 2003 Quantity	Quantity Unit Cost	Total Cost
Missile Hardware												
BLOCK 1	90	342.6	30,838	0	0	0	90	330.3	29,727			
GMRP Ordalts				95	164.1	15,587						
COMPONENT IMPR			2,038			836			1,150			
PROPULSION	90	9.4	845	0	0	0	90	9.7	873			
ORDNANCE PACK	90	26.1	2,350	0	0	0	90	27.0	2,430			
WARHEAD	60	4.6	273	0	0	0	60	6.6	396			
SAFE & ARM DEV	60	0.3	20	0	0	0	60	2.6	156			
TELEMETER	30	26.5	795				30	28.3	849			
Total Hardware			37,159			16,423			35,581			
Procurement Support												
CONTRACTOR EN			3,547			3,554			2,577			
GOVT INHOUSE EN			2,443			2,750			2,035			
PRODUCT ACCEPT			300			129			188			
Total Procurement Support			6,290			6,433			4,800			
Non-recurring Proc												
Requalification						0						
G&C Flyaway Cost	90	483	43,449				90	448.7	40,381			
Retrofit Kit Flyaway Cost				95	241	22,856						
Fleet Support												
ILS						0			411			
CONTAINER	160	3.1	488									
CANISTER							90	24.8	2,232			
Total Fleet Support			488			0			2,643			
Weapon System Cost			**43,937**			**22,856**			**43,024**			
Modifications												
Initial Spares			1,667			2,500			2,254			
Total Program Cost			45,604			25,356			45,278			

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System		A. DATE JUNE 2001		
B. APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA2					C. P-1 ITEM NOMENCLATURE ROLLING AIRFRAME MISSILE (RAM)			SUBHEAD 22EF	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
EF001 GUIDANCE & CONTROL ASSEMBLY										
FY 2000										
BLOCK 1 MISSILE*	90	342.6	NAVSEA	5/99	SS/FP	RAYTHEON, TUCSON,AZ	3/00	03/02	YES	
FY 2002										
BLOCK 1 MISSILE	90	330.3	NAVSEA	5/01	SS/FP	RAYTHEON, TUCSON,AZ	11/01	11/03	YES	
EF001 GMRP Ordalts										
FY 2001	95	164.1	NAVSEA	5/00	SS/FP	RAYTHEON, TUCSON,AZ	12/00	12/02	YES	
EF002 PROPULSION ROCKET MOTOR MK112/1 ARMING & FIRING DEVICE MK298/1										
FY2000	90	9.4	NAVSEA	7/99	C/FP	ATLANTIC RESEARCH	02/00	07/01	YES	
FY2002	90	9.7	NAVSEA	5/01	C/FP	COMPETITIVE	11/01	07/03	YES	
EF005 ORDNANCE PACKAGE TARGET DETECT MK20										
FY2000	90	26.1	NAVSEA	6/99	SS/FP	RAYTHEON, TUCSON,AZ	3/00	01/02	YES	
FY2002	90	27	NAVSEA	5/01	SS/FP	RAYTHEON, TUCSON,AZ	11/01	7/03	YES	

D. REMARKS

Includes canisters

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)					Weapon System		A. DATE JUNE 2001			
B. APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA2					C. P-1 ITEM NOMENCLATURE ROLLING AIRFRAME MISSILE (RAM)				SUBHEAD 22EF	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
EF004										
SAFE & ARMS MK 13/2										
FY2000	60	0.3	NAVSEA	7/00	SS/FP	CHINA LAKE	1/00	06/01	YES	
FY 2002	60	2.6	NAVAIR	7/01	C/FP	COMPETITIVE	11/01	07/03	YES	
EF006										
WARHEAD WDU 17/8										
FY 2000	60	6.3	NAVAIR	2/00	C/FP	ENSIGN BRICKFORD	6/00	11/01	YES	
FY 2002	60	6.6	NAVAIR	5/01	C/FP	OPTION	11/01	07/03	YES	
EF010										
TELEMETER										
FY 2000	30	26.5	NAVSEA	5/99	SS/FP	CHINA LAKE	3/00	7/01	YES	
FY 2002	30	28.3	NAVSEA	5/01	SS/FP	CHINA LAKE	11/01	7/03	YES	
EF957										
CONTAINERS										
FY 2000	160	3.1	NAVSEA	9/99	C/FP	AC INCORPORATION	9/00	2/01	YES	
EF007										
CANISTER										
FY 2002	90	24.8	NAVSEA	5/01	SS/FP	RAYTHEON, TUCSON,AZ	11/01	11/03	YES	

D. REMARKS

FY 2002/03 BUDGET PRODUCTION SCHEDULE, P-21

DATE JUNE 2001

APPROPRIATION/BUDGET ACTIVITY:
WEAPONS PROCUREMENT, NAVY BA-2

Weapon System

P-1 ITEM NOMENCLATURE
ROLLING AIRFRAME MISSILE (RAM)

		Production Rate			Procurement Leadtimes					
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
5" Rolling Airframe Missle	Raytheon Company	90	20	480	0	3	24	24	24	Months
	Co., Tucson, AZ									

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2000												FISCAL YEAR 2001										BAL
						1999			CALENDAR YEAR 2000									CALENDAR YEAR 2001										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
5" Rolling Airframe Missile/RC	98	N	94	54	40																							40
5" Rolling Airframe Missile/RC	99	N	95		95																							95
5" Rolling Airframe Missile/RC	00	N	90		90						A																	90
5" Rolling Airframe Missile/RC	01	N																										

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2002												FISCAL YEAR 2003										BAL
						2001			CALENDAR YEAR 2002									CALENDAR YEAR 2003										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
5" Rolling Airframe Missile/RC	98	N	94	54	40		30	10																				0
5" Rolling Airframe Missile/RC	99	N	95		95			20	40	35																		
5" Rolling Airframe Missile/RC	00	N	90		90						8	7	8	7	8	7	8												0
5" Rolling Airframe Missile/RC	01	N	0		0																								0
5" Rolling Airframe Missile/RC	02	N	90		90		A																						90
																													90

Remarks:

DD Form 2445, JUL 87

Previous editions are obsolete

311 / 244

Exhibit P-21 Production Schedule

BUDGET ITEM JUSTIFICATION SHEET
P-40

DATE: **June 2001**

APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy/2 - Other Missiles

P-1 ITEM NOMENCLATURE
HELLFIRE AGM-114K

Program Element for Code B Items:

Other Related Program Elements

	Prior* Years	ID Code	FY2000	FY2001	FY 2002								
QUANTITY	3,131	A	234	248	0								
COST ($M)	153.5		19.9	19.8	0.0								
Initial Spares ($M)	0.91		0.0	0.0	0.0								
Total ($M)	154.4		19.9	19.8	0.0								
Unit Cost ($M)	0.05		0.06	0.06	0								

The Hellfire II (AGM-114K) is a laser guided missile that can be employed from land or carrier based helicopters. The AGM-114 was developed by the Army as executive service to be used as it's primary anti-armor missile for the advanced attack helicopter (AAH-64). The AGM-114K gives the USMC AH-1W helicopter the ability to penetrate modern armor with minimum exposure of the launching platform to enemy counterfire. Approval for Full Rate Production was granted in March 1986.

FY 2001 represents the final procurement of the Hellfire II for the U.S. Navy. FY 2001 Congressional plus-up to ease a declining inventory.

*Prior year funding is for HELLFIRE II AGM-114K only and does not include HELLFIRE AGM-114B.

CLASSIFICATION: **UNCLASSIFIED**

MISSILE COST ANALYSIS

EXHIBIT P-5
(Dollars in Millions)

Date: June 2001

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

Cost Elements / Missile Hardware	Prior Years* Total Cost	**FY 2000** Quantity	Quantity Unit Cost	Total Cost	**FY 2001** Quantity	Quantity Unit Cost	Total Cost	**FY 2002** Quantity	Quantity Unit Cost	Total Cost
**AUR	115.142	213	0.057	13.732	248	0.063	15.555			
***AUR		21	0.063	1.336						
Total Hardware	115.142	234		15.068	248		15.555			
Recurring Production Support										
Govt In-House	12.499			4.249			3.567			
Govt Test Program	5.526									
Contractor SE/PM	12.971						0.137			
Total Recurring Prod Support	30.996			4.249			3.704			
RECURRING FLYAWAY	146.138			19.317			19.259			
Non-Recurring Costs										
Acceptance Test Equipment										
Containers	1.750			0.257			0.257			
Total Non-Recurring Costs	1.750			0.257			0.257			
TOTAL MISSILE FLYAWAY	147.888			19.574			19.516			
Fleet Support										
Handling Equipment	0.694									
Training Equipment	0.466									
Data & Pubs	0.355			0.019			0.019			
Integrated Logistics Support	4.111			0.281			0.281			
Total Fleet Support	5.626			0.300			0.300			
Weapon System Cost	153.516			19.874			19.816			
Modifications										
Initial Spares	0.914									
Total Program Cost	154.430	234		19.874	248		19.816			

*The amount Identified against this Cost Element reflects total prior year funding associated with this cost element.
**The unit cost for the 213 units reflect hardware costs only and not the associated costs of contract engineering support and contract modification costs ($1.560).
***These funds will be awarded with the FY01 contract.

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A						Weapon System		A. DATE June 2001		
B. APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/2 - Other Missiles					C. P-1 ITEM NOMENCLATURE HELLFIRE II AGM-114K				SUBHEAD J2F6	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
HELLFIRE II										
FY 2000	213	0.057	HUNTSVILLE, ALABAMA	APRIL 2000	MIPR/FFP	LOCKHEED MARTIN, ORLANDO, FL	9/00	03/02	YES	
FY 2000 *	21	0.063	HUNTSVILLE, ALABAMA	FEB 2001	MIPR/FFP	LOCKHEED MARTIN, ORLANDO, FL	7/01	01/03	YES	
FY 2001	248	0.063	HUNTSVILLE, ALABAMA	FEB 2001	MIPR/FFP	LOCKHEED MARTIN, ORLANDO, FL ORLANDO, FL	7/01	01/03	YES	

D. REMARKS

*A quantity of 21 FY 00 funded units will be awarded with the FY01 contract.

FY 2002/03 BUDGET PRODUCTION SCHEDULE, P-21					DATE June 2001
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/2-Other Missiles**			Weapon System		P-1 ITEM NOMENCLATURE **HELLFIRE II AGM-114K PEO(W)**

		Production Rate			Procurement Leadtimes					
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
HELLFIRE II AGM-114K	LOCKHEED MARTIN, (HSLLC)	120	175	400	4	11	0	18	29	EA

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2000												FISCAL YEAR 2001										BAL
						1999			CALENDAR YEAR 2000									CALENDAR YEAR 2001										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOCKHEED MARTIN, HELLFIRE SYSTEMS LIMITE	98	N	200	0	200						100												100						0
LIABILITY CO. (HSLLC)																													
LOCKHEED MARTIN, HSLLC	00	N	213	0	213												A												213
*LOCKHEED MARTIN, HSLLC	00	N	21	0	21																					A			21
LOCKHEED MARTIN, HSLLC	01	N	248	0	248																					A			248

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2002												FISCAL YEAR 2003										BAL
						2001			CALENDAR YEAR 2002									CALENDAR YEAR 2003										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOCKHEED MARTIN, HSLLC	00	N	213	0	213						113		100																0
*LOCKHEED MARTIN, HSLLC	00	N	21	0	21																21								0
LOCKHEED MARTIN, HSLLC	01	N	248	0	248																125		123						0

Remarks:
*Contract will be award with the FY01 contract. Qtys will be delivered with first delivery of FY01 buy.

CLASSIFICATION:

BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: June 2001
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy** **BA2 - Other Missiles**				P-1 ITEM NOMENCLATURE **PENGUIN (J2GS) PEO(W)**							
	1999 & Prior Years	FY 2000	FY 2001	FY 2002							
QUANTITY	111	0	0	0							
COST ($M)	$172.4	$9.9	$0.0	$0.0							
Initial Spares ($M)	$6.4	$0.0	$0.0	$0.0							
Total ($M)	$178.8	$9.9	$0.0	$0.0							
Unit Cost ($M)	$1.611	$0.000	$0.000	$0.000							

The Penguin missile system is an Anti-Ship Missile, manufactured in Norway by Kongsberg Defense and 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 will also be integrated into the Navy's next generation SH-60 aircraft, the SH-60R. The Penguin missile is a short-to-medium range, rolling airframe, inertially guided missile with passive infrared terminal homing. The Naval Air Systems Command, PMA-258, provides total life cycle support for the Penguin missile to meet customer requirements and to support fleet operations. The Navy has procured a total of 111 AUR missiles.

Funding was used to perform life extension on current weapons inventory.

WEAPONS PROCUREMENT, NAVY
FY 2002 PRESIDENT'S BUDGET
MISSILE COST ANALYSIS
EXHIBIT P-5
(Dollars in Millions)

Missile Nomenclature & Popular Name PENGUIN **Date: June 2001**

Cost Elements	FY 2000 Quantity	Quantity Unit Cost	Total Cost	FY 2001 Quantity	Quantity Unit Cost	Total Cost	FY 2002 Quantity	Quantity Unit Cost	Total Cost
Missile Hardware									
Penguin Missile Warhead									
Penguin Missile Rocket									
Penguin Missile Wings/Canards									
Peng Missile Fire Control/Release									
Total Hardware									
Procurement Support									
Government In-House									
Total Procurement Support									
Total Flyaway Cost									
Fleet Support									
Training Equipment									
Field Activity Support			0.152						
ILS Services									
Total Fleet Support			0.152						
Weapon System Cost	103	0.095	9.785						
Modifications									
Advanced Procurement									
Various									
Initial Spares									
Total Program Cost			9.937						

BUDGET ITEM JUSTIFICATION SHEET P-40												DATE: June 2001	
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-2; OTHER MISSILES**						P-1 ITEM NOMENCLATURE **AERIAL TARGETS (J2EM)**						**PE: 0204228N / 0204162N**	
Program Element for Code B Items: **0604258N, 0605130D, 0604366N**						Other Related Program Elements **N/A**							
	Prior Years	ID Code	FY 2000	FY 2001	FY 2002								
QUANTITY													
COST (In Millions)	$2,662.9	A	$45.2	$58.4	$66.3								

PROGRAM COVERAGE:

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

JUSTIFICATION OF BUDGET YEAR REQUIREMENTS:

In Fiscal Year 2002, major efforts include the procurement of the Sub-Sonic Aerial Target (SSAT), the Supersonic Sea Skimming Target (SSST) and TDU-32 Tow Targets. TA/AS procurements include target command/control equipment, scoring equipment, location and identification equipment, navigation equipment, electronic countermeasures equipment, active emitter augmentation equipment and target control systems. 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.

BUDGET ITEM JUSTIFICATION SHEET FOR AGGREGATED ITEMS P-40a												DATE: June 2001	
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-2 OTHER MISSILES**						P-1 ITEM NOMENCLATURE **AERIAL TARGETS/J2EM**							
Procurement Items	ID Code	Prior Years	FY 2000	FY 2001	FY 2002								
Anti-Air Warfare Target	A												
Quantity			0	0	0								
Funding		$173.6	$1.0	$0.9	$0.0								
Subsonic Aerial Target	A												
Quantity			71	78	109								
Funding		$374.6	$25.6	$27.8	$35.0								
Other Targets (1)	B												
Funding		$115.2	$11.5	$16.4	$15.6								
Other Costs		$182.1	$7.2	$13.3	$15.8								
Prior funded items		$1,817.5											
Total P-1 Funding													
Funding		$2,662.9	$45.2	$58.4	$66.3								

P-1 SHOPPING LIST

(1) Quantities are not displayed here because multiple types of targets are included in the line. Target quantities are identified on the detailed P-5 for "Other Targets".

WEAPONS SYSTEM COST ANALYSIS P-5										B. DATE June 2001	
APPROPRIATION/BUDGET ACTIVITY WEAPONS PROCUREMENT, NAVY BA-2 OTHER MISSILES				P-1 ITEM NOMECLATURE/SUBHEAD AERIAL TARGETS/J2EM							
COST CODE	ELEMENT OF COST	IDENT CODE	Prior Years Total Cost	FY 2000 QTY	FY 2000 TOTAL COST	FY 2001 QTY	FY 2001 TOTAL COST	FY 2002 QTY	FY 2002 TOTAL COST		
EM020	Anti-Air Warfare Target	A	$173,577	0	$993	0	$907	0	$0		
EM030	Subsonic Aerial Target	A	$374,556	71	$25,552	78	$27,752	109	$34,984		
EM200	OTHER TARGETS	B	$115,184		$11,453		$16,369		$15,588		
EM300	TA/AS	A	$182,074		$7,244		$13,323		$15,777		
	VARIOUS		$1,817,484		$0		$0		$0		
TOTAL			**$2,662,875**	**71**	**$45,242**	**78**	**$58,351**	**109**	**$66,349**		
SPARES											
	Anti-Air Warfare Target		$0		$0		$0		$0		
	Subsonic Aerial Target		$455		$0		$0		$0		
	OTHER TARGETS		$703		$0		$0		$0		
	TA/AS		$363		$188		$30		$335		
	VARIOUS		$53,947		$0		$0		$0		
	TOTAL SPARES		$55,468		$188		$30		$335		
TOTAL PROGRAM			**$2,718,343**	**71**	**$45,430**	**78**	**$58,381**	**109**	**$66,684**		

P-1 SHOPPING LIST

ITEM NO. 15 PAGE NO. 3

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

Quantities are not displayed here because multiple types of targets are included in the line. Target quantities are identified on the detailed P-5 for "Other Targets".

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5) **June 2001**

TARGET SYSTEM: **ANTI-AIR WARFARE TARGET (AAW)**		FISCAL YEAR 2000			FISCAL YEAR 2001			FISCAL YEAR 2002			FISCAL YEAR 2003		
MANUFACTURER: **RAYTHEON AIRCRAFT, WICHITA, KS**	Prior Yrs		UNIT	TOTAL		UNIT	TOTAL		UNIT	TOTAL		UNIT	TOTAL
COST CODE: **EM020** FLYAWAY COST ($000)	Total Cost	QTY	COST	COST	QTY	COST	COST	QTY	COST	COST	QTY	COST	COST
HARDWARE:													
TARGET	$114,019	0	$0	$0	0	$0	$0	0	$0	$0			
GFM-BATTERIES	$1,996			$0			$0			$0			
GFM-IRFNA (1)	$3,691			$0			$0			$0			
INSTALL/MISSION KITS	$13,293			$0			$0			$0			
EXTENDED PERFORMANCE KITS (2)	$4,626			$0			$0			$0			
TOTAL HARDWARE	**$137,625**	**0**	**$0**	**$0**	**0**	**$0**	**$0**	**0**	**$0**	**$0**			
PROCUREMENT SUPPORT (RECURRING):													
GOVERNMENT IN-HOUSE (3)	$12,176			$993			$907			$0			
DOCUMENTATION	$2,657			$0			$0			$0			
GOVERNMENT TEST	$2,212			$0			$0			$0			
TOTAL RECURRING	**$17,045**			**$993**			**$907**			**$0**			
PROCUREMENT SUPPORT (NONRECURRING):													
PRODUCT IMPROVEMENT	$13,364			$0			$0			$0			
SPECIAL TOOLING AND TEST EQUIPMENT	$0			$0			$0			$0			
TOTAL NONRECURRING	**$13,364**			**$0**			**$0**			**$0**			
TOTAL FLYAWAY	**$168,034**	**0**	**$0**	**$993**	**0**	**$0**	**$907**	**0**	**$0**	**$0**			
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	$469			$0			$0			$0			
TRAINING DEVICES	$272			$0			$0			$0			
DOCUMENTATION	$242			$0			$0			$0			
ILS	$4,560			$0			$0			$0			
TOTAL GRD EQUIP/FLEET SUP COST	**$5,543**			**$0**			**$0**			**$0**			
WEAPONS SYSTEM COST	**$173,577**	**0**	**$0**	**$993**	**0**	**$0**	**$907**	**0**	**$0**	**$0**			
TARGETS INITIAL SPARES	$0			$0			$0			$0			
TOTAL PROGRAM COST	**$173,577**	**0**	**$0**	**$993**	**0**	**$0**	**$907**	**0**	**$0**	**$0**			

P-1 SHOPPING LIST
ITEM NO: 15 PAGE NO: 4

(1) Inhibited Red Fuming Nitric Acid.
(2) Extended performance kits are required to perform missions at altitudes from 70,000 to 100,000 feet at velocities from Mach 3 to 4.
(3) FY00/01 government in-house to cover production support for the deliveries scheduled in FY00/01.

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5) **June 2001**

TARGET SYSTEM: **SUBSONIC AERIAL TARGET**		FISCAL YEAR 2000			FISCAL YEAR 2001			FISCAL YEAR 2002			FISCAL YEAR 2003		
MANUFACTURER: NORTHROP-GRUMMAN	Prior Yrs		UNIT	TOTAL		UNIT	TOTAL		UNIT	TOTAL		UNIT	TOTAL
COST CODE: **EM030** FLYAWAY COST ($000)	Total Cost	QTY	COST	COST	QTY	COST	COST	QTY	COST	COST	QTY	COST	COST
HARDWARE:													
TARGET	$301,894	71	$279	$19,808	78	$259	$20,196	109	$243	$26,491			
INSTALL/MISSION KITS	$41,240			$2,150			$3,936			$4,847			
TOTAL HARDWARE	**$343,134**	**71**	**$0**	**$21,958**	**78**	**$309**	**$24,132**	**109**	**$288**	**$31,338**			
PROCUREMENT SUPPORT (RECURRING):													
GOVERNMENT IN-HOUSE	$15,242			$1,132			$1,450			$1,434			
DOCUMENTATION	$1,906			$148			$150			$154			
GOVERNMENT TEST	$2,109			$390			$425			$433			
TOTAL RECURRING	**$19,257**			**$1,670**			**$2,025**			**$2,021**			
PROCUREMENT SUPPORT (NONRECURRING):													
PRODUCT IMPROVEMENT (1)	$1,349			$420			$0			$0			
SPECIAL TOOLING AND TEST EQUIPMENT	$0			$0			$0			$0			
TOTAL NONRECURRING	**$1,349**			**$420**			**$0**			**$0**			
TOTAL FLYAWAY	**$363,740**	**71**	**$339**	**$24,048**	**78**	**$335**	**$26,157**	**109**	**$306**	**$33,359**			
GROUND EQUIPMENT/FLEET SUPPORT COST:													
GROUND EQUIPMENT	$4,041			$825			$900			$917			
INSTALL & CHECKOUT	$0			$0			$0			$0			
SPECIAL HANDLING EQUIPMENT	$0			$0			$0			$0			
FLEET TEST EQUIPMENT	$0			$0			$0			$0			
TRAINING DEVICES	$298			$37			$45			$46			
DOCUMENTATION	$998			$0			$0			$0			
ILS	$5,479			$642			$650			$662			
TOTAL GRD EQUIP/FLEET SUP COST	**$10,816**			**$1,504**			**$1,595**			**$1,625**			
WEAPONS SYSTEM COST	**$374,556**	**71**	**$360**	**$25,552**	**78**	**$356**	**$27,752**	**109**	**$321**	**$34,984**			
TARGETS INITIAL SPARES	$455			$0			$0			$0			
TOTAL PROGRAM COST	**$375,011**	**71**	**$360**	**$25,552**	**78**	**$356**	**$27,752**	**109**	**$321**	**$34,984**			

(1) These funds (FY00/$550K) provide Way Point Navigation validation and flight testing for the BQM-74. Way point navigation is required for close in weapon system testing. It allows the target to safely fly to an end point behind the ship. It also allows scenarios to be repeated as weapon system testing occurs.

P-1 SHOPPING LIST
ITEM NO: 15 PAGE NO: 5

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5) **June 2001**

TARGET SYSTEM: **OTHER TARGETS**		FISCAL YEAR 2000			FISCAL YEAR 2001			FISCAL YEAR 2002			FISCAL YEAR 2003		
MANUFACTURER: VARIOUS	Prior Yrs		UNIT	TOTAL		UNIT	TOTAL		UNIT	TOTAL			
COST CODE: **EM200** FLYAWAY COST ($000)	Total Cost	QTY	COST	COST	QTY	COST	COST	QTY	COST	COST			
HARDWARE:													
Supersonic Sea Skimming Target (SSST)	$17,534	16	$536	$8,577	25	$548	$13,688	23	$552	$12,695			
FOREIGN NDI - SUPERSONIC	$725			$0			$0			$0			
FOREIGN NDI - SUBSONIC	$0			$0			$0			$0			
TOW TARGETS	$3,399	215	$2.88	$619	500	$2.97	$1,486	500	$3.08	$1,541			
SM-2 TARGET	$2,000			$0			$0			$0			
MQM-8G(EER) VANDAL	$67,370			$0			$0			$0			
TOTAL HARDWARE	**$91,028**			**$9,196**			**$15,174**			**$14,236**			
PROCUREMENT SUPPORT (RECURRING):													
GOVERNMENT IN-HOUSE	$10,529			$1,324			$895			$1,052			
DOCUMENTATION	$1,039			$0			$0			$0			
GOVERNMENT TEST	$300			$0			$0			$0			
TOTAL RECURRING	**$11,868**			**$1,324**			**$895**			**$1,052**			
PROCUREMENT SUPPORT (NONRECURRING):													
PRODUCT IMPROVEMENT	$3,726			$0			$0			$0			
CONTRACTOR ENGINEERING	$1,435			$0			$0			$0			
SPECIAL TOOLING AND TEST EQUIPMENT	$0			$0			$0			$0			
TOTAL NONRECURRING	**$5,161**			**$0**			**$0**			**$0**			
TOTAL FLYAWAY	**$108,057**	**0**	**$0**	**$10,520**	**0**	**$0**	**$16,069**	**0**	**$0**	**$15,288**			
GROUND EQUIPMENT/FLEET SUPPORT COST:													
GROUND EQUIPMENT	$2,105			$749			$300			$300			
INSTALL & CHECKOUT	$0			$0			$0			$0			
SPECIAL HANDLING EQUIPMENT	$0			$0			$0			$0			
FLEET TEST EQUIPMENT	$784			$184			$0			$0			
TRAINING DEVICES	$64			$0			$0			$0			
DOCUMENTATION	$1,665			$0			$0			$0			
ILS	$2,509			$0			$0			$0			
TOTAL GRD EQUIP/FLEET SUP COST	**$7,127**			**$933**			**$300**			**$300**			
WEAPONS SYSTEM COST	**$115,184**			**$11,453**			**$16,369**			**$15,588**			
TARGETS INITIAL SPARES	$703			$0			$0			$0			
TOTAL PROGRAM COST	**$115,887**			**$11,453**			**$16,369**			**$15,588**			

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5) **June 2001**

TARGET SYSTEM: **TA/AS**		FISCAL YEAR 2000			FISCAL YEAR 2001			FISCAL YEAR 2002			FISCAL YEAR 2003		
MANUFACTURER: VARIOUS COST CODE: **EM300** FLYAWAY COST ($000)	Prior Yrs Total Cost	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST			
HARDWARE:													
CMD/CONTROL EQUIPMENT	$31,265			$345			$1,975			$81			
SCORING EQUIPMENT	$20,143			$0			$558			$437			
LOCATION/ID EQUIPMENT	$14,654			$0			$420			$788			
ECM/EMITTER EQUIPMENT	$44,116			$90			$4,810			$5,355			
AUGMENTATION/NAVIGATION EQUIPMENT	$9,809			$572			$771			$2,456			
INSTALL/MISSION EQUIPMENT	$2,057			$370			$566			$583			
MOBILE SEA RANGE	$12,868			$0			$0			$0			
TOTAL HARDWARE	**$134,912**			**$1,377**			**$9,100**			**$9,700**			
PROCUREMENT SUPPORT (RECURRING):													
GOVERNMENT IN-HOUSE	$28,538			$4,718			$2,972			$4,673			
DOCUMENTATION	$99			$0			$165			$170			
GOVERNMENT TEST	$276			$0			$51			$55			
TOTAL RECURRING	**$28,913**			**$4,718**			**$3,188**			**$4,898**			
PROCUREMENT SUPPORT (NONRECURRING):													
PRODUCT IMPROVEMENT	$1,300			**$602**			$0			$0			
SPECIAL TOOLING AND TEST EQUIPMENT	$0			$0			$0			$0			
TOTAL NONRECURRING	**$1,300**			**$602**			**$0**			**$0**			
TOTAL FLYAWAY	**$165,125**			**$6,697**			**$12,288**			**$14,598**			
GROUND EQUIPMENT/FLEET SUPPORT COST:													
GROUND EQUIPMENT	$488			$0			$143			$256			
INSTALL & CHECKOUT	$917			$0			$0			$0			
SPECIAL HANDLING EQUIPMENT	$0			$0			$0			$0			
FLEET TEST EQUIPMENT	$2,002			$0			$0			$0			
TRAINING	$444			$310			$320			$320			
DOCUMENTATION	$0			$0			$0			$0			
ILS	$13,098			$237			$572			$603			
TOTAL GRD EQUIP/FLEET SUP COST	**$16,949**			**$547**			**$1,035**			**$1,179**			
WEAPONS SYSTEM COST	**$182,074**			**$7,244**			**$13,323**			**$15,777**			
TARGETS INITIAL SPARES	$363			$188			$30			$335			
TOTAL PROGRAM COST	**$182,437**			**$7,432**			**$13,353**			**$16,112**			

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)

A. DATE June 2001

B. APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy/BA-2; Other Missiles

C. P-1 ITEM NOMENCLATURE
AERIAL TARGETS

SUBHEAD J2EM

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
Anit-Air Warfare Tgt/FY-99 (1)	35	156	NAVAIR		SS/FP	Raytheon A/C, Wichita, KS	JUN 99	JUN 00	Yes	MAY 98
Subsonic Aerial Target/FY-99	86	258	NAVAIR		C/Option	Northrop-Grumman, Hawthorne, CA	DEC 98	APR 00	Yes	
Subsonic Aerial Target/FY-00	71	279	NAVAIR		C/Option	Northrop-Grumman, Hawthorne, CA	FEB 00	MAR 01		
Subsonic Aerial Target/FY-01	78	259	NAVAIR		C/FP	Northrop-Grumman, Hawthorne, CA	APR 01	FEB 02		
Subsonic Aerial Target/FY-02	109	243	NAVAIR		C/Option	Northrop-Grumman, Hawthorne, CA	JAN 02	FEB 03		
Supersonic Sea Skimming Target										
SSST/FY-99	18	536	NAVAIR		SS/FP	McDonnell Douglas, St. Louis, MO	DEC 99	MAY 01		
SSST/FY-00	16	536	NAVAIR		SS/Option	McDonnell Douglas, St. Louis, MO	DEC 99	MAY 01		
SSST/FY-01	25	548	NAVAIR		SS/Option	McDonnell Douglas, St. Louis, MO	JUL 01	AUG 02		
SSST/FY-02	23	552	NAVAIR		SS/Option	McDonnell Douglas, St. Louis, MO	FEB 02	MAR 03		

D. REMARKS

(1) The FY-99 Anti-Air Warfare Target version will include the updated avionics system (old system will be replaced due to obsolete components).

(2) Unit price for Foreign NDI program is not applicable; various items are procured under this line item.

CLASSIFICATION:

UNCLASSIFIED

FY 2002/2003 BUDGET PRODUCTION SCHEDULE, P-21 | DATE **June 2001**

APPROPRIATION/BUDGET ACTIVITY: **Weapons Procurement, Navy/BA-2 - OTHER MISSILES** | Weapon System | P-1 ITEM NOMENCLATURE: **AERIAL TARGETS**

Item	Manufacturer's Name and Location	Production Rate MSR	1-8-5	MAX	Procurement Leadtimes ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
Anti-Air Warfare Target (AAW)	Raytheon, Wichita, KS	3	10	20			16			E
Subsonic Aerial Target	Northrop-Grumman, Hawthorne, CA	7-8	20	40-45			13			E

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2000 / 1999 OCT	NOV	DEC	CALENDAR YEAR 2000 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	FISCAL YEAR 2001 / CALENDAR YEAR 2001 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	BAL
Anti-Air Warfare Tgt./RAYTHEON	99	N	35	0	35									3	3	3	3	3	3	3	3	3	3	3	2					0
Subsonic Aerial Tgt./NORTHROP-GRU	99	N	86	0	86							1	5	9	9	9	9	9	9	9	9	8								0
Subsonic Aerial Tgt./NORTHROP-GRU	00	N	71	0	71					A													7	7	7	7	6	6	24
Subsonic Aerial Tgt./ NORTHROP-GRU	01	N	78	0	78																			A						78

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2002 / 2001 OCT	NOV	DEC	CALENDAR YEAR 2002 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	FISCAL YEAR 2003 / CALENDAR YEAR 2003 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	BAL
Subsonic Aerial Tgt./NORTHROP-GRU	00	N	71	47	24	6	6	6	6																					0
Subsonic Aerial Tgt./NORTHROP-GRU	01	N	78	0	78					6	6	6	6	6	6	7	7	7	7	7	7									0
Subsonic Aerial Tgt./NORTHROP-GRU	02	N	109	0	109				A													10	10	10	9	9	9	9	9	34

Remarks:

CLASSIFICATION:

UNCLASSIFIED

CLASSIFICATION:

UNCLASSIFIED

FY 2002/2003 BUDGET PRODUCTION SCHEDULE, P-21					DATE June 2001					
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-2 OTHER MISSILES**			Weapon System		P-1 ITEM NOMENCLATURE **AERIAL TARGETS**					
		Production Rate			Procurement Leadtimes					
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
Subsonic Aerial Target	Northrop-Grumman, Hawthorne, CA	7-8	20	40-45			13			E

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2004												FISCAL YEAR 2005												BAL
						2003			CALENDAR YEAR 2004									CALENDAR YEAR 2005												
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Subsonic Aerial Tgt./NORTHROP-GRU	02	N	109	76	34	9	9	9	7																				0

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2006												FISCAL YEAR 2007												BAL
						2005			CALENDAR YEAR 2006									CALENDAR YEAR 2007												
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

Remarks:

CLASSIFICATION:

UNCLASSIFIED

FY 2002/2003 BUDGET PRODUCTION SCHEDULE, P-21						DATE June 2001					
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-2 - OTHER MISSILES**				Weapon System		P-1 ITEM NOMENCLATURE **AERIAL TARGETS**					
		Production Rate			Procurement Leadtimes						
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure	
Supersonic Sea Skimming Tgt.	McDonnell Douglas, St Louis, MO	N/A	N/A	42+			13			E	

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2000												FISCAL YEAR 2001										BAL
						1999			CALENDAR YEAR 2000									CALENDAR YEAR 2001										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
SSST/McDonnell Douglas	99	N	18	0	18			A																	5	5	4	4		0
SSST/McDonnell Douglas	00	N	16	0	16			A																	4	4	4	4		0
SSST/McDonnell Douglas	01	N	25	0	25																						A			25

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2002												FISCAL YEAR 2003										BAL
						2001			CALENDAR YEAR 2002									CALENDAR YEAR 2003										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
SSST/McDonnell Douglas	01	N	25	0	25											1	4	4	4	4	4								0
SSST/McDonnell Douglas	02	N	23	0	23					A													4	4	4	4	3		0

Remarks:

CLASSIFICATION: **UNCLASSIFIED**

FY 2002
PRESIDENT'S
BUDGET SUBMISSION

BUDGET ITEM JUSTIFICATION SHEET P-40											DATE: June 2001	
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-2/OTHER MISSILES**								P-1 ITEM NOMENCLATURE **DRONES AND DECOYS (J2DJ)**				
Program Element for Code B Items: **N/A**								Other Related Program Elements **N/A**				
	Prior Years	ID Code	FY 2000	FY 2001	FY 2002							
QUANTITY												
COST ($M)	$233.6		$9.9	$14.9	$0.0							

PROGRAM COVERAGE:

Funding for Drones and Decoys from FY 1986 through FY 1993 has been used for continued procurements of ADM-141 Tactical Air Launched Decoy (TALD) units, which are non-powered, glide trajectory driven vehicles. The ADM-141 TALD is an expendable of similar size to a 500 pound general purpose bomb, and is carried similarly. After launched from strike aircraft, the ADM-141 TALD uses radar signature augmentation and preprogrammed flight profiles to simulate manned aircraft. Its mission is to deceive and saturate hostile radar controlled air defenses, thus enhancing strike aircraft survivability. Currently, the 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.

FY99 funding was provided by Congress for the Improved Tactical Air Launch Decoy (ITALD) Program. ITALD currently meets Operational Requirements Document (ORD) requirements for accuracy, however operationally it was determined that the accuracy is inadequate to support the mission of long range suppression and saturation of threat Integrated Air Defense Systems. An Engineering Change Proposal was issued to the FY98 contract for a navigational and engine upgrade.

FY00 funding was provided by Congress for the Improved Tactical Air Launch Decoy (ITALD) Program to retrofit and test existing ITALDS from the FY96 and FY98 contracts and to procure approximately 27 ITALDS with GPS.

FY01 funding was provided by Congress for the Improved Tactical Air Launch Decoy (ITALD) Program to procure approximately 101 ITALDS with GPS.

WEAPON SYSTEM COST ANALYSIS EXHIBIT (P-5) **June 2001**

TARGET SYSTEM: **ITALD** MANUFACTURER: **R**MI LTD, RATAT HASHARON, ISRAEL COST CODE: **DJ010** FLYAWAY COST ($000)		FISCAL YEAR 2000			FISCAL YEAR 2001			FISCAL YEAR 2002			TO	
	Prior Yrs Total Cost	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	QTY	UNIT COST	TOTAL COST	COMPLETE COSTS	TOTAL COST
HARDWARE:												
ITALD (1)	$35,655	27	$127	$3,429	101	$127	$12,827	0	$0	$0		
CONTAINERS	$355	13	$5	$65	51	$5	$255			$0		
TOTAL HARDWARE	**$36,010**	**27**	**$132**	**$3,494**	**101**	**$132**	**$13,082**	**0**	**$0**	**$0**		
PROCUREMENT SUPPORT (RECURRING):												
CONTRACTOR ENGINEERING	$812			$0			$0			$0		
GOVERNMENT IN-HOUSE	$4,370			$1,151			$1,585			$0		
DOCUMENTATION	$166			$300			$195			$0		
GOVERNMENT TEST (2)	$1,531			$608			$0			$0		
TOTAL RECURRING	**$6,879**			**$2,059**			**$1,780**			**$0**		
PROCUREMENT SUPPORT (NONRECURRING):												
PRODUCT IMPROVEMENT (3)	$6,948			$4,384			$0			$0		
CONTRACTOR ENGINEERING	$0			$0								
SPECIAL TOOLING AND TEST EQUIPMENT	$0			$0			$0			$0		
TOTAL NONRECURRING	**$6,948**			**$4,384**			**$0**			**$0**		
TOTAL FLYAWAY	**$49,837**	**27**	**$368**	**$9,937**	**101**	**$147**	**$14,862**	**0**	**$0**	**$0**		
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	$24			$0			$0			$0		
DOCUMENTATION	$0			$0			$0			$0		
ILS	$784			$0			$0			$0		
TOTAL GRD EQUIP/FLEET SUP COST	**$808**			**$0**			**$0**			**$0**		
WEAPONS SYSTEM COST	**$50,645**	**27**	**$368**	**$9,937**	**101**	**$147**	**$14,862**	**0**	**$0**	**$0**		
VARIOUS 1/	**$182,967**											
TARGETS INITIAL SPARES	$0			$0			$0			$0		
TOTAL PROGRAM COST	**$233,612**	**27**	**$368**	**$9,937**	**101**	**$147**	**$14,862**	**0**	**$0**	**$0**		

(1) Combined FY00/FY01 procurement of 128 ITALDS with GPS.
(2) Operational Tests
(3) Includes Retrofit of 167 ITALDS with GPS Upgrade @ $7.9k each, DEC Upgrade, 18 Operational Assessment Vehicles and IDTP backward capability.

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)

A. DATE June 2001

B. APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy/BA-2; Other Missiles

C. P-1 ITEM NOMENCLATURE DRONES AND DECOYS

SUBHEAD J2DJ

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
ADM-141C/FY00	27	127	NAVAIR	N/A	SS/FP	Ramat Hasaron, IS Israeli Military Industries	Sep 01	Dec 02	Yes	N/A
ADM-141C/FY01	101	127	NAVAIR	N/A	SS/FP	Ramat Hasharon, IS Israeli Military Industries,	Sep 01	Jan 03	Yes	N/A

D. REMARKS

FY 2002/03 BUDGET PRODUCTION SCHEDULE, P-21					DATE June 2001
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-2 Other Missiles**			Weapon System		P-1 ITEM NOMENCLATURE **DRONES AND DECOYS (J2DJ)**

		Production Rate			Procurement Leadtimes					
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
ADM-14C/IMI	IMI, Ramat Hasharon, IS (ITALD)	20	100	200			14			E

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2000												FISCAL YEAR 2001										BAL
						1999			CALENDAR YEAR 2000										CALENDAR YEAR 2001										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
ADM-141C/IMI	00	N	27	0	27																							A	27
ADM-141C/IMI	01	N	101	0	101																							A	101

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2002												FISCAL YEAR 2003										BAL
						2001			CALENDAR YEAR 2002										CALENDAR YEAR 2003										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
ADM-141C/IMI	00	N	27	0	27															20	7									0
ADM-141C/IMI	01	N	101	0	101																13	20	20	20	20	8				0

Remarks:

BUDGET ITEM JUSTIFICATION SHEET **P-40**													**DATE:** **June 2001**
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/2**						P-1 ITEM NOMENCLATURE **OTHER MISSILE SUPPORT/2290**							
Program Element for Code B Items: **N/A**						Other Related Program Elements **N/A**							
	Prior Years	ID Code	FY 2000	FY 2001	FY 2002								
QUANTITY													
COST ($M)	$32.9	A	$12.6	$14.8	$15.8								
Initial Spares ($M)	$1.1		$0.7	$0.7	$0.7								

The Vertical Launching System (VLS) is a missile launching system for surface combatants, designed to launch STANDARD Missile, TOMAHAWK, EVOLVED SEASPARROW 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 weapon 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 21* SPRUANCE (DD-963) Class Destroyers and one 61 cell and one 29 cell launcher for 58 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. Funds are for the procurement of VLS canisters, training for new missile variants (BLK IVA, ESSM, and Tactical Tomahawk), to provide VLS unique equipment to the weapon facilities and to provide canister ILS. Prior to FY-96, canisters were also funded by SCN and OPN Appropriations.

EVOLVED SEASPARROW Quad Pack (ESSM/QP) missile is being designed to provide an enhanced ship self defense capability for DDG-51 Flight IIA (DDG-79 and follow) ships. Procurement of the ESSM/QP canisters is budgeted starting in FY-01 under BLI #230700/EVOLVED SEASPARROW (ESSM).

* 3 SPRUANCE (DD-963) Class Ships are being decommissioned in FY01 bringing the total to 21 DD-963s.

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System	DATE: June 2001
APPROPRIATION/BUDGET ACTIVITY: Weapons Procurement, Navy/BA-2	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD: OTHER MISSILE SUPPORT/2290 (A2FD)

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years	FY 2000			FY 2001			FY 2002					
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost			
FD005	TYPE I CANISTERS														
	SM-2 MR BLK III/IIIA/IIIB (MK-13)		4,758	75	33.5	2,512	75	33.5	2,510	75	35.0	2,625			
FD006	TYPE II CANISTERS														
	SM-2 BLK IV (MK-21 MOD 0)		10,132												
	SM-2 BLK IVA (MK-21 MOD 1)			12	157.2	1,886	15	157.1	2,356	22	156.6	3,445			
	TACTICAL TOMAHAWK (MK-14 MOD 2) UPGRADE														
FD009	CANISTER EQUIPMENT		2,254			1,657			2,220			2,004			
FD970	ILS SUPPORT		14,815			6,521			7,344			7,193			
FD980	INITIAL TRAINING SUPPORT		950			0			336			573			
			32,909			**12,576**			**14,766**			**15,840**			

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

ITEM NO. 17 PAGE NO. 2

UNCLASSIFIED

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A) | Weapon System | A. DATE: **June 2001**

B. APPROPRIATION/BUDGET ACTIVITY: **Weapons Procurement, Navy/2**

C. P-1 ITEM NOMENCLATURE: **OTHER MISSILE SUPPORT/2290**

SUBHEAD: **A2FD**

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FY 00										
FD005/TYPE I CANS										
SM-2 BLK III/IIIA/IIIB	75	33.5	NAVSEA		FP/ OPT	United Defense, L.P. MINNEAPOLIS, MN	02/00	04/01	YES	
FD006/ TYPE II CANS										
SM-2 BLK IVA	12	157.2	NAVSEA		FP/ OPT	United Defense, L.P. MINNEAPOLIS, MN	06/00	12/01	YES	
FY 01										
FD005/TYPE I CANS										
SM-2 BLK III/IIIA/IIIB	75	33.5	NAVSEA		FP/ OPT	United Defense, L.P. MINNEAPOLIS, MN	01/01	02/02	YES	
FD006/ TYPE II CANS										
SM-2 BLK IVA	15	157.1	NAVSEA		FP/ OPT	United Defense, L.P. MINNEAPOLIS, MN	01/01	04/02	YES	
FY 02										
FD005/TYPE I CANS										
SM-2 BLK III/IIIA/IIIB	75	35.0	NAVSEA		FP/ OPT	United Defense, L.P. MINNEAPOLIS, MN	01/02	01/03	YES	
FD006/ TYPE II CANS										
SM-2 BLK IVA	22	156.6	NAVSEA		FP/ OPT	United Defense, L.P. MINNEAPOLIS, MN	01/02	04/03	YES	

D. REMARKS

FY 2002/03 BUDGET PRODUCTION SCHEDULE, P-21 | DATE **June 2001**

APPROPRIATION/BUDGET ACTIVITY: **WEAPONS PROCUREMENT, NAVY/2** | Weapon System | P-1 ITEM NOMENCLATURE: **OTHER MISSILE SUPPORT/229(**

		Production Rate			Procurement Leadtimes					
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
SM-2 BLK III/IIIA/IIIB	United Defense, L.P.	120	330	480	3	3	18	18	21	E
SM-2 BLK IV/IVA	Minneapolis, Mn									

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2000												FISCAL YEAR 2001												BAL
						1999			CALENDAR YEAR 2000									CALENDAR YEAR 2001												
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
SM-2 BLK III/IIIA/IIIB (MK-13)	99		75		75							8	8	8	8	8	8	8	8	11										0
SM-2 BLK IV (MK-21 MOD 0)	99		36		36							4	4	4	4	4	4	4	4	4										0
SM-2 BLK III/IIIA/IIIB (MK-13)	00		75		75					A														8	8	8	8	8	8	27
SM-2 BLK IVA (MK-21 MOD 1)	00		12		12									A																12
SM-2 BLK III/IIIA/IIIB (MK-13)	01		75		75																A									75
SM-2 BLK IVA (MK-21 MOD 1)	01		15		15																A									15
ESSM/QP (MK-25 MOD 0)	01		10		10																A									10

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2002																								
						2001			CALENDAR YEAR 2002																						
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP														
SM-2 BLK III/IIIA/IIIB (MK-13)	00		75	48	27	8	8	11																						
SM-2 BLK IVA (MK-21 MOD 1)	00		12	0	12			6	6																					
SM-2 BLK III/IIIA/IIIB (MK-13)	01		75	0	75					8	8	8	8	8	8	8	8													
SM-2 BLK IVA (MK-21 MOD 1)	01		15	0	15							4	4	4	3															
ESSM/QP (MK-25 MOD 0)	01		10	0	10																									
SM-2 BLK III/IIIA/IIIB (MK-13)	02		75	0	75				A																					
SM-2 BLK IVA (MK-21 MOD 1)	02		22	0	22				A																					
ESSM/QP (MK-25 MOD 0)	02		2	0	2				A																					

Remarks:

Minimum Sustaining Rate are met with FMS and Direct Commercial Sale (DCS) quantities.
ESSM/QP (MK-25 MOD 0) Qty shown for informational Purposes.

BUDGET ITEM JUSTIFICATION SHEET
P-40

DATE: **June 2001**

APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy/ BA - 2 Other Missiles

P-1 ITEM NOMENCLATURE
AIM-9 Sidewinder Mods

Program Element for Code B Items:

Other Related Program Elements
0207161N

	Prior Years	ID Code	FY 2000	FY 2001								
QUANTITY			0	63								
COST (In Millions)	46.4		0	27.3								

The AIM-9 Sidewinder short-range air-to-air missile (SRM) is a launch and leave, air combat munitions 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.

AIM-9X starts production with FY 2001 funds. The following Congressional language resulted from the FY01 Appropriations Conference - "The conferees directed that future Navy and Air Force budget requests for AIM-9X be included in the new procurement sections of the Missile Procurement Air Force and Weapons Procurement Navy budget accounts rather than the current practice of budgeting AIM-9X as a modification." As a result, FY01 procurement actions are addressed in a P3A and the remainder of the program is detailed in a P5. Modificati to the AIM-9M to incorporate changes to ensure compatibility with F/A-18E/F are funded in FY01 through FY03. The AIM-9X is a long-term evolution to the AIM-9 which provides improvements in missile seeker and kinematics by retrofitting components to current missiles to the maximum extent possible. Retrofitting components will extend the operational effectiveness of existing inventories at an affordable cost while continuing the evolution of the AIM-9 series. Anti-Tamper features will be incorporated to protect improvements inherent to this design. The Defense Acquisition Board (DAB) approved the Low Rate Initial Production (LRIP) acquisition strategy in December 1996 as part of the MS II decision. This strategy includes a pricing agreement with Raytheon for the first three production lots, and sustainment activities to include depot level repair. On September 8, 2000 AIM-9X conducted a DAB briefing chaired by Dr. Gansler at which time the program received approval to enter Low-Rate Initial Production (LRIP). The modeling and simulation suite was accredited by the program manager for use in spec compliance and to support the LRIP DAB. The AIM-9X program has been designated an ACAT-1C program for future LRIPs and FRP with the milestone decis authority delegated to the Navy Acquisition Executive.

FY2001 Program Justification: Successful LRIP DAB Milestone Decision on 22 Sept 2000. LRIP I option was awarded Nov 2000.

The total quantity of missiles produced will be a combination of All up Rounds (AUR) and Captive Air Training Missiles (CATM). Navy and Air Force quantities to be procured for FY2001 is stated below: (FY02 through FY 07 are presented in the P5 exhibit).

Note: In FY01 $2.9M has been identified as a reprogramming source for other higher priority Navy requirements.

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION** Date: June 2001

MODELS OF SYSTEM AFFECTED: AIM-9X TYPE MODIFICATION: Increased Capability MODIFICATION TITLE: AIM-9X Missile Modification

DESCRIPTION/JUSTIFICATION:

The AIM-9X (Sidewinder) short range air-to-air missile is a long-term evolution of the AIM-9 series of fielded missiles. The AIM-9X missile program provides a launch and leave, air combat munitions 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 short-range air-to-air missile arena is essential and includes first shot, first kill opportunity against an enemy employing IR countermeasures. The AIM-9X employs several components common with the AIM-9M. Anti-Tamper features are being incorporated to protect improvements inherent in this design. AIM-9X is an Acquisition Category IC (ACAT-IC) joint-service program with Navy lead. The Air Force is procuring a total of 5,097 missiles of which 1,100 are Captive Air Training Missiles (CATMs).

NOTES:

1. The following Congressional language resulted from the FY01 Appropriations Conference - 'The conferees direct that future Air Force and Navy budget requests for AIM-9X be included in the new procurement sections of the Missile Procurement Air Force and Weapons Procurement Navy budget accounts rather than the current practice of budgeting AIM-9X as a modification.' As a result, FY01 and prior year actions are addressed in a BP21 P3A and the remainder of the program is detailed in weapons procurement documentation (P40, 5, 5A, 21).

2. The following notes apply to the Projected Financial Plan and Installation Schedule sections. ALL TOTALS INCLUDE ONLY FY01 AND PRIOR YEARS DATA.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

The Navy and Air Force successfully developed a restructured program to overcome schedule delays. The delays were due to issues with the Control Actuation System (CAS) and tracker software which have since been rectified and tested. The restructure supported a May LRIP DAB but when FY 00 production funding was deferred by the FY 00 Appropriation Act the DAB was rescheduled to be in line with the availability of funds. The program met LRIP entry criteria in September 2000, with LRIP I contract awarded Nov 00, Milestone III in 3Q FY03 with FRP award in FY04 and Initial Operating Capability (IOC) in 4Q FY03.

The joint flight test program has completed 16 unguided and 14 guided launches proving capabilities well beyond the fielded AIM-9M system.

	FY 1998 & Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E		127.8		57.0		38.9		21.5		16.4														
PROCUREMENT																								
INSTALLATION KITS							63	16.8																
INSTALLATION KITS - UNIT COST								0.3																
INSTALLATION KITS NONRECURRING								0.0																
SPEC TOOLING/SPEC TEST EQUIP								1.1																
ENGINEERING CHANGE ORDERS								0.8																
DATA								0.1																
GOVERNMENT IN-HOUSE								0.7																
TRAINING EQUIPMENT								1.5																
SUPPORT EQUIPMENT								0.4																
OTHER PRODUCTION SUPPORT								1.1																
ILS								1.3																
INSTALL COST (INCLUDED IN INSTALLATION KITS (INCLUDES TEARDOWN, TEST AND SHIPPING)																								
TOTAL PROCUREMENT								23.8																
REPROGRAMMING SOURCE								2.9																
LINE ITEM TOTAL								26.7																

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued** Date: June 2001

MODELS OF SYSTEMS AFFECTED: **AIM-9X** MODIFICATION TITLE: **AIM-9X MISSILE MODIFICATION**

INSTALLATION INFORMATION:

METHOD OF IMPLEMENTATION: **CONTRACTOR**

ADMINISTRATIVE LEADTIME: 2 Weeks (Lots 1-3)* PRODUCTION LEADTIME: 21 Months (Lot 1)

CONTRACT DATES: FY 2000: Not Applicable FY 2001: Nov 2000 FY 2002: N/A

DELIVERY DATE: FY 2000: FY 2001: Aug 2002 FY 2002: N/A

($ in Millions)

Cost:	Prior Years		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007				Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$		$	Qty	$
PRIOR YEARS																								
FY 1999 EQUIPMENT																								
FY 2000 EQUIPMENT																								
FY 2001 EQUIPMENT																								
FY 2002 EQUIPMENT																								
FY 2003 EQUIPMENT																								
FY 2004 EQUIPMENT																								
FY 2005 EQUIPMENT																								
FY 2006 EQUIPMENT																								
FY 2007 EQUIPMENT																								
TO COMPLETE																								

INSTALLATION SCHEDULE:

	FY 2000 & Prior	FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				TC	TOTAL
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
In	0	63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63
Out	0	0	0	0	0	0	0	0	8	19	24	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63

INPUT SCHEDULE: DELIVERY OF COMPONENTS TO THE CONTRACTOR FOR MISSILES.

OUTPUT SCHEDULE: DELIVERY OF MISSILES FROM THE CONTRACTOR (includes 15 CATMs). Deliveries reflect actual contract modification.

INPUT STARTS IN 1ST QTR FY01 TO ALLOW FOR TEAR-DOWN, INSPECTION, AND SHIPMENT OF GFE COMPONENTS TO THE CONTRACTOR.

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION** Date: June 2001

MODELS OF SYSTEM AFFECTED: AIM-9M TYPE MODIFICATION: Reliability MODIFICATION TITLE: AIM-9M Missile Modification

DESCRIPTION/JUSTIFICATION:

During F/A-18E/F testing AIM-9M missiles experienced wing and forward hangar failures due to the F/A-18E/F dynamic wing tip environment. Modifications to the missile wing were developed and tested during F/A-18E/F EMD DT testing and were incorporated into the AIM-9M assets used during F/A-18E/F OPEVAL. Selected forward hangars were also used during F/A-18E/F EMD and OPEVAL but with flight hour limitations. For fleet use, new hangars manufactured with a new material will be used to provide the fleet with a hangar that does not require inspections.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Modifications will be incorporated by Engineering Change Proposal (ECP) to the AIM-9M baseline. Funding is for 600 All Up Rounds and 150 CATMS and sequenced to cover F/A-18E/F deployments.

Congressional notification of AIM-9M's modification (compatibility with F/A-18E/F) was submitted with an FY01 start.

	FY 1998 & Pr		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	QTY	$	TY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																								
RDT&E																								
PROCUREMENT																								
HARDWARE								0.3		0.3														
INSTALLATION KITS - UNIT COST																								
INSTALLATION KITS NONRECURRING																								
SPEC TOOLING/SPEC TEST EQUIP																								
ENGINEERING CHANGE ORDERS																								
DATA																								
GOVERNMENT IN-HOUSE								0.3		0.5														
TRAINING EQUIPMENT																								
SUPPORT EQUIPMENT																								
OTHER PRODUCTION SUPPORT																								
ILS																								
INSTALL COST (INCLUDED IN INSTALLATION KITS (INCLUDES TEARDOWN, TEST AND SHIPPING)																								
TOTAL PROCUREMENT								0.6		0.8														

BUDGET ITEM JUSTIFICATION SHEET
P-40

DATE: **June 2001**

APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy

P-1 ITEM NOMENCLATURE
HARM Mods - AGM-88C/D

Program Element for Code B Items:
2032700

Other Related Program Elements
0205601N

	Prior Years	ID Code	FY 2000*	FY 2001	FY 2002							
QUANTITY	0		270	0	0							
COST ($M)	$0.0		$89.1	$0.0	$0.0							
Initial Spares ($M)												
Total ($M)	$0.0		$89.1	$0.0	$0.0							
Unit Cost ($M)	0		0.330	0	0							

* Funding for FY00 was executed under Subhead Y2ES. Subhead J2ES became effective beginning FY01 due to a program realignment from PEO(T) to PEO(W).

MISSION DESCRIPTION: The High Speed Anti-Radiation Missile (HARM) is a joint-service air-to-service missile designed to suppress or destroy land and sea based radars involved with enemy air defense systems. HARM is integrated on the F/A-18 and EA-6B aircraft. HARM weighs 807 lbs, is 164 inches long and 10 inches in diameter. HARM is a joint-service program with USN (lead), USAF, and FMS participation. The HARM was in full production from FY1982 through FY1996. The USN procured 8,654 all-up-round (AUR) HARMs and 551 Block IV missile modification kits with WPN funding. The last year of USN WPN funding was appropriated in FY94.

The HARM weapon was recently deployed in the North American Treaty Organization (NATO) military action in Kosovo, was successfully utilized in Iraq and Bosnia, and currently is used in Northern and Southern Watch activity. As the only missile that can successfully isolate and attack "Pop-up" and "Shoot and Scoot" anti-air defense systems, the HARM AGM-88C is the Fleet shooters weapon of choice. The current HARM baseline is the AGM-88C (Block V) configuration, however a disproportionately higher number of AGM-88B (Block III) missiles remain in the USN inventory. The FY 2000, Kosovo Supplemental funding will be used to procure modification kits to upgrade approximately 270 AGM-88Bs to the current baseline. The current AGM-88C baseline offers greater capability against existing and advanced threats which includes capabilities to counter threats of high pulse densities, wider frequency agility (larger footprint), more complex wave patterns, and multiple engagement radars. The modification kits will include an improved Target Detector for better performance against advanced threats.

The HARM AGM-88B+/D (Block VI)/Precision Navigation Unit (PNU) Upgrade Program is a tri-national cooperative program that will enable the fleet to maintain effectiveness against increasingly sophisticated, ground-based enemy radars. The Block VI/PNU consists of a tactical software upgrade in conjunction with a hardware upgrade which includes the installation of an Inertial Measurement Unit (IMU) coupled with a Global Positioning System (GPS) receiver to provide improved guidance capability to current domestic and international customer inventories. The AGM-88B+/D (Block VI is in development and will start production in FY03. Milestone III is expected in June 03.

CLASSIFICATION: UNCLASSIFIED

P3A **INDIVIDUAL MODIFICATION** Date: June 2001

MODELS OF SYSTEM AFFECTED: AGM-88B and AGM-88C TYPE MODIFICATION: HARM AGM88C/D UPGRADE MODIFICATION TITLE: HARM Mods - AGM-88C/D

DESCRIPTION/JUSTIFICATION:

The High speed Anti-Radiation Missile (HARM) is the USN weapon of choice against ground-based enemy radar emitters. The current HARM configuration is the AGM-88C, however the AGM-88D configuration is in development and will enter production in FY2003. The AGM-88D builds upon the AGM-88C configuration and will enhance fleet ability to suppress threats in both a reactive and preplanned fashion, increase probability of kill, extend launch range, provide GPS based point-to-point capability/geographic specificity, improve effectiveness against low power radar transmitters, practically eliminate friendly fire, and improve HARMs effectiveness in closely confined battle situations such as those experienced during Kosovo Operations.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: Engineering and Manufacturing Development (EMD)
EMD Contract Award: JUL 03

	FY 2000		FY 2001		FY 2002	
FINANCIAL PLAN (IN MILLIONS)	QTY	$	QTY	$	QTY	$
RDT&E		10.713		9.368		12.328
PROCUREMENT						
INSTALLATION KITS	270	74.300	0		0	
INSTALLATION KITS - UNIT COST		0.275				
INSTALLATION KITS NONRECURRING						
COMPONENTS INTEGRAL TO AUR BUILD-UP		0.550				
EQUIPMENT NONRECURRING		0.000				
ENGINEERING CHANGE ORDERS		1.050				
DATA		0.450				
TRAINING EQUIPMENT						
SUPPORT EQUIPMENT		0.530				
PROD START UP and ENGINEERING SUPP		8.924				
GOVT TEST PROGRAM - TELEMETRY		2.100				
INTEGRATED LOGISTICS SUPPORT		0.854				
TRANSPORTATION		0.000				
INTERIM CONTRACTOR SUPPORT						
INSTALL COST/ALL-UP-ROUND BUILD-UP*		0.300				
TOTAL PROCUREMENT		89.058				

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued** Date: June 2001

MODELS OF SYSTEMS AFFECTED: AGM-88B MODIFICATION TITLE: HARM Mods - AGM-88C/D

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: Contractor Assembly at Plant
ADMINISTRATIVE LEADTIME: 5 Months PRODUCTION LEADTIME: 18 Months
CONTRACT DATES: FY 2000: SEP 00 FY 2001: n.a. FY 2002: n.a.
DELIVERY DATE: FY 2000: FEB 02 FY 2001: n.a. FY 2002: n.a.

($ in Millions)

Cost:	FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																			0	0.0
FY 1999 EQUIPMENT																			0	0.0
FY 2000 EQUIPMENT	270	0.3																	270	0.3
FY 2001 EQUIPMENT																				
FY 2002 EQUIPMENT																				
FY 2003 EQUIPMENT																				
FY 2004 EQUIPMENT																				
FY 2005 EQUIPMENT																				
FY 2006 EQUIPMENT																				
FY 2007 EQUIPMENT																				
TO COMPLETE																				

INSTALLATION SCHEDULE: \1

	FY 2000	FY 2001				FY 2002				FY 2003			
	& Prior	1	2	3	4	1	2	3	4	1	2	3	4
In	270	0	0	0	0	0	0	0	0	0	0	0	0
Out	0	0	0	0	0	0	12	35	51	51	51	51	19

\1 Installation schedule reflects delivery of missile control and guidance sections from Raytheon. Field activity will perform All-Up-Round (AUR) breakdown/build-up.

BUDGET ITEM JUSTIFICATION SHEET
P-40

DATE: **June 2001**

APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy/BA-2

P-1 ITEM NOMENCLATURE
STANDARD MISSILE MODIFICATION (A2FK) BLI:235600

Program Element for Code B Items:

Other Related Program Elements

	Prior Years	ID Code	FY 2000	FY 2001	FY 2002						To	Total
QUANTITY	313		74	80	58							
COST ($M)	$153.0		$41.2	$50.2	$35.4							
Initial Spares ($M)												

PROGRAM OVERVIEW: The Standard Missile Modification Program provides for improvements in operational readiness and electronic counter measures (ECM) performance in the STANDARD Missiles currently deployed. All of these modifications are "turn-key" and do not involve separate install funding.

WEAPONS SYSTEM COST ANALYSIS **P-5**	Weapon System	DATE: **June 2001**
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-2**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **STANDARD MISSILE MODIFICATION (A2FK) BLI:235600**

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years	FY 2000			FY 2001			FY 2002					
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost			
FK007	GC&A			74	382.45	28,301	80	443.25	35,460	58	429.67	24,921			
	MK 104 UPGRADE			74	41.00	3,034	80	46.35	3,708	58	45.73	2,652			
	MK 54 S&A DEVICE			74	9.45	699	80	9.69	775	58	9.83	570			
	MK 45 TDD MOD 9/10			74	109.34*	8,091	80	104.91	8,393	58	104.91	6,085			
	MK 125			74	15.07	1,115	80	19.08	1,526	58	19.39	1,125			
	SM-1Blk V1B Mod Overrun								363						
	* MK 45 TDD MOD 9/10 unit cost increase in FY00 includes cost for Engineering Change Proposals (ECPs)														
						41,240			**50,225**			**35,353**			

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A	Weapon System	A. DATE June 2001
B. APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-2**	C. P-1 ITEM NOMENCLATURE **STANDARD MISSILE MODIFICATION**	SUBHEAD **A2FK**

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
GC&A										
FY00	74	382.45	NAVSEA		SS/FFP/IF	RAYCO-TUCSON, AZ	05/00	05/02	YES	
FY01	80	443.25	NAVSEA		SS/FFP/IF	RAYCO-TUCSON, AZ	03/01	01/03	YES	
FY02	58	429.67	NAVSEA		SS/FFP/IF	RAYCO-TUCSON, AZ	01/02	01/04	YES	
MK 104 UPGRADE										
FY00	74	41.00	NAVSEA		SS/FFP/AF	ARC-CAMDEN, AR	07/00	10/01	YES	
FY01	80	46.35	NAVSEA		SS/FFP/AF	ARC-CAMDEN, AR	03/01	10/02	YES	
FY02	58	45.73	NAVSEA		SS/FFP/AF	ARC-CAMDEN, AR	03/02	10/03	YES	
MK 54 S&A DEVICE										
FY00	74	9.45	NAVSEA		SS/FFP	KAMAN- Middletown,CT	03/00	10/01	YES	
FY01	80	9.69	NAVSEA		SS/FFP	KAMAN- Middletown,CT	05/01	10/02	YES	
FY02	58	9.83	NAVSEA		SS/FFP	KAMAN- Middletown,CT	03/02	10/03	YES	
MK 45 TDD MOD 9/10										
FY00	74	109.34*	NAVSEA		MYP/SS/FFP/AF	MOTOROLA-Scottsdale,AZ	12/99	10/01	YES	
FY01	80	104.91	NAVSEA		MYP/SS/FFP/AF	MOTOROLA-Scottsdale,AZ	03/01	10/02	YES	
FY02	58	104.91	NAVSEA		MYP/SS/FFP/AF	MOTOROLA-Scottsdale,AZ	03/02	10/03	YES	
MK 125										
FY00	74	15.07	NAVSEA		SS/FFP	AlliantTech-Magna,UT	04/00	10/01	YES	
FY01	80	19.08	NAVSEA		SS/FFP	AlliantTech-Magna,UT	06/01	10/02	YES	
FY02	58	19.39	NAVSEA		SS/FFP	AlliantTech-Magna,UT	04/02	10/03	YES	

D. REMARKS

* FY00 MK 45 TDD MOD 9/10 unit cost includes Engineering Change Proposals (ECPs).

FY 2002 BUDGET PRODUCTION SCHEDULE, P-21						DATE June 2001	
APPROPRIATION/BUDGET ACTIVITY **WEAPONS PROCUREMENT NAVY/BA2**			Weapon System			P-1 ITEM NOMENCLATURE **Standard Missile Modifications/2356**	
		Production Rate			Procurement Leadtimes		
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
MK 104 *	ARC, Camden, AR	156	TBD	TBD	-	5	19	19	24	EA
MK 54 *	Kaman, Middletown, CT	160	TBD	TBD	-	5	19	19	24	EA
MK 45 *	Motorola, Scottsdale, AZ	120	TBD	TBD	-	5	19	19	24	EA
MK 125 *	AlliantTech, Magna, UT	96	TBD	TBD	-	6	18	18	24	EA

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2001												FISCAL YEAR 2002										BAL
						2000			CALENDAR YEAR 2001												CALENDAR YEAR 2002									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
RAYCO	1995		68	68	0																								
RAYCO	1996		67	67	0																								
RAYCO	1997		32	32	0																								
RAYCO	1998		83	74	9								3	3	3														
RAYCO	1999		63	0	63												8	8	8	8	8	8	8	7					
RAYCO	2000		74	0	74																				9	10	10	9	9	27
RAYCO	2001		80	0	80																								80
RAYCO	2002		58	0	58																								58

Remarks: * These components are also on the SM-2 Block IIIB and IVA All Up Rounds.

BUDGET ITEM JUSTIFICATION SHEET P-40							DATE: June 2001					
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy BA 2 - Other Missiles**							P-1 ITEM NOMENCLATURE **Weapons Industrial Facilities (42FU)**					
Program Element for Code B Items:							Other Related Program Elements					
	Prior Years	ID Code	FY 2000	FY 2001	FY 2002							
QUANTITY												
COST (In Millions)			**$27.681**	**$29.198**	**$17.247**							

This item provides funding to:
-Close, deactivate, prepare for disposal, and convey the two Government-owned contractor-operated (GOCO), Naval Weapons Industrial Reserve Plants (NWIRPs) under the cognizance of NAVAIR supported by WPN funds. The two facilities are NWIRP, McGregor TX and NWIRP, Toledo OH. Closure and deactivation is being accomplished in accordance with 41 CFR, Chapter 101, Federal Property Management Regulations, and other applicable guidance. Upon completion of divestiture there will no longer be a requirement to fund these facilities.
-Accomplish environmental remediation as required by law in accordance with Section 120(h) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and Executive Order 12898, Environmental Justice. CERCLA 120(h) requires assurance of environmental contamination remediation prior to disposal of Government real property. This assurance is provided by following guidance promulgated by ASSTSECNAV (I&E) memo of 22 December 1993, Application of BRAC Environmental Procedures to Non-BRAC Identification of Uncontaminated Property and Cleanup of Contaminated Property at Closing Installations.
-Develop Environmental Impact Statements (EISs) and conduct Cultural Resource Serveys as required by law. The EISs and Cultural Resource Surveys must be accomplished in accordance with 40 CFR, the National Environmental Policy Act (NEPA) and other applicable guidance. The NEPA process is required for any major Federal action affecting the environment. Application to GOCO divestures was confirmed by NAVAIR Counsel in letter serial AIR-7.7.4/REC of 3 April 95, which based its conclusion on OPNAVINST 5090.1B, the Defense Authorization Acts of 1994 and 1995, and case law.
-Dispose of the facilities as required by law. NWIRP, McGregor TX is being accomplished in accordance with Section 2868, Land Conveyance, NWIRP, McGregor, TX of Public Law 104-106, National Defense Authroization Act for FY-1996. The mandatory divestiture of NWIRP, Toledo OH will be accomplished in accordance with ASSTSECNAV (RD&A) memo of 7 July 1995, 41 CFR, Chapter 101, Federal Property Management Regulations and other applicable guidance.
-Accomplish explosive decontamination of NWIRP, McGregor TX in accordance with AMCCOMR 385-2, Decontamination and Disposal of Facilities, Equipment and Material and other applicable guidance prior to transfer of the facility to the city of McGregor as required by law.

Funding also supports Capital Type Rehabilitation projects, at Government-owned contractor operated (GOCO) plants under the cognizance of NAVSEA, for weapons systems such as Sparrow, Sea Sparrow, Hawk, Standard, Sidewinder, VLS and Mark 45 Gun Mounts, Phalanx, and rocket motors. Federal Acquisition Regulation Part 52.245-7 specifies that Facilities Use contracts require that the government fund capital type rehabilitation projects to support and maintain these facilities. These plants have an average age of 45 years and lack of proper maintenance will limit capabilities to maintain scheduled production rates and overall productivity. Funding is separated to reflect environmental, safety, major repair, energy conservation and facilities restoration.

BUDGET ITEM JUSTIFICATION SHEET P-40													DATE: June 2001
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy BA 2 - Other Missiles**							P-1 ITEM NOMENCLATURE **Weapons Industrial Facilities (42FU)**						
Program Element for Code B Items:							Other Related Program Elements						
	Prior Years	ID Code	FY 2000	FY 2001	FY 2002								
QUANTITY													
COST (In Millions)			**$27.681**	**$29.198**	**$17.247**								

(CONTINUED FROM PAGE 1 of 2)

- 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.

WEAPONS SYSTEM COST ANALYSIS **P-5**	Weapon System	DATE: **June 2001**
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-2**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD 37012 **Weapons Industrial Facilities (42FU)**

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years	FY 2000			FY 2001			FY 2002					
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost			
FU002	Capital Type Rehabilitation														
	Environmental					1,755			3,646			2,753			
	Safety					797			0			0			
	Energy Conservation					0			1,500			918			
	Major Repairs					1,109			0			0			
FU005	Facilities Restoration (ABL)					20,555			20,604			10,043			
FU020	Government-Owned Contractor-Operated Facilities Divestiture		78,557												
	NWIRP McGregor					3,333			3,146			3033			
	NWIRP Toledo					132			302			500			
			78,557			**27,681**			**29,198**			**17,247**			

BUDGET ITEM JUSTIFICATION SHEET

DATE June 2001

APPROPRIATION/BUDGET ACTIVITY	**P-1 ITEM NOMENCLATURE**	**SUBHEAD**
WP,N - BA2 OTHER MISSILES	Fleet Satellite Communications Follow-On (Advance Procurement)2433	52EU

	PY	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	TO COMP	TOTAL
QUANTITY											
COST (in millions)		**$9.6**									

PROGRAM COVERAGE: The Ultra High Frequency (UHF) Follow-On communications satellite constellation satisfies DoD worldwide UHF communications requirements. The current constellation will be near its design life in 2003. The funding in this line provided for the procurement of long lead time material (LLTM) for a UHF satellite (F11) to be launched in FY03. The availability of the UHF Follow-On (UFO) satellite constellation is expected to dip below 70% by FY03 if no action is taken. The F11 will help mitigate risks and boost the overall availability of the UFO constellation. F11 will be procured as an option to the existing Boeingcontract and will be launched in 2003.

COST ANALYSIS															**DATE** June 2001
APPROPRIATION ACTIVITY WP,N - BA-2 OTHER MISSILES						**P-1 ITEM NOMENCLATURE** Fleet Satellite Communications Follow-On (Advance Procurement)2433									**SUBHEAD** 52EU
			PY	**FY99**			**FY 2000**			**FY 2001**			**FY 2002**		
COST CODE	**ELEMENT OF COST**	**ID CODE**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**
4100	Long Lead Time Material								9,600						
4400	Production Support								34						
	TOTAL CONTROL								**9,634**			**0**			**0**

Remarks:

Exhibit P-10, Advance Procurement Requirements Analysis (Page 1 - Funding)			Date: June 2001											
Appropriation (Treasury) Code/CC/BA/BSA/Item Control Number WP/N/BA2/ /243300			P-1 Line Item Nomenclature Fleet Satellite Communications Follow-On (Advance Procurement)											
Weapon System F-11 SATELLITE			First System (BY1) Award and Completion Date OCT 99/DEC 03									Interval between Systems N/A		
($ in Millions)														
	PLT	When Rqd	Prior Years	PY-1	PY	2001	2002	2003	2004	2005	2006	2007	To Complete	
End Item Qty 1	48					92.2								
CFE *														
Master Oscillator Group		13			1.0									
UHF Antenna		13			1.6									
EHF Component		13			1.8									
Propulsion Components (Tank)		15			0.6									
Thrusters		15			1.2									
Earth Sensor		13			2.7									
Momentum Wheels					0.7									
Term Liab														
Other					0.0									
Total AP					9.6									

Description:
*The CFE items are components of major substructures of the end item. These substructures are required to be completed before integration in end item. The Long Lead Time Material (LLTM) was generated in accordance with the Armed Services Pricing Manual (ASPM). Specific sources of data included: historical advanced economic order quantity (AEOQ) cost for flight 1 spacecraft (adjusted for 00 future value); historical material cost for flight 3 (F-10) which was procured without AEOQ; actual cost incurred from previous related procurements and cost models utilized by the prime contractor.
Items listed above under CFE were designated LLTM due their significant longer leadtimes than other components of the end item, their unique special order status and their existence on the program schedule's critical path. Since many of these items are also major subcontract items, the contract and negotiation process also injected schedule uncertainty in these critical path items. All cost estimates are in FY00 dollars. Other is for production and material management support.

P-1 Shopping List-Item No - 22 **Page: 3**

BUDGET ITEM JUSTIFICATION SHEET

DATE June 2001

APPROPRIATION/BUDGET ACTIVITY	**P-1 ITEM NOMENCLATURE**	**SUBHEAD**
WP,N - BA2 OTHER MISSILES	Fleet Satellite Communications Follow-On 2433	52EU

	PY	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	TO COMP	TOTAL
QUANTITY											
COST (in millions)			**$94.7**	**$77.8**							

PROGRAM COVERAGE: The Ultra High Frequency (UHF) Follow-On communications satellite constellation satisfies DoD worldwide UHF communications requirements. The current constellation is expected to drop below required availability by 2003. The funding in this line will provide for the launch of one satellite in 2003 to maintain availabililty to the UFO constellation..

The availability of the UHF Follow-On (UFO) satellite constellation is expected to dip below 70% in FY03 if no action is taken. The next satellite (F11), will help mitigate risks and boost the overall availability of the UFO constellation. F11 is being procured as an option to the existing Hughes contract and is planned to be launched in 2003. The current level of funding provides for UHF payload with a new, more capable digital receiver (new receiver necessary due to parts obsolescence).

Funding in FY01 will procure one satellite, for launch in 2003, to fill the void until a new satellite constellation can be put in place. The impact of not procuring the satellite is a steadily decreasing availability of UHF satellite communications. Since the demand for UHF communications already exceeds the availability, the reduction of such service will result in an unacceptable tactical operations scenario.

FY01 funding of $94.7M provides for the F11 satellite and FY02 funding of $77.8M provides for F11 launch services.

COST ANALYSIS												**DATE** June 2001
APPROPRIATION ACTIVITY WP,N - BA-2 OTHER MISSILES					**P-1 ITEM NOMENCLATURE** Fleet Satellite Communications Follow-On 2433							**SUBHEAD** 52EU
			TOTAL COST IN THOUSANDS OF DOLLARS									
				PY	**FY2000**			**FY 2001**			**FY 2002**	
COST CODE	**ELEMENT OF COST**	**ID CODE**	**QTY**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**	**QTY**	**UNIT COST**	**TOTAL COST**
4200	Satellite Procurement							1	92,237	92,237			
4300	Launch Services												74,900
4400	Production Support									2,423			2,940
	TOTAL CONTROL									**94,660**			**77,840**
Remarks:													

DD FORM 2446, JUN 86

PROCUREMENT HISTORY AND PLANNING

A. DATE: June 2001

B. APPROPRIATION/BUDGET ACTIVITY: WP,N - BA2 OTHER MISSILES

C. P-1 ITEM NOMENCLATURE: Fleet Satellite Communications Follow-On 2433

SUBHEAD: 52EU

COST CODE	ELEMENT OF COST	FY	CONTRACTOR AND LOCATION	CONTRACT METHOD & TYPE	LOCATION OF PCO	RFP ISSUE DATE	AWARD DATE	DATE OF FIRST DELIVERY	QTY	UNIT COST	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
4200	Satellite Procurement	01	oeing Satellite Systems Inc	SS/FFP	SPAWAR	Aug-98	Dec-00	Dec-03	1	92,237	Yes	N/A

D. REMARKS

DD FORM 2446, JUN 87

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: June 2001
APPROPRIATION/BUDGET ACTIVITY **WEAPONS PROCUREMENT, NAVY** **BA-2: Other Missiles**	P-1 ITEM NOMENCLATURE/LINE ITEM # Ordnance Support Equipment - BLI #250000
Program Element for Code B Items:	OTHER RELATED PROGRM ELEMENTS

	Prior Years	ID Code		FY 2000	FY 2001	FY2002							
QUANTITY													
EQUIPMENT COST (In Millions)	N/A			**$4.1**	**$2.7**	**$4.2**							
SPARES COST (In Millions)													

PROGRAM DESCRIPTION/JUSTIFICATION:

No justification materials are submitted in this backup book due to security considerations. Details are held at a higher classification.

	FY2000	FY2001	FY2002
Funding Totals	**$4,099**	**$2,698**	**$4,210**

BUDGET ITEM JUSTIFICATION SHEET P-40												DATE: June 2001	
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/Torpedoes & Related Equipment, BA-3**							P-1 ITEM NOMENCLATURE **ASW TARGETS LI#314100**						
Program Element for Code B Items: **0204229N**							Other Related Program Elements						
	Prior Years	ID Code	FY 2000	FY 2001	FY 2002								
QTY MODS MK-39/1	N/A	A	N/A	N/A	N/A								
QTY MODS MK-30/2	N/A	B	N/A	N/A	N/A								
COST ($M)	$0.0		$2.0	$3.2	$15.3								
Initial Spares ($M)	$0.0		$0.0	$0.8	$0.5								
TOTAL ($M)	$0.0		$2.0	$3.9	$15.8								
Unit Cost ($M)													

ITEM DESCRIPTION/JUSTIFICATION:

This line item includes two distinct systems: (a) MK 39 Mod 1 (Cost Codes TG002, TG832, TG842, TG852, TG862 and TG900) and (b) MK30 Mod 2 (Cost Codes TG005, TG015, TG835, TG865 , TG875, TG885, TG900 and TG905).

The MK 39 Mod 1 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 MK 46, MK 48, ADCAP and MK 50 placement exercises. Its operation consists of a dynamic run trajectory that is actively controlled in depth and course with pre-programmable run maneuvers and is capable of generating a magnetic field (anomaly) detectable by all current Navy Magnetic Anomaly Detectors (MAD).

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, MK 30 Mod 2 will be a highly reliable and maintainable unmanned undersea vehicle simulating the dynamics, acoustics and magnetic signature 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 commences in FY01 with the purchase of batteries and towed arrays, and efforts to convert the Engineering Development Models into production units, and field activity support. Procurement of all-up production units commences in FY02.

WEAPONS SYSTEM COST ANALYSIS P-5			Weapon System											DATE: June 2001
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy** **BA-3: Torpedo and Related Equipment**			ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **ASW Targets/73TG**										
COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS Prior Years	FY 2000			FY 2001			FY 2002				
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
	N86														
TG002	MK39 Mod 1/2 - EMATT	A		335	3.77	1,262	330	3.85	1,269	500	4.37	2,185			
TG832	Prod Eng (In-house)	A				523			534			555			
TG842	Quality Assurance	A				45			45			45			
TG862	Acceptance T & E	A				55			55			55			
TG900	Consulting Services	A				99			95			123			
	Total MK39 Mod 1 - EMATT	A				$1,984			$1,998			$2,963			
	N88														
TG005	MK30 Mod 2	B				$0	2	$230	$460	3	$2,911	$8,734			
TG015	MK30 Mod 2 Support Equipment	B				$0			$0			$685			
TG835	Production Engineering (In-house)	B				$0			$538			$1,848			
TG885	Site Installation and Checkout	B				$0			$20			$328			
TG900	Consulting Services	B				$0			$135			$187			
TG905	Production Engineering (Contractor)	B				$0			$0			$230			
	Total MK30 Mod 2	B				$0			$1,153			$12,012			
	N6														
TG007	Program Suport	B				$0			$0			$360			
	Note: FY01 costs are for towed arrays, batteries, and other material to support deployment of 2 EDM vehicles. Note: EMATT Unit Cost increase in FY02 is due to additional capabilities such as variable speed or field programmability features														
						$1,984			**$3,151**			**$15,335**			

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

ITEM NO. PAGE NO.

25 **2**

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)						Weapon System		A. DATE June 2001		
B. APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy BA-3:Torpedo and Related Equipment					C. P-1 ITEM NOMENCLATURE ASW Targets				SUBHEAD 73TG	
Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FY2000										
MK39 Mod 1 - EMATT/ECP	335	3.77	NAVSEA	N/A	C/FFP-Option	Sippican, Inc. Marion, MA	Apr-00	Aug-01	Yes	NA
FY2001										
MK39 Mod 1 - EMATT/ECP	330	3.85	NAVSEA	N/A	C/FFP-Option	Sippican, Inc. Marion, MA	Feb-01	Jul-02	Yes	NA
MK30 Mod 2	2	230	NAVSEA	Jan-00	C/FFP	Raytheon Portsmouth, RI	Oct-01	Aug-02	Yes	NA
FY2002										
MK39 Mod 2 - EMATT/ECP	500	4.37	NAVSEA	Feb-01	C/FFP	TBD	Feb-02	Apr-03	Yes	NA
MK30 Mod 2	3	2,911	NAVSEA	NA	C/FFP	TBD	Nov-01	May-03	Yes	NA

D. REMARKS

FY 2000/01 BUDGET PRODUCTION SCHEDULE, P-21			DATE	June 2001
APPROPRIATION/BUDGET ACTIVITY: Weapons Procurement, Navy **BA-3:Torpedo and Related Equipment**		Weapon System	P-1 ITEM NOMENCLATURE **ASW Targets/73TG**	

		Production Rate			Procurement Leadtimes					
Item	Manufacturer's Name and Location	MSR	1-8-5	MAX	ALT Prior to Oct 1	ALT After Oct 1	Initial Mfg PLT	Reorder Mfg PLT	Total	Unit of Measure
ASW Targets - MK39 Mod1	Sippican, Inc.	40	250	500	0	4	14	14	32	
	Marion, MA									
ASW Targets - MK30 Mod 2	Raytheon	3	12	20	1	2	18	18	20	
	Portsmouth, RI									

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL YEAR 2000												FISCAL YEAR 2001												BAL
						2000			CALENDAR YEAR 2000										CALENDAR YEAR 2001												
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
MK39 Mod1/ Sippican, Inc.	1999		1000	0	1000									200		200		200		200		200								0
MK39 Mod1/ Sippican, Inc.	2000		335	0	335							A																100		235
MK39 Mod1/ Sippican, Inc.	2001		330	0	330																	A								500

ITEM / MANUFACTURER	FY	SVC	QTY	DEL	BAL	FISCAL 2002																								BAL
						2001			CALENDAR YEAR 2002																						
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
MK39 Mod1/ Sippican, Inc.	2000		335	100	235		100			135																			
MK39 Mod1/ Sippican, Inc.	2001		330	0	330										100		100													
MK39 Mod2/ TBD	2002		500	0	500					A														35		117		116		
MK 30 Mod 2/Raytheon	2001		2	2	0	A										2														
MK 30 Mod 2/TBD	2002		3	3	0		A																		1	1	1			

Remarks:

FY01 Mod 2 $ are for batteries, towed arrays, and other materials to support deployment of 2 EDM units in FY02. Mod 2 technical issues caused six month delay in in-water system testing.

BUDGET ITEM JUSTIFICATION SHEET
P-40

DATE: **June 2001**

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

P-1 ITEM NOMENCLATURE
Torpedo MK46 Mods/MK54 Mod 0, H3F5, LI# 321500

Program Element for Code B Items:
0204228N

Other Related Program Elements
0604610N Lightweight Torpedo Development

	Prior Years	ID Code	FY 2000*	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total** Program
QUANTITY		B	17	0	0							
COST ($M)			$28.5	$7.1	$7.4							
Initial Spares ($M)			$0.8	$0.7	$1.4							

ITEM DESCRIPTION/JUSTIFICATION:

The MK46 is an in-service lightweight torpedo designed for launch from surface vessel torpedo tubes, VLA, and fixed/rotary wing aircraft. FY00 completes introduction of the SLEP variant MK46 Mod 5A(SW). The Lightweight Hybrid Torpedo (LHT) MK54 Mod 0, is a modular evolution building from the MK46 and MK50 torpedo. It is comprised of the MK50 sonar, MK46 warhead and 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 water. The LHT LRIP contract was awarded in Dec 99 to Raytheon Systems Company.

The total Lightweight torpedo inventory is composed of a mix of MK46 5A(s), MK46 5A(SW), MK50, and MK54.

* FY00 Total Control includes $1.6M for SLEP Kits assembly completion.

** FY97 was the last year in which SLEP kits were procured. The LHT Funding Totals above reflect funding from FY00 and out, with the exception of $1.6M in FY00 for the completion of SLEP Kit assembly.

Performance Spec Milestone: June 1996

Technical Data Package: April 2001

DTE: July 1999-July 2002

OPEVAL: October 2002-December 2003

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System	DATE: June 2001
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/ Torpedoes & Related Equipment, BA-3**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD Torpedo MK46 Mods/MK54 /Mod 0, H3F5, LI# 321500

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years	FY 2000 *			FY 2001 **			FY 2002 **					
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost			
F5103	SLEP (FY00 Assembly)	A				1,561			0			0			
F5104	Hardware	B		17	739	12,559	0	0	1,212	0	0	1,401			
F5105	Fleet Exercise Systems					1,099			0			0			
F5106	MK54 Platform Integration					705			0			0			
F5107	MK54/VLA Flight & Integration					508			0			0			
F5003	Support Equipment					3,628			1,205			1,397			
F5830	Production Engineering-In-house					2,130			4,089			4,059			
F5860	Accept. Test & Evaluation					5,976			0			0			
F5900	Production Engineering-Contractor					350			570			587			
						28,516			**7,076**			**7,444**			

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

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* FY00 F5103 $1.6M represents funding required for assembly of SLEP kits previously procured (FY96-FY97).

** No LWT procurement in FY01 and FY02. Funding for TI and engineering services.

UNCLASSIFIED

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE
		June 2001

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Weapons Procurement, Navy	Torpedo MK46 Mods/MK54 Mod 0, H3F5, LI# 321500	H3F5

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
MK 54 Mod 0/ 2000	17	743	NAVSEA	Nov-99	SS/FP	Raytheon	Dec-99	Apr-01		

D. REMARKS

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION** Date: June 2001

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

DESCRIPTION/JUSTIFICATION:

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

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

966

	FY 1999 & Prior		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E																						
PROCUREMENT																						
INSTALLATION KITS	1148	17843																				
INSTALLATION KITS - UNIT COST																						
INSTALLATION KITS NONRECURRING																						
EQUIPMENT																						
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE ORDERS																						
DATA																						
TRAINING EQUIPMENT																						
SUPPORT EQUIPMENT																						
OTHER		16626																				
OTHER																						
OTHER																						
INTERIM CONTRACTOR SUPPORT		1035																				
INSTALL COST *				1561																		
TOTAL PROCUREMENT		35504		1561		0		0														

*FY2000 Install Cost reflects $1.6M SLEP Assembly allocation resulting from PBD 752 Readiness Enhancement plus up.

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued** Date: June 2001

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

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **Firm Fixed Price Contract-Raytheon contracted by NAVSEA**
ADMINISTRATIVE LEADTIME: NA PRODUCTION LEADTIME: NA
CONTRACT DATES: FY 1999: NA FY 2000: NA FY 2001: NA
DELIVERY DATE: FY 1999: NA FY 2000: NA FY 2001: NA

($ in Millions)

Cost:	Prior Years		FY 2000*		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		To Complete		Total	
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS			252	1561																		
FY 1998 EQUIPMENT																						
FY 1999 EQUIPMENT																						
FY 2000 EQUIPMENT																						
FY 2001 EQUIPMENT																						
FY 2002 EQUIPMENT																						
FY 2003 EQUIPMENT																						
FY 2004 EQUIPMENT																						
FY 2005 EQUIPMENT																						
TO COMPLETE																						

INSTALLATION SCHEDULE:

	FY 1999 & Prior	FY 2000 1	2	3	4	FY 2001 1	2	3	4	FY 2002 1	2	3	4
In	1148	0	0	0	0	0	0	0	0	0	0	0	0
Out*	896	63	63	63	63	0	0	0	0	0	0	0	0

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION** Date: June 2001

MODELS OF SYSTEM AFFECTED: MK54 Mod 0 TYPE MODIFICATION: MODIFICATION TITLE: Hybrid Hardware (F5104)

DESCRIPTION/JUSTIFICATION:

The Lightweight Hybrid Torpedo (LHT) is 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 DEVELOPMENT MILESTONES: Development testing began 4th qtr FY99, OPEVAL complete 3rd qtr FY02

966

	FY 1999 & Prior		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		TC		TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E		71582		8984		9262		10310														
PROCUREMENT																						
INSTALLATION KITS			17	12559	0	792	0	1311														
INSTALLATION KITS - UNIT COST				739		0		0														
INSTALLATION KITS NONRECURRING																						
EQUIPMENT																						
EQUIPMENT NONRECURRING				1099		0		0														
ENGINEERING CHANGE ORDERS																						
DATA																						
TRAINING EQUIPMENT																						
SUPPORT EQUIPMENT				3628		1205		1397														
OTHER				8106		4089		4059														
OTHER NONRECURRING*				1213		0		0														
OTHER																						
INTERIM CONTRACTOR SUPPORT				350		570		587														
INSTALL COST				0	14	420	3	90														
TOTAL PROCUREMENT		0		26955		7076		7444														

* OTHER NONRECURRING reflects FY2000 MK54 Platform Integration and MK54/VLA Flight Integration efforts, as identified on P-5 exhibit.

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)** Date: June 2001

MODELS OF SYSTEMS AFFECTED: MK54 Mod 0 MODIFICATION TITLE: HYBRID Hardware (F5104)

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **Firm Fixed Price Contract-Raytheon**
ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 20 Months
CONTRACT DATES: FY 1999: FY 2000: Dec-99 FY 2001:
DELIVERY DATE: FY 1999: FY 2000: Apr-01 FY 2001:

($ in Millions)

Cost:	Prior Years		FY 200 966		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		To Complete		Total	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
PRIOR YEARS																						
FY 2000 EQUIPMENT					14	420	3	90														
FY 2001 EQUIPMENT																						
FY 2002 EQUIPMENT																						
FY 2003 EQUIPMENT																						
FY 2004 EQUIPMENT																						
FY 2005 EQUIPMENT																						
FY 2006 EQUIPMENT																						
FY 2007 EQUIPMENT																						
TO COMPLETE																						

INSTALLATION SCHEDULE:

	FY 1999 & Prior	FY 2000				FY 2001				FY 2002			
		1	2	3	4	1	2	3	4	1	2	3	4
In	0	0	0	0	0	0	2	6	6	3	0	0	0
Out	0	0	0	0	0	0	0	0	2	6	6	3	0

BUDGET ITEM JUSTIFICATION SHEET P-40												DATE: June 2001	
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-3 Torpedo and Related Equipment**							P-1 ITEM NOMENCLATURE **MK 48 ADCAP MODS Torpedo BLI: 322500 SBHD: C3D1/H3D1**						
Program Element for Code B Items: **0204284N**							Other Related Program Elements						
		ID Code	FY 2000	FY 2001	FY 2002								
QUANTITY MODS		A	115	115	68								
QUANITY CBASS		B	0	0	0								
COST ($M)			$45.0	$43.5	$42.4								
Initial Spares ($M)			$2.1	$2.8	$3.0								

ITEM DESCRIPTION/JUSTIFICATION:

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

The G&C Modification addresses the need to increase memory and processing capacity of the G&C hardware and to replace obsolete and sunset technology 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.

FY00 (Production 5) contract was awarded April 00 to Raytheon Systems Corporation, base year (FY00) with three option years (FY01-FY03), and allowed increased procurement quantities in FY00-FY03.

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System	DATE: June 2001
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy** **BA-3 Torpedo and Related Equipment**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **MK 48 ADCAP MODS Torpedo BLI: 322500 SBHD: C3D1/H3D1**

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years	FY 2000			FY 2001			FY 2002			FY 2003		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
D1001	ADCAP MODS CBASS (Contractor, Installation, ECP, TI)	A		115	179	20,607	115	162	18,685	68	236	16,014			
D1003	Support and Ancillary Equipment					2,307			2,130			2,977			
D1830	Production Engineering (Contractor and In House)					11,125			11,266			12,878			
D1860	Acceptance T&E (Contractor and In House)					10,927			11,442			10,517			
			0			**44,966**			**43,523**			**42,386**			

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE June 2001

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Weapons Procurement, Navy **BA-3 Torpedo and Related Equipment**	**MK 48 ADCAP MODS Torpedo BLI: 322500**	**C3D1/H3D1**

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FY00 MK48 MOD6	115	179	NAVSEA	January, 2000	C/FP	Raytheon Systems Corporation	4/00	9/01		
FY01 MK48 MOD6	115	179	NAVSEA	N/A	C/FP (option)	Raytheon Systems Corporation	1/01	6/02		
FY02 MK48 MOD6	68	236	NAVSEA	N/A	C/FP (option)	Raytheon Systems Corporation	1/02	6/03		

D. REMARKS

Unit cost reflected in this budget includes install cost from prior year buys.

Install cost is annualized funding and pays for installation of units delivered in that year. The quantity installed in any given year is different from the procurement quantity.

BUDGET ITEM JUSTIFICATION SHEET
P-40

DATE: **June 2001**

APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy BA-3: Torpedoes and Related Equipment

P-1 ITEM NOMENCLATURE
QUICKSTRIKE/323100/73QS

Program Element for Code B Items:

Other Related Program Elements
204304N

	Prior Years	ID Code	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Program
QUANTITY												
COST ($M)	N/A	A	$0.0	$1.9	$3.9							
Initial Spares ($M)	N/A	A	$0.0	$0.0	$0.0							

PROGRAM DESCRIPTION/JUSTIFICATION:

The QUICKSTRIKE family of mines consists of the MK-62 and MK-63 (500 lb. and 1000 lb. Mines) based on MK-82 and MK-83 general purpose bombs respectively, and the MK-65 (2000 lb.) mine. The Mod 0, 1, and 3 variants utilize various target detection devices (TDD). QUICKSTRIKE Mod 3 utilizes a newly developed TDD, MK-71. The MK-71 is a software-programmable device that is capable of being programmed to optimize detection of new threats. The QS Mod 3 Kit will consist of TDD MK-71, MK-75 Mod 1 safe/arming device, and various adapters and batteries (for each mine type). Additional support hardware include Test Sets MK-649 and 650, and Presetter MK-11.

BUDGET ITEM JUSTIFICATION SHEET FOR AGGREGATED ITEMS P-40a											DATE: June 2001	
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy, BA-3: Torpedoes and Related Equipment							P-1 ITEM NOMENCLATURE QUICKSTRIKE/323100/73QS					
Procurement Items	ID Code	Prior Years	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total
QUICKSTRIKE MOD Kits	A	N/A		**56/952**	**291/2968**							
SUPPORT HARDWARE				**340**	**350**							
PRODUCTION ENGINEERING				**200**	**370**							
QUALITY ASSURANCE				**100**	**77**							
ACCEPTANCE T&E				**350**	**134**							

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: June 2001
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-3 Torpedo and Related Equipment**	P-1 ITEM NOMENCLATURE **Torpedo Support Equipment BLI: 330100 SBHD: C3F8 / H3F8**
Program Element for Code B Items:	Other Related Program Elements

		ID Code	FY 2000	FY 2001	FY 2002							
QUANTITY													
COST ($M)			$23.1	$23.5	$30.0								
Initial Spares ($M)													

Starting in FY 2001 this program is funded under PEO Submarine.

The Torpedo Support Equipment account procures various torpedo components required to ready weapons for Surface Ships, Sub-Surface, Fixed Wing, and Rotary to achieve and maintain a readiness posture sufficient to counter the enemy sub-surface threat. The objective of this line is to provide the Fleet with ready exercise weapons for conducting training maneuvers which involve actually firing the torpedoes, and to maintain warshot inventories in an operational ready-for-issue status in support of combat ready deployment by anti-submarine warfare forces. After a torpedo is fired during a training exercise it is recovered and all expendable components such as batteries, cables, igniters (as well as various accessories required for air-launched torpedoes), must be replaced. These items as well as components such as exercise heads, fuel tanks, and exhaust valves which may be used more than onetime, 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 Mod 5A(S), MK46 Mod 5A(SW), MK 48 Mod 4, 5, and 6, MK 50 and their associated Support and Test Equipment (S&TE). This equipment includes the following: lead droppers, seawater batteries, pressure cylinders, REXTORP kits, sway brace pads, suspension bands, thermal batteries, boiler assemblies, stop squibs, shutdown valves, gas injection assemblies, tailnuts, air stabilizers, wire coils, flex hoses, otto fuel, igniters, propellant, umbilical cables, and containers. 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.

WEAPONS SYSTEM COST ANALYSIS **P-5**	Weapon System	DATE: **June 2001**
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy** **BA-3 Torpedo and Other Related Equipment**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **Torpedo Support Equipment BLI: 330100 SBHD: C3F8 / H3F8**

TOTAL COST IN THOUSANDS OF DOLLARS

COST CODE	ELEMENT OF COST	ID Code	Prior Years	FY 2000			FY 2001			FY 2002					
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
F8001	Lightweight Support Equipment					1,975			915			7,442			
F8002	Other Equipment Investment					1,536			3,390			2,288			
F8830	Production Engineering - In House					914			1,512			1,317			
F8840	Quality Assurance					973			170			170			
F8860	Acceptance T & E					528			1,172			2,087			
F8900	Production Engineering - Contractor					169			172			176			
Total	Lightweight Total					**6,095**			**7,331**			**13,480**			
F8100	Exercise and Expendables and Component Replacement					5,269			5,884			7,577			
F8101	Other Equipment Investment					8,164			7,562			6,292			
F8833	Production Engineering (In-house)					451			1,413			1,413			
F8843	Quality Assurance					2,156			361			365			
F8863	Acceptance Test and Evaluation					153			271			198			
F8893	Production Engineering - Contractor					775			700			700			
Total	Heavyweight Total					**16,968**			**16,191**			**16,545**			
						23,063			**23,522**			**30,025**			

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE June 2001

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Weapons Procurement, Navy **BA-3 Torpedo Support Equipment**	**Torpedo Support Equipment**	**C3F8 / H3F8**

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FY2000										
MK46 Seawater Battery	851	0.285	NUWC, Keyport		RC/FFP	Magnavolt, Clayton, NC	8/00	10/01	Yes	
MK78 Mod 1Suspension Band	2869	0.386	NUWC, Keyport		RC/FFP	United Terex, Inc. Fairview Village, PA	9/00	6/01	Yes	
MK46 Pressure Cylinder (Short)	767	0.199	NUWC, Keyport		RC/FFP	Cartridge Actuated Devices, Farifield NJ	8/00	11/00	Yes	
MK46 MK31 Air Stabilizer	337	0.657	NUWC, Keyport		RC/FFP	United Terex, Inc. Fairview Village, PA	5/00	12/00	Yes	
MK50 Thermal Battery	5	1.602	NUWC, Keyport		RC/FFP	Aerospatiale Batteries, Bourges, FR	2/01	9/01	Yes	
MK46 Fuel Shutoff Valves	141	0.300	NUWC, Keyport		RC/FFP	Unknown	7/01	1/02	Yes	
Universal Container	27	6.500	NSWC, Earle		RC/FFP	Naval Weapon Station Earle, NJ	4/01	6/01	Yes	
Extrusion Dies	1	24.000	NSWC, Earle		RC/FFP	Naval Weapon Station Earle, NJ	4/01	6/01	Yes	
Torpedo Wire Coil	789	2.675	NUWC, Keyport		RC/FFP	Entwistle, Hudson, MA	3/00	7/00	Yes	
Sub Wire Coil	1000	1.830	NUWC, Keyport		RC/FFP	Entwistle, Hudson, MA	3/00	7/01	Yes	
Flex Hose (Improved)	800	1.036	NUWC, Keyport		RC/FFP	Cortland Cable Co, Cortland, NY	8/00	6/01	Yes	
Igniter	1000	0.128	NUWC, Keyport		RC/FFP	Quantic, Hollister, CA	6/00	1/00	Yes	
Umbilical Cables (Improved)	48	3.314	NUWC, Keyport		RC/FFP	G & H Technology	2/01	10/01	Yes	
Otto Fuel	24	8.800	NSWC, Indian Head		WR	NSWC Indian Head, MD	5/00	6/00	Yes	
FY2001										
MK46 Mod 5 Seawater Battery	723	0.350	NUWC, Keyport	Option	RC/FFP	Magnavolt, Clayton, NC	3/01	10/01	Yes	
MK46 Pressure Cylinder (Short)	200	0.215	NUWC, Keyport	Option	RC/FFP	Cartridge Actuated Devices, Farifield NJ	4/01	10/01	Yes	
MK46 Pressure Cylinder (Long)	370	0.250	NUWC, Keyport	4/01	RC/FFP	Unknown	6/01	1/02	Yes	
MK50 MK33 Air Stabilizer	175	2.200	NUWC, Keyport	4/01	RC/FFP	Unknown	7/01	1/02	Yes	
MK50 REXTORP Kit	500	0.050	NUWC, Keyport	4/01	RC/FFP	Unknown	4/01	8/01	Yes	
MK46 REXTORP Kit	1228	0.050	NUWC, Keyport	4/01	RC/FFP	Unknown	4/01	8/01	Yes	
MK46 Fuel Shutoff Valve	182	0.300	NUWC, Keyport	5/01	RC/FFP	Unknown	7/01	1/02	Yes	
Torpedo Wire Coil	611	2.675	NUWC, Keyport	Option	RC/FFP	Entwistle, Hudson, MA	3/01	9/01	Yes	
Sub Wire Coil	800	1.940	NUWC, Keyport	Option	RC/FFP	Entwistle, Hudson, MA	3/01	12/01	Yes	
Otto Fuel	255	8.600	NSWC Indian Head	Option	WR	NSWC Indian Head, MD	11/00	1/01	Yes	
MK62-1 A-Cable Recepticle	301	0.956	NUWC, Keyport	Option	RC/FFP	Quantic, Hollister, CA	3/01	8/01	Yes	
MK62-1 A-Cable Insert	600	0.216	NUWC, Keyport	Option	RC/FFP	G & H Technology	3/01	10/01	Yes	
MK62-1 A-Cable Insert	400	0.216	NUWC, Keyport	4/01	RC/FFP	Unknown	4/01	10/01	Yes	

D. REMARKS

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE June 2001

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Weapons Procurement, Navy **BA-3 Torpedo Support Equipment**	**Torpedo Support Equipment**	**C3F8 / H3F8**

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
FY 2002										
MK46 Mod 5 Seawater Battery	350	0.315	NUWC, Keyport	Option	RC/FFP	Magnavolt, Clayton, NC	3/02	10/02	Yes	
MK78 Mod 1Suspension Band	735	0.500	NUWC, Keyport	Option	RC/FFP	Unknown	3/02	10/02	Yes	
MK46 Pressure Cylinder (Long)	370	0.250	NUWC, Keyport	Option	RC/FFP	Unknown	3/02	10/02	Yes	
MK46 MK31 Air Stabilizer	400	0.800	NUWC, Keyport	Option	RC/FFP	Unknown	3/02	10/02	Yes	
MK50 MK33 Air Stabilizer	175	2.300	NUWC, Keyport	Option	RC/FFP	Unknown	3/02	10/02	Yes	
MK46 REXTORP Kits	200	0.100	NUWC, Keyport	Option	RC/FFP	Unknown	3/02	10/02	Yes	
MK50 Thermal Battery	129	1.794	NUWC, Keyport	Option	RC/FFP	Aerospatiale Batteries, France	3/02	10/02	Yes	
Universal Container	238	3.600	NAVSEA	1/02	PR/FFP	Unknown	3/02	10/02	Yes	
MK50 MEL Boiler	180	28.000	NAVSEA	Option	PR/FFP	Hamilton Sundstrand	3/02	10/02	Yes	
Torpedo Wire Coil	1000	2.900	NUWC, Keyport	11/01	RC/FFP	Unknown	3/02	7/02	Yes	
Sub Wire Coil	600	2.018	NUWC, Keyport	Option	RC/FFP	Entwistle, Hudson, MA	3/02	11/02	Yes	
Flex Hose (Improved)	700	1.080	NUWC, Keyport	Option	RC/FFP	Cortland Cable Co, Cortland, NY	3/02	11/02	Yes	
Igniter	179	0.220	NUWC, Keyport	Option	RC/FFP	Quantic, Hollister, CA	3/02	11/02	Yes	
Otto Fuel	140	17.470	NSWC Indian Head	Option	WR	NSWC Indian Head, MD	1/02	2/02	Yes	
MK62-1 A-Cable Insert	1000	0.225	NUWC, Keyport	Option	RC/FFP	Unknown	3/02	12/02	Yes	

D. REMARKS

BUDGET ITEM JUSTIFICATION SHEET
P-40

DATE: **June 2001**

APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy **BA 3 - Torpedoes and Related Equipment**

P-1 ITEM NOMENCLATURE
ASW Range Support BLI: 330200 SBHD: 83F4/73F4

Program Element for Code B Items:

Other Related Program Elements

	Prior Years	ID Code	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Program
QUANTITY												
COST ($M)			$ 15.1	$ 18.8	$ 14.9							
Initial Spares ($M)												

The ASW Range support program provides training range equipment, weapon proofing range equipment, and Fleet support equipment for use on the Navy's underwater ranges. This equipment is used to instrument Fleet exercises and torpedo firings, ASW readiness assessment and ASW weapon production acceptance testing. The Weapon Fleet training ranges supported are Southern California Offshore Range (SCORE), Barking Sands Tactical Underwater Range/Barking Sands Underwater Range Extension (BARSTUR/BSURE), Atlantic Underwater Test and Evaluation Center (AUTEC) and Atlantic Fleet Weapons Training Facility (AFWTF). Test and Evaluation (T&E) ranges are Nanoose, Dabob Bay and Quinault.

F4001 - Pinger Exercise Components are placed in weapons and other underwater vehicles for tracking during training and T&E exercises, and to insure safe operation and movement of all craft and weapons on the ranges. In addition, pinger components are also procured to support the future Shallow Water Training Ranges at both coasts and Hawaii.

F4003 - Recovery Equipment is used on T&E ranges for recovering weapons on or buried in the sea floor. Approximately $10 million of hardware is recovered each year using these devices.

F4004 - The T&E Range Equipment line provides for improvement and modernization of range equipment for YTT (Yard Torpedo Tender) and test crafts; portable tracking range components used at remote sites for testing requirements in different sea-bottom, littoral and cold water environments; and other range systems in support of weapon T&E operations.

F4005 - The ASW Target MK 30 Mod 1 provides essential fleet ASW training on the Navy's underwater tracking ranges. The MK 30 Mod 1 is currently used at the BARSTUR - Hawaii, AUTEC - Bahamas, AFWTF - St. Croix, Virgin Islands and SCORE. ASW range support funds are used to procure components for the MK 30 that are consumed/expended during fleet in-water runs. These funds are also used to replace obsolete components and improve maintenance and reliability of the targets.

F4006 - The stationary target components include the MK 28 Targets, and T&E Targets. MK 28 Targets are used for conducting Service Weapons Test (SWT) on in-service and advanced warshot torpedoes. The SWT is the only test the Navy has to verify the explosive chain of torpedoes. Funding is used to procure target systems and components expended during SWT operations in addition to improvement and modernization projects. The T&E targets include the MK 69, a bottom mounted stationary target, and Over-The-Side (OTS), a surface deployed target, used to test various weapon attributes during T&E exercises. These targets are needed to fill specific technical requirements for the MK 48 ADCAP, MK 50 and MK54 torpedo upgrades. Funding is used to procure components that improve operability and maintenance of the target.

F4007 - This is a Congressional plus-up to support the Northwest Range Complex that provides the test resources for acceptance testing for USW system acquisition. Funding will provide for upgrade/refurbishment of existing range systems that are required to keep the Range Complex viable. The major systems that require upgrade/refurbishment are: Range Craft and Craft Systems, Fire Control and Instrumentation, and Engineering and display systems.

Production Engineering funds support efforts performed by a field activity or contractor during the production phase of these projects.

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS P-5	Weapon System	DATE: **June 2001**
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy** **BA 3 - Torpedoes and Related Equipment**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **ASW Range Support BLI: 330200 SBHD: 83F4/73F4**

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years	FY 2000			FY 2001			FY 2002					
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost			
	N86														
F4001	Pinger Exercise Components					289			239			275			
F4003	Recovery Equipment					66			51			52			
F4004	Test & Evaluation Range Equipment					298			238			275			
F4005	MK 30 Components					468			358			305			
F4006	Stationary Target Components					142			120			147			
F4007	NW Range Upgrade					0			397			0			
F4830	Production Engineering In-House					286			252			238			
F4850	Product Improvement					230			194			164			
F4900	Production Engineering - Contractors					29			22			18			
	N87														
F4001	Pinger Exercise Components					1,674			1,686			1967			
F4003	Recovery Equipment					376			354			378			
F4004	Test & Evaluation Range Equipment					1,726			1,682			1988			
F4005	MK30 Components					2,713			2,523			2204			
F4006	Stationary Target Components					834			844			1061			
F4007	NW Range Upgrade					0			2,815			0			
F4830	Production Engineering In-House					1,658			1,781			1709			
F4850	Product Improvement					1,329			1,371			1180			
F4900	Production Engineering - Contractors					170			160			130			
	N88														
F4001	Pinger Exercise Components					445			469			170			
F4003	Recovery Equipment					100			99			32			
F4004	Test & Evaluation Range Equipment					459			471			169			
F4005	MK 30 Components					720			705			1145			
F4006	Stationary Target Components					222			235			91			
F4007	NW Range Upgrade					0			788			0			
F4830	Production Engineering In-House					440			499			654			
F4850	Product Improvement					352			384			425			
F4900	Production Engineering - Contractors					44			44			44			
	N6														
F4001	Pinger Exercise Components											24			
F4005	MK30 Components											16			
						15,070			**18,781**			**14,861**			

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

ITEM NO. 30 PAGE NO. 2

UNCLASSIFIED

CLASSIFICATION: UNCLASSIFIED

BUDGET ITEM JUSTIFICATION SHEET P-40									DATE: June 2001
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy** **BA - 3 Torpedoes and Related Equipment**				P-1 ITEM NOMENCLATURE **BLI 2410** **FIRST DESTINATION TRANSPORTATION (FDT) / 93TA**					
	FY 2000	FY 2001	FY 2002						
COST (In Millions)	2.4	1.8	2.8						

First Destination Transportation (FDT) provides for the movement of newly procured equipment and material from the contractor's plant to the initial point of receipt for subsequent shipment to its destination .

CLASSIFICATION: UNCLASSIFIED

WEAPONS SYSTEM COST ANALYSIS P-5											DATE: June 2001	
APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy BA 3 Torpedoes and Related Equipmen			P-1 ITEM NOMENCLATURE/SUBHEAD First Destination Transportation (FDT) / 93TA									
COST CODE	ELEMENT OF COST	IDENT CODE	TOTAL COST IN THOUSANDS OF DOLLARS									
			FY 2000		FY 2001		FY 2002					
			QTY	TOTAL COST	QTY	TOTAL COST	QTY	TOTAL COST				
TA001	First Destination Transportation			2,396		1,825		2,802				

BUDGET ITEM JUSTIFICATION SHEET P-40								DATE: June 2001					
APPROPRIATION/BUDGET ACTIVITY WEAPONS PROCUREMENT, NAVY BA-4: OTHER WEAPONS								P-1 ITEM NOMENCLATURE/LINE ITEM # SMALL ARMS AND WEAPONS - BLI #412900 24E3					
Program Element for Code B Items:								OTHER RELATED PROGRM ELEMENTS					
	Prior Years	ID Code		FY 2000	FY 2001	FY 2002							
QUANTITY													
EQUIPMENT COST (In Millions)	N/A			$2.4	$2.4	$0.9							
SPARES COST (In Millions)													

PROGRAM DESCRIPTION/JUSTIFICATION:

Quantities of weapons procured with the above funding are to meet small arms allowances and inventory objectives.

This line item provides for initial issue procurement, modernization, standardization and stock replenishment procurement of a wide variety of small arms and weapons (caliber .50 and below), including required gun mounts and associated support components. The line also provides for procurement of sufficient types and quantities of weapons to support training, security afloat and shore missions of approximately 2,495 ship/ashore activities Navy-wide.
This line was increased in FY03 and FY04 due to funds being transferred into this line for procurement of M240 Machines guns for the 20 NMCBs, 2 NCFSUs and 2 CEMUs (SEABEES).
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	FY2000	FY 2001	FY 2002
Funding Totals	**$2,365**	**$2,387**	**$910**

BUDGET ITEM JUSTIFICATION SHEET P-40												DATE: JUNE 2001
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-4**							P-1 ITEM NOMENCLATURE **4205** **MK-15 CLOSE-IN WEAPON SYSTEM (CIWS) MODS-24DT**					
Program Element for Code B Items:							Other Related Program Elements					
	Prior Years	ID Code	FY 2000 and Prior	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Complete	Total Program
QUANTITY		A										
COST (M$)		A	**$50.1**	**$25.7**	**$40.5**							
Initial Spares (M$)												

THIS LINE ITEM FUNDS PROCUREMENT OF BLOCK IB PHALANX SURFACE MODE (PSUM) ORDALT KITS AND PLANNED INSTALLATIONS OF PRIOR PROCURED HARDWARE.

	FY01	FY02
DT001 ORDALTS	24769	39500
DT802 PRODUCTION ENGR SUPPORT		
DT803 ENGR SUPPORT		
DTINS INSTALLATION	957	1503
TOTAL	25726	40503

CLASSIFICATION: **UNCLASSIFIED**

P3A **INDIVIDUAL MODIFICATION** Date: June 2001

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

DESCRIPTION/JUSTIFICATION:

THE BLOCK IB SURFACE MODE ORDALT INCLUDES THE ADDITION OF A THERMAL IMAGER, AN AUTOMATIC ACQUISITION VIDEO TRACKER AND STABILIZATION SYSTEM FOR THE TRACKER. THE UPGRADE IS ESSENTIAL TO PROVIDE THE FLEET CAPABILITY AGAINST SMALL HIGH SPEED SURFACE THREATS AND LOW SLOW SPEED AIR THREATS.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES: COMPLETE

	FY 2000 & Prior		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007					TC	TOTAL	
	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$				$	QTY	$
FINANCIAL PLAN (IN MILLIONS)																						
RDT&E		100818																				
PROCUREMENT																						
INSTALLATION KITS																						
INSTALLATION KITS NONRECURRING																						
EQUIPMENT																						
EQUIPMENT NONRECURRING																						
ENGINEERING CHANGE ORDERS																						
DATA																						
TRAINING EQUIPMENT		4972																				
SUPPORT EQUIPMENT																						
BLOCK 1 ORDALTS	219	261276																				
-PSUM PROCUREMENT	13	23000	14	24769	32	39500																
ORMS	var	224790																				
PRODUCTION ENGINEERING		21213																				
PRODUCTION ENGINEERING SUPPORT		15679																				
ENGINEERING SUPPORT		2446																				
INSTALL COST		50075		957		1003																
TOTAL PROCUREMENT	232	603451	14	25726		40503																

CLASSIFICATION: **UNCLASSIFIED**

P3A (Continued) **INDIVIDUAL MODIFICATION (Continued)** Date: June 2001

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

INSTALLATION INFORMATION:
METHOD OF IMPLEMENTATION: **BLOCK IB SURFACE MODE ORDALT KITS WILL BE ACOMPLISHED BY AIT INSTALLATIONS DURING PIERSIDE AVAILABILITY.**

ADMINISTRATIVE LEAD-TIME: Months PRODUCTION LEADTIME: 24 Months
CONTRACT DATES: FY 2000: FY 2001: FY 2002:
DELIVERY DATE: FY 2000: FY 2001: FY 2002:

($ in Millions)

Cost:	Prior Years		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007						To Complete		Total
	Qty	**$**	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$							
PRIOR YEARS	215	50075	3	768	1	160																	
FY 1998 EQUIPMENT				189																			
FY 1999 EQUIPMENT						343																	
FY 2000 EQUIPMENT																							
FY 2001 EQUIPMENT																							
FY 2002 EQUIPMENT																							
FY 2003 EQUIPMENT																							
FY 2004 EQUIPMENT																							
FY 2005 EQUIPMENT																							
FY 2006 EQUIPMENT																							
TO COMPLETE																							

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

	FY 2000 & Prior	FY 2001				FY 2002			
		1	2	3	4	1	2	3	4
In	209	0	1	0	0	0	0	1	0
Out	209	0	0	1	0	0	0	0	1

BUDGET ITEM JUSTIFICATION SHEET **P-40**											**DATE:** **June 2001**	
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy**						P-1 ITEM NOMENCLATURE **BLI: 4210 5"/54 GUN MOUNT MODS**						
Program Element for Code B Items:						Other Related Program Elements						
	Prior Years	ID Code	FY 2000	FY 2001	FY 2002						To	Total
QUANTITY												
COST ($M)			$28.8	$0.0	$0.0							
Initial Spares ($M)												

COST ELEMENT E5006: THIS ELEMENT IS FOR PROCUREMENT OF SAFETY / SHOCK ORDALTS FOR 5"/54 MK 45 GUN MOUNTS.

	FY 00	FY 01	FY 02
SAFETY/SHOCK ORDALTS	$28,756	$0	$0

NOTE: BEGINNING IN FY 01, THIS BUDGET LINE HAS BEEN COMBINED WITH BUDGET LINE 4217 GUN MOUNT MODS.

BUDGET ITEM JUSTIFICATION SHEET
P-40

DATE: **June 2001**

APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy / BA-4: OTHER WEAPONS

P-1 ITEM NOMENCLATURE
BLI: 4213 MK75/76MM GUN MOUNT MODS / A4DU

Program Element for Code B Items:

Other Related Program Elements

	Prior Years	ID Code	FY 2000	FY 2001	FY 2002						To	Total
QUANTITY												
COST ($M)			$2.0	$0.0	$0.0							
Initial Spares ($M)												

COST ELEMENT DU001: THIS ELEMENT PROVIDES FOR THE PROCUREMENT OF SAFETY/SHOCK ORDALTS FOR THE MK 75 GUN MOUNT. THE ORDALTS WILL PROVIDE SAFETY IMPROVEMENTS FOR FFG 7, USCG WMEC 270, AND USCG WHEC 378.

DUINS: INSTALLATION OF MOD EQUIPMENT FY96 AND OUT ARE TURN-KEY INSTALLATIONS.

	FY 00	FY 01	FY 02
SAFETY/SHOCK ORDALTS	$1,957	$0	$0

NOTE: BEGINNING IN FY01, THIS BUDGET LINE HAS BEEN COMBINED WITH BUDGET LINE 4217 GUN MOUNT MODS.

BUDGET ITEM JUSTIFICATION SHEET
P-40

DATE: **June 2001**

APPROPRIATION/BUDGET ACTIVITY
Weapons Procurement, Navy / BA-4: OTHER WEAPONS

P-1 ITEM NOMENCLATURE
BLI: 4217 GUN MOUNT MODS

Program Element for Code B Items:

Other Related Program Elements

	Prior Years	ID Code	FY 2000*	FY 2001	FY 2002						To	Total
QUANTITY												
COST ($M)			$0.0	$29.5	$5.7							
Initial Spares ($M)												

E5001 - 5" GUN MOUNT MODS: This element procures gun safety and shock hardening ORDALTs for 5" MK 45 gun mounts.

E5002 - MINOR CALIBER MODS: This element procures ORDALTs and miscellaneous equipment required to improve safety and reliability for the 25MM MK 38 Machine Gun System and all other minor caliber ordnance much of which is outdated and difficult to support. It provides initial fill kits and replacement of surveyed and outdated minor caliber ordnance for active ships. This element also procures MK 11 saluting mounts and related components.

E5003 - 76MM GUN MOUNT MODS: This element procures safety/shock ORDALTs for 76MM MK 75 gun mounts. These ORDALTs will provide safety improvements for USN FFG 7 Class ships, USCG WMEC 270, and USCG WHEC 378 cutters.

*FY 98 - FY 00: Funding was in three separate budget lines in BA-4 - Other Weapons (Under $5M Each) with the following accounting data.

Subhead: A4E5	Cost Code: E5001	Title: 5" Gun Mount Mods	BLI: 421000
Subhead: A4DU	Cost Code: E5002	Title: 76MM Gun Mount Mods	BLI: 421300
Subhead: A4E6	Cost Code: E5003	Title: Mods Under $2 M	BLI: 422000

E5004 - CG CONVERSION MK 45 GUN MOUNT UPGRADE: This element procures modifications and associated technical and logistics support to upgrade MK 45 Gun Mounts to a Mod 4 configuration in support of the Cruiser Conversion Program. These modifications include: Gun Mount preparation, Mod 4 Kits, 5"/62 caliber Gun Barrels, Assembly and Test, and ERGM Handling Mechanism. The upgraded Gun Mount will be capable of firing Extended Range Guided Munitions and extend the range of ballistic ammunition.

E5005 - INSTALLATION OF EQUIPMENT (MK 45 Mod 4): This element provides funding to install the MK 45 Mod 4 Gun Mount.

CLASSIFICATION: **UNCLASSIFIED**

WEAPONS SYSTEM COST ANALYSIS **P-5**	Weapon System	**DATE:** **June 2001**
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy/BA-4**	ID Code	P-1 ITEM NOMENCLATURE/SUBHEAD **GUN MOUNT MODS/4217 (14E5)**

COST CODE	ELEMENT OF COST	ID Code	TOTAL COST IN THOUSANDS OF DOLLARS												
			Prior Years	FY 2000			FY 2001			FY 2002			FY 2003		
			Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost	Quantity	Unit Cost	Total Cost
E5001	5" Gun Mount Mods					0			1,359			1,656			
E5002	Minor Caliber Mods					0			1,236			1,143			
E5003	76MM Gun Mount Mods					0			1,911			1,849			
E5004	CG Conversion MK 45 Gun Mount Upgrade					0			25,000			782			
E5005	Installation of Equipment (MK 45 Mod 4)					0			0			318			
			0			**0**			**29,506**			**5,748**			**0**

CLASSIFICATION: **UNCLASSIFIED**

BUDGET PROCUREMENT HISTORY AND PLANNING EXHIBIT (P-5A)	Weapon System	A. DATE
		June 2001

B. APPROPRIATION/BUDGET ACTIVITY	C. P-1 ITEM NOMENCLATURE	SUBHEAD
Other Procurement, Navy/BA-4 Ordnance Support Equipment	GUN MOUNT MODS - 4217	14E5

Cost Element/ FISCAL YEAR	QUANTITY	UNIT COST (000)	LOCATION OF PCO	RFP ISSUE DATE	CONTRACT METHOD & TYPE	CONTRACTOR AND LOCATION	AWARD DATE	DATE OF FIRST DELIVERY	SPECS AVAILABLE NOW	DATE REVISIONS AVAILABLE
Fiscal Year (01)										
E5004	4	*5,500	NSWC/PHL	Mar-01	SS/CPIF/FFP	ULDP/ Minneapolis, MN & Louisville, KY	Mar-01	Feb-03	NO	Jul-01

D. REMARKS

*This unit cost is reflective of upgrading overhauled gun mounts provided as GFE.

CLASSIFICATION: **UNCLASSIFIED**

TIME PHASED REQUIREMENT SCHEDULE P-23		A. APPROPRIATION/BUDGET ACTIVITY Weapons Procurement, Navy		B. P-1 ITEM NOMENCLATURE BLI: 4217 Gun Mount Mods		C. DATE June-01	

		FY 2000				FY 2001				FY 2002				FY 2003				FY 2004				FY 2005				FY 2006				LATER
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
ACTIVE FORCE INVENTORY	(P)																			2		2	2							
	(P)																													
SCHOOLS/OTHER TRAINING	(P)														1															
OTHER	(P)															1														
TOTAL PHASED REQ	(C)	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2	2	2	4	4	6	8							
ASSETS ON HAND	0																													
DELIVERY FY 98 & PRIOR	0																													
FY 99 & PRIOR	0																													
FY 00	0																													
FY 01	8						SS								1	1		1	1	1	1	1	1							
FY 02	0																													
TOTAL ASSETS	8	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2	3	4	5	6	7	8							
QTY OVER (+) OR SHORT (-)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	1	2	1	0							

D. REMARKS	E. RQMT (QTY)	TOTAL RQMT	INSTALLED	ON HAND AS OF 1/1/00	FY 99 & PRIOR UNDELIVERED	UNFUNDED
For Cost Code 5001 Gun Mount Mods (FY01 only)						
For Cost Code 5004 CG Conversion MK 45 Gun Mount Upgrade (FY02 and after)	1. APPN - WPN					
	2. APPN -					

3. PROCUREMENT LEADTIME	ADMIN	INITIAL ORDER	REORDER
36 months	3 months	23 months	23 months

BUDGET ITEM JUSTIFICATION SHEET P-40	DATE: June 2001
APPROPRIATION/BUDGET ACTIVITY **Weapons Procurement, Navy / BA-4: OTHER WEAPONS**	P-1 ITEM NOMENCLATURE **BLI: 4220 MODS UNDER $2 MILLION / A4E6**
Program Element for Code B Items:	Other Related Program Elements

	Prior Years	ID Code	FY 2000	FY 2001	FY 2002						To	Total
QUANTITY												
COST ($M)			$1.8	*$4.0	$0.0							
Initial Spares ($M)												

COST ELEMENT E6001(FY00): THIS ELEMENT 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. THESE ORDALTS ARE REQUIRED TO IMPROVE SAFETY AND RELIABILITY FOR THE 25MM MK 38 MACHINE GUN SYSTEM AND ALL OTHER MINOR CALIBER ORDNANCE MUCH OF WHICH IS OUTDATED AND DIFFICULT TO SUPPORT. IT PROVIDES INITIAL FILL KITS AND REPLACEMENT OF SURVEYED AND OUTDATED MINOR CALIBER ORDNANCE FOR ACTIVE SHIPS. THIS ELEMENT ALSO PROCURES MK 11 SALUTING MOUNTS AND RELATED COMPONENTS.

THE BUDGET ALSO INCLUDES CONGRESSIONAL FUNDS IN FY01 FOR THE SHOULDER LAUNCHED MULTI-PURPOSE ASSAULT WEAPON (SMAW), COMMON PRACTICE (CP) ROUND. THIS ROCKET, 83MM HEAA PRACTICE, IS CONFIGURED TO BE BALLISTICALLY MATCHED TO THE DUAL MODE AND HIGH EXPLOSIVE ANTI-ARMOR ROCKETS. THIS ITEM IS FOR TRAINING USE ONLY AND IS BEING PROCURED THROUGH THE NAVY. REQUEST WAS SUBMITTED FOR THESE FUNDS BE CORRECTLY REFLECTED UNDER A USMC BUDGET LINE.

	FY 00	FY 01
MINOR CALIBER ORDALTS	$1,802	$3,963

*NOTE: $4.0 million was added by the Congress in FY 2001 for SMAW Ammunition Rounds. This effort is properly funded in the PAN,MC appropriation, line item 033500, and a reclassification action is in process.