DEPARTMENT OF THE ARMY

Procurement Programs

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FY 2001 Budget Estimate

MISSILE PROCUREMENT, ARMY

APPROPRIATION

February 2000

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Appropriation: **MISSILES**

Activity: 2. **OTHER MISSILES**

LINE NO.	ITEM NOMENCLATURE	ID	(DOLS) FY 00 UNIT COST	FY 99		FY 00		FY 01	
				QTY	COST	QTY	COST	QTY	COST
(1)	(2)	(3)	(4)	(7)	(8)	(9)	(10)	(11)	(12)
	****SURFACE-TO-AIR MISSILE SYSTEM****								
1	AVENGER SYSTEM SUMMARY (C14900) *			15	34,684	15	34,216	7	29,801
	SUB-ACTIVITY TOTAL				**34,684**		**34,216**		**29,801**
	****AIR-TO-SURFACE MISSILE SYSTEM****								
2	HELLFIRE SYS SUMMARY (C70000)	A		2,000	308,335	2,200	305,459	2,200	296,962
	LESS: ADVANCE PROCURMENT (PY)						-11,598		-11,599
					308,335		293,861		285,363
3	HELLFIRE SYS SUMMARY (C70000) ADVANCE PROCURMENT (CY)				44,275				
	SUB-ACTIVITY TOTAL				**352,610**		**293,861**		**285,363**
	****ANTI-TANK/ASSAULT MISSILE SYSTEM****								
4	JAVELIN (AAWS-M) SYSTEM SUMMARY (CC0007)			3,569	363,364	2,525	304,615	3,754	387,959
	LESS: ADVANCE PROCURMENT (PY)				-25,613				-15,711
					337,751		304,615		372,248
5	JAVELIN (AAWS-M) SYSTEM SUMMARY (CC0007) ADVANCE PROCURMENT (CY)						40,000		

Appropriation: **MISSILES**

Activity: 2. **OTHER MISSILES**

LINE NO.	ITEM NOMENCLATURE	ID	(DOLS) FY 00 UNIT COST	FY 99		FY 00		FY 01	
				QTY	COST	QTY	COST	QTY	COST
(1)	(2)	(3)	(4)	(7)	(8)	(9)	(10)	(11)	(12)
6	MLRS ROCKET (C65400)						3,747		9,413
7	MLRS LAUNCHER SYSTEMS (C66400)			24	121,134	39	137,507	66	188,689
	LESS: ADVANCE PROCUREMENT (PY)				-------		-------		-------
					121,134		137,507		188,689
8	ARMY TACTICAL MSL SYS (ATACMS) - SYS SUM (C98510)	B		96	90,586	110	90,777		15,044
9	ATACMS/BAT (CA6101)	A		24	149,675	48	228,051	55	230,334
10	MULTI PURPOSE INDV MUN (C09100)								
11	MULTI PURPOSE INDV MUN (C09100)								3,547
	ADVANCE PROCUREMENT (CY)				--------		--------		--------
	SUB-ACTIVITY TOTAL				**699,146**		**804,697**		**819,275**
	ACTIVITY TOTAL				**1,086,440**		**1,132,774**		**1,134,439**

Appropriation: **MISSILES**

Activity: 3. **MODIFICATIONS**

LINE NO.	ITEM NOMENCLATURE	ID	(DOLS) FY 00 UNIT COST	FY 99		FY 00		FY 01	
				QTY	COST	QTY	COST	QTY	COST
(1)	(2)	(3)	(4)	(7)	(8)	(9)	(10)	(11)	(12)
	****MODIFICATIONS****								
12	PATRIOT MODS (C50700)				14,188		49,630		22,929
13	STINGER MODS (C20000)				13,416		21,858		21,838
14	AVENGER MODS (CE8710)				8,349		4,197		6,828
15	ITAS/TOW MODS (C61700)				62,998		67,704		64,562
16	MLRS MODS (C67500)				2,767		6,596		16,499
	SUB-ACTIVITY TOTAL				**101,718**		**149,985**		**132,656**
	ACTIVITY TOTAL				**101,718**		**149,985**		**132,656**

Appropriation: **MISSILES**

Activity: 4. **SPARES AND REPAIR PARTS**

LINE NO.	ITEM NOMENCLATURE	ID	(DOLS) FY 00 UNIT COST	FY 99		FY 00		FY 01	
				QTY	COST	QTY	COST	QTY	COST
(1)	(2)	(3)	(4)	(7)	(8)	(9)	(10)	(11)	(12)
	****SPARES AND REPAIR PARTS****								
17	SPARES AND REPAIR PARTS (CA0250)				18,762		18,835		20,785
	SUB-ACTIVITY TOTAL				**18,762**		**18,835**		**20,785**
	ACTIVITY TOTAL				**18,762**		**18,835**		**20,785**

Appropriation: **MISSILES**

Activity: 5. SUPPORT EQUIPMENT AND FACILITIES**

LINE NO.	ITEM NOMENCLATURE	ID	(DOLS) FY 00 UNIT COST	FY 99		FY 00		FY 01	
				QTY	COST	QTY	COST	QTY	COST
(1)	(2)	(3)	(4)	(7)	(8)	(9)	(10)	(11)	(12)
	****SUPPORT EQUIPMENT AND FACILITIES****								
18	AIR DEFENSE TARGETS (C93000)				2,512		2,352		2,394
19	ITEMS LESS THAN $5.0M (MISSILES) (CL2000)				914		981		969
20	MISSILE DEMILITARIZATION (HL2000)				1,453		1,385		1,341
21	PRODUCTION BASE SUPPORT (CA0100)				3,229		3,192		3,144
22	CLOSED ACCOUNT ADJUSTMENT				307				
	SUB-ACTIVITY TOTAL				**8,415**		**7,910**		**7,848**
	ACTIVITY TOTAL				**8,415**		**7,910**		**7,848**
	APPROPRIATION TOTAL				**1,215,335**		**1,309,504**		**1,295,728**

Exhibit P-40, Budget Item Justification Sheet

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 2 / Other Missiles

P-1 Item Nomenclature: AVENGER SYSTEM SUMMARY (C14900)

Program Elements for Code B Items:

Code:

Other Related Program Elements: C15200 AVENGER TRAINING DEVICES, C16000 AVENGER PED MT STINGER (MYP), CA0260 AVENGER SPARES, CA0286 AVENGER MOD SPARES

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	773	93		15	15	7	10	23	73	68	107	1184
Gross Cost	935.1	62.4	0.0	34.7	34.2	29.8	34.3	60.2	130.3	120.8	379.2	1820.9
Less PY Adv Proc	122.9											122.9
Plus CY Adv Proc	122.9											122.9
Net Proc (P-1)	935.1	62.4	0.0	34.7	34.2	29.8	34.3	60.2	130.3	120.8	379.2	1820.9
Initial Spares	60.9					2.9	2.9	5.9	2.0	2.0	53.5	130.2
Total Proc Cost	996.0	62.4	0.0	34.7	34.2	32.7	37.2	66.1	132.3	122.8	432.7	1951.1
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The Avenger System is a lightweight, highly mobile/transportable surface-to-air missiles/gun weapon system mounted on a High Mobility Multi-Purpose Wheeled Vehicle (HMMWV). It is operated by a two-man crew for defense against cruise missiles, helicopters, and fixed wing aircraft at low altitude, day or night, and in clear or adverse weather. The system incorporates an operator's position with controls, displays, fire control electronics, and the Standard Vehicle Mounted
Launcher (SVML). The SVML includes seeker coolant bottles and related hardware; it supports and launches multiple Stinger Missiles. The SVML provides output signals that can be used to display to the gunner exactly where the Stinger is pointed. The driven sight reticule capability aids the gunner in severe background clutter and Electro-Magnetic Counter Measure (ECM) environments. The system operates with the standard unmodified Basic Stinger, the Stinger-POST (Passive Optical Seeker Technique) or Stinger-RMP (Reprogrammable Micro Processor) missile rounds, and the high rate of fire .50 caliber machine gun. The Avenger fills the Line-of-Sight Rear (LOS-R) role in Forward Area Air Defense Systems (FAADS).

JUSTIFICATION: The FY 01 program procures 7 additional Avenger systems. The Avenger constitutes the Line-Of-Sight Rear (LOS-R) component of the Forward Area Air Defense System (FAADS), and it is the first FAADS element fielded. Fielding to the ARNG and the upgunning of the active Army units are required to meet Total Army Force requirements and to support the National Strategy. By upgunning, 12 fire units are added to approved "A-Series" Table of organization and Equipment (Conservative Heavy Division) units. Funding will provide for standardization of Air Defense Artillery platoons, increases in division night-fighting capability, and a reduction in force structure (removal of Man Portable Air Defense System (MANPADS) teams.

Exhibit P-5, Weapon Missiles Cost Analysis	Appropriation/ Budget Activity/Serial No: MISSILE PROCUREMENT / 2 / Other Missiles	P-1 Line Item Nomenclature: AVENGER SYSTEM SUMMARY (C14900)	Weapon System Type:	Date: February 2000

Cost Elements	ID CD	FY 98			FY 99			FY 00			FY 01		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
AVENGER (PED MT STINGER) (MYP)													
Hardware-Recurring													
Turret Assembly					16,392	15	1,093	16,392	15	1,093	10,038	7	1,434
Sub-Total Hardware Production					16,392	15	1,093	16,392	15	1,093	10,038	7	1,434
Other Hardware													
ECU/PPU					1,257						327		
Std Veh Mtd Launcher (SVML) Army					6,882						1,650		
STC/AFCC					1,702			1,702			761		
Captive Flight Trainers					121						372		
HMMWV					764			775			368		
FBCB2											943		
Other GFE					171			174			82		
Sub-Total Other Hardware					10,897	15	726	2,651	15	177	4,503	7	643
Total Driveaway					27,289	15	1,819	19,043	15	1,270	14,541	7	2,077
Support Cost													
Support Equipment								2,065			4,770		
Training Equipment					2,787			3,695			2,942		
Contractor Engineering & Fielding Support					4,608			4,767			4,118		
Government Engineering								2,582			3,187		
Equip for Upgun & Cascaded Units								1,300					
ECU/PPU Kits for Fld Units								764			243		
Fielding					7,395			15,173			15,260		
Sub-Total Support Cost													
Gross P-1 End Cost					34,684			34,216			29,801		
Less: Prior Year Adv Proc													
Net P-1 Full Funding Cost					34,684			34,216			29,801		
Plus P-1 CY Adv. Proc													
Other Non P-1 Costs													
Initial Spares											2,856		
MODS					8,349			4,197			6,828		
TOTAL					**43,033**			**38,413**			**39,485**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 2 / Other Missiles

Weapon System Type:

P-1 Line Item Nomenclature: AVENGER SYSTEM SUMMARY (C14900)

WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $OOO	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
FY 97	Boeing, Huntsville, Alabama	SSM-6/FP	MICOM	Dec-96	May-97	93	379	yes		
FY 99	Boeing, Huntsville, Alabama	SS/FP	AMCOM	Jun-99	Jul-01	15	1,093	yes		
FY 00 Option	Boeing, Huntsville, Alabama	SS/FP	AMCOM	Dec-99	Dec-01	15	1,093	yes		
FY 01 Option	Boeing, Huntsville, Alabama	SS/FP	AMCOM	Nov-00	May-02	7	1,434	yes		

REMARKS:

FY 2000 / FY 2001 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: AVENGER SYSTEM SUMMARY (C14900)

Date: February 2000

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP. PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 98 / Calendar Year 98 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Fiscal Year 99 / Calendar Year 99 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	LATER
AVENGER	1	97	A	93	41	52	10	10	10	10	10	2																			
	1	97	F	74		74						2	9	9	9	9	9	9	9	9											
	1	99	A	15																							A				15
	1	00	A	15																											15
	1	01	A	7																											7

MFR	NAME / LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D +
1	Boeing , Huntsville, Alabama	3	12	40	15

MFR Number		ADMIN LEAD TIME Prior 1 Oct.	After 1 Oct.	MFR After 1 Oct.	TOTAL After 1 Oct.
	INITIAL	6	8	25	33
	REORDER	2	8	18	26
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				

REMARKS

FY 2000 / FY 2001 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: AVENGER SYSTEM SUMMARY (C14900)

Date: February 2000

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP. PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 00 / Calendar Year 00 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Fiscal Year 01 / Calendar Year 01 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	LATER
AVENGER	1	97	A	93	93																										
	1	97	F	74	74																										
	1	99	A	15	0	15																						3	3	3	6
	1	00	A	15	0	15			A																						15
	1	01	A	7	0	7														A											7

MFR	NAME / LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D +
1	Boeing , Huntsville, Alabama	3	12	40	15

MFR Number		ADMIN LEAD TIME Prior 1 Oct.	After 1 Oct.	MFR After 1 Oct.	TOTAL After 1 Oct.	REMARKS
	INITIAL	6	8	25	33	
	REORDER	2	8	18	26	
	INITIAL					
	REORDER					
	INITIAL					
	REORDER					
	INITIAL					
	REORDER					
	INITIAL					
	REORDER					

FY 2000 / FY 2001 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: AVENGER SYSTEM SUMMARY (C14900)

Date: February 2000

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP. PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 02 / Calendar Year 02 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Fiscal Year 03 / Calendar Year 03 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	LATER
AVENGER	1	97	A	93	93																										
	1	97	F	74	74																										
	1	99	A	15	9	6	3	3																							
	1	00	A	15	0	15			3	3	3	3	3																		
	1	01	A	7	0	7								3	3	1															

MFR	NAME / LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D +
1	Boeing , Huntsville, Alabama	3	12	40	15

MFR Number		ADMIN LEAD TIME Prior 1 Oct.	After 1 Oct.	MFR After 1 Oct.	TOTAL After 1 Oct.	REMARKS
	INITIAL	6	8	25	33	
	REORDER	2	8	18	26	
	INITIAL					
	REORDER					
	INITIAL					
	REORDER					
	INITIAL					
	REORDER					
	INITIAL					
	REORDER					

Exhibit P-40, Budget Item Justification Sheet

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 2 / Other Missiles

P-1 Item Nomenclature: HELLFIRE SYS SUMMARY (C70000)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	352	1056	1100	2000	2200	2200	2200	1797				12905
Gross Cost	2192.2	353.8	241.3	308.3	305.5	297.0	234.3	193.5	26.1	22.2	772.2	4946.4
Less PY Adv Proc					11.6	11.6	11.6	9.5				44.3
Plus CY Adv Proc				44.3								44.3
Net Proc (P-1)	2192.2	353.8	241.3	352.6	293.9	285.4	222.7	184.0	26.1	22.2	772.2	4946.4
Initial Spares	7.5											7.5
Total Proc Cost	2199.7	353.8	241.3	352.6	293.9	285.4	222.7	184.0	26.1	22.2	772.2	4953.9
Flyaway U/C	0.046	0.124	0.218	0.154	0.139	0.135	0.106	0.106				0.080
Wpn Sys Proc U/C	0.046	0.124	.219	.176	.134	.130	.101	.102				.080

DESCRIPTION: HELLFIRE is an air-to-ground missile system designed to defeat specific targets and minimize exposure of the delivery vehicle to enemy fire. Laser HELLFIRE uses semi-active laser terminal guidance; Longbow HELLFIRE uses a radio frequency guidance section and is a fire-and forget missile. HELLFIRE is the primary anti-tank armament of the AH-64 Apache, OH-58D Kiowa Warrior, and Special Operations helicopters and will be used by the RAH-66 Comanche, the Army's next-generation helicopter. Production buys are scheduled to support training, testing, fielding and deployment of these aircraft. Beginning in FY 90, the missile was reconfigured with an interim warhead to improve lethality against near-term threat reactive armor. HELLFIRE II includes hardening of the laser seeker against countermeasures, further warhead improvements for the long term, replacement of the mechanical fuze with an electronic fuze, and restoration of the original length and weight. Longbow HELLFIRE is designed to defeat specific targets and substantially enhance survivability of the AH-64D Longbow Apache Helicopter. The Advanced Precision Kill Weapon System (APKWS) seeker will begin procurement of long-lead items and initial production facilities in FY 06. The APKWS will consist of a laser guidance section that uses existing Hydra-70 rocket components and launch equipment. The APKWS is a highly accurate weapon that will complement the HELLFIRE missile in precision strike against soft point targets. The APKWS will provide improved accuracy over the current 2.75 rocket used on the AH-64 Apache, OH-58 Kiowa Warrior, and the RAH-66 Comanche helicopters.

JUSTIFICATION: FY 01 is the third year of the Longbow Hellfire missile's five-year multi-year production contract. The FY 01 procurement dollars will be used to produce the Longbow Hellfire missile and will also support the on-going training, fielding and deployment of the complete AH-64D Longbow Apache system.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 2 / Other Missiles

P-1 Item Nomenclature: LASER HELLFIRE MSL (BASIC/IHW/HFII) (C70100)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	47340	1800										49140
Gross Cost	1939.8	104.5	9.5	9.3	1.0	0.0	0.0	0.0	0.0	0.0	0.0	2064.1
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	1939.8	104.5	9.5	9.3	1.0	0.0	0.0	0.0	0.0	0.0	0.0	2064.1
Initial Spares	5.7											5.7
Total Proc Cost	1945.5	104.5	9.5	9.3	1.0	0.0	0.0	0.0	0.0	0.0	0.0	2069.8
Flyaway U/C	0.041	0.058										0.042
Wpn Sys Proc U/C	0.041	0.058										.042

Description: Laser HELLFIRE is an air-to-ground, point target, precision strike missile system designed to defeat individual hardpoint targets. The missile system has the capability for modular guidance section replacements. Laser HELLFIRE uses semi-active laser terminal guidance and is the primary anti-tank armament of the AH-64 Apache, OH-58 Kiowa Warrior, and Special Operations helicopters and will be used by the RAH-66 Comanche, the Army's next-generation helicopter. Beginning in FY 90, the missile was reconfigured with an interim warhead to improve lethality against near-term threat reactive armor. HELLFIRE II includes hardening of the laser seeker against countermeasures, further warhead improvements for the long term, replacement of the mechanical fuze with an electronic fuze, and restoration of the original length and weight.

Justification: HELLFIRE II will defeat all known electro-optical countermeasures and advanced reactive armors. Using its semi-active laser homing guidance system, laser HELLFIRE is perfectly suited for strikes at a variety of specific hardpoint targets, while minimizing exposure of the aircraft and supporting troops.

Exhibit P-5, Weapon Missiles Cost Analysis	Appropriation/ Budget Activity/Serial No: MISSILE PROCUREMENT / 2 / Other Missiles	P-1 Line Item Nomenclature: LASER HELLFIRE MSL (BASIC/IHW/HFII) (C70100)	Weapon System Type:	Date: February 2000

Cost Elements	ID CD	FY 98			FY 99			FY 00			FY 01		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$OOO	Each	$OOO	$OOO	Each	$OOO	$OOO	Each	$OOO	$OOO	Each	$OOO
Flyaway Costs													
Hardware Costs - Recurring													
All-Up-Rounds													
Containers													
Gov Furn Eq (GFE) Explosives													
Engineering Services					690								
Engineering Change Orders													
Fielding					30								
Acceptance Testing					2477			510					
SUBTOTAL					**3197**			**510**					
Engineering Support													
Project Mgt Admin					3246			250					
Production Engineering Support					2873			250					
SUBTOTAL					**6119**			**500**					
NON-Recurring													
Depot Tooling/Test Equipment													
Initial Production Facilitization (IPF)													
Rate Tooling/ Test Equipment													
SUBTOTAL													
TOTAL FLYAWAY					**9316**			**1010**					
Peculiar Support Equipment													
Environmental Protection Covers													
SUBTOTAL													
Launchers													
Gross P-1 End Cost					**9316**			**1010**					
Less: Prior Year Adv Proc													
Net P-1 Full Funding Cost					**9316**			**1010**					
Plus: P-1 CY Adv Proc													
Other Non P-1 Costs													
Initial Spares													
Mods													
TOTAL					**9316**			**1010**					

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 2 / Other Missiles

Weapon System Type:

P-1 Line Item Nomenclature: LASER HELLFIRE MSL (BASIC/IHW/HFII) (C70100)

WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $OOO	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
All-Up-Rounds										
FY97	HELLFIRE Systems Limited Liability Company (HSLLC)	FFP	AMCOM	Jan-97	Jan-99	1800	46	yes		

REMARKS:

FY 00 / 01 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: LASER HELLFIRE MSL (BASIC/IHW/HFII) (C70100)

Date: February 2000

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP. PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 99 / Calendar Year 99												Fiscal Year 00 / Calendar Year 00									LATER
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
114K/Martin/FY94	1	94	A	1417	1214	203			196	4	3																				
114K/Martin/FY94	1	94	N	1873	1866	7					7																				
114K/Martin/FY95	1	95	A	1600	1109	491	291	200																							
114K/HSLLC/FY96	1	96	A	750	0	750		375	375																						
114K/HSLLC/FY96	1	96	MA	1572	400	1172				503		134	535																		
114K/HSLLC/FY97	1	97	A	1800	0	1800				123			160		421			396	1	358	341										
114K/HSLLC/FY98	1	98	N	100	0	100																				100					
114K/HSLLC/FY00	1	00	MA	504	0	504																									504

MFR	NAME / LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D +
1	HELLFIRE System Limited Liability Company (HLLLC)	104	250	525	18
	Orlando, Fl				

MFR Number		ADMIN LEAD TIME Prior 1 Oct.	After 1 Oct.	MFR After 1 Oct.	TOTAL After 1 Oct.
	INITIAL	1	8	24	32
	REORDER	3	5	23	28
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				

REMARKS

HSLLC production rate data reflects a warm base for HELLFIRE II.

FY 00 / 01 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: LASER HELLFIRE MSL (BASIC/IHW/HFII) (C70100)

Date: February 2000

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP. PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 01 / Calendar Year 01												Fiscal Year 02 / Calendar Year 02										LATER
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
114K/Martin/FY94	1	94	A	1417	1417																										
114K/Martin/FY94	1	94	N	1873	1873																										
114K/Martin/FY95	1	95	A	1600	1600																										
114K/HSLLC/FY96	1	96	A	750	750																										
114K/HSLLC/FY96	1	96	MA	1572	1572																										
114K/HSLLC/FY97	1	97	A	1800	1800																										
114K/HSLLC/FY98	1	98	N	100	100																										
114K/HSLLC/FY00	1	00	MA	504	0	504												64	240	200											
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	NAME / LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D +
1	HELLFIRE System Limited Liability Company (HLLC)	104	250	525	18
	Orlando, Fl				

MFR Number			ADMIN LEAD TIME Prior 1 Oct.	After 1 Oct.	MFR After 1 Oct.	TOTAL After 1 Oct.
	INITIAL		1	8	24	32
	REORDER		3	5	23	28
	INITIAL					
	REORDER					
	INITIAL					
	REORDER					
	INITIAL					
	REORDER					
	INITIAL					
	REORDER					

REMARKS

HSLLC production rate data reflects a warm base for HELLFIRE II.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 2 / Other Missiles

P-1 Item Nomenclature: LONGBOW HELLFIRE/LBHF+ (C70300)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	352	1056	1100	2000	2200	2200	2200	1797				12905
Gross Cost	223.3	249.2	231.9	299.0	304.5	297.0	234.3	193.5	26.1	22.2	26.0	2107.0
Less PY Adv Proc					11.6	11.6	11.6	9.5				44.3
Plus CY Adv Proc				44.3								44.3
Net Proc (P-1)	223.3	249.2	231.9	343.3	292.9	285.4	222.7	184.0	26.1	22.2	26.0	2107.0
Initial Spares												
Total Proc Cost	223.3	249.2	231.9	343.3	292.9	285.4	222.7	184.0	26.1	22.2	26.0	2107.0
Flyaway U/C	0.634	0.236	0.209	0.150	0.138	0.135	0.106	0.106				0.163
Wpn Sys Proc U/C	0.634	0.236	.210	.172	.133	.130	.101	.102				.163

Description: The Longbow HELLFIRE will be employed on the AH-64D Longbow Apache helicopter. Longbow HELLFIRE will provide the capability to engage targets both during the day and night, in adverse weather and with battlefield obscurants present. Longbow HELLFIRE provides a fire and forget capability against a given target set which complements the semi-active Laser HELLFIRE missile. The Longbow HELLFIRE missile contains a radio frequency guidance section which will provide a lock-on before launch (LOBL) or lock-on after launch (LOAL) capability, depending on target range and movement parameters. All three Longbow program elements (Fire Control Radar, D Model Apache helicopter, and Longbow HELLFIRE missile) were deployed simultaneously and are scheduled to be fielded as a total system. Laser HELLFIRE and Longbow HELLFIRE are complementary; both are required on the modern battlefield.

Justification: The Longbow HELLFIRE will not change the AH-64 mission or role but will provide for increased aircraft survivability. It is envisioned that Longbow HELLFIRE will also be used on the Comanche as a pre-planned product improvement item. FY 01 is the third year of the five-year multi-year contract.

Exhibit P-5, Weapon Missiles Cost Analysis	Appropriation/ Budget Activity/Serial No: MISSILE PROCUREMENT / 2 / Other Missiles	P-1 Line Item Nomenclature: LONGBOW HELLFIRE/LBHF+ (C70300)	Weapon System Type:	Date: February 2000

Cost Elements	ID CD	FY 98			FY 99			FY 00			FY 01		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
Flyaway Costs													
Hardware Costs - Recurring													
All-Up-Rounds					283025	2000	142	291598	2200	133	280299	2200	127
Containers													
Gov Furn Eq (GFE) Explosives					1295			1422			1446		
Engineering Services					1586			2000			2572		
Engineering Change Orders													
Fielding					1932			1145			1710		
Acceptance Testing					2527			2390			3392		
SUBTOTAL					**290365**			**298555**			**289419**		
Engineering Support													
Project Mgt Admin					4896			3655			3717		
Production Engineering Support					3758			2239			3826		
SUBTOTAL					**8654**			**5894**			**7543**		
NON-Recurring													
Depot Tooling/Test Equipment													
Initial Production Facilitization (IPF)													
Rate Tooling/ Test Equipment													
SUBTOTAL													
TOTAL FLYAWAY					**299019**			**304449**			**296962**		
Peculiar Support Equipment													
Environmental Protection Covers													
SUBTOTAL													
Gross P-1 End Cost					**299019**			**304449**			**296962**		
Less: Prior Year Adv Proc								11598			11599		
Net P-1 Full Funding Cost					**299019**			**292851**			**285363**		
Plus: P-1 CY Adv Proc					44275								
Other Non P-1 Costs													
Initial Spares													
Mods													
TOTAL					**343294**			**292851**			**285363**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 2 / Other Missiles

Weapon System Type:

P-1 Line Item Nomenclature: LONGBOW HELLFIRE/LBHF+ (C70300)

WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $OOO	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
All-Up-Rounds										
FY 98	Longbow Limited Liability Company (LLLC) Orlando, Fl	FFP	AMCOM	Dec-97	Feb-00	1100	176	Yes		**
FY 99	Longbow Limited Liability Company (LLLC) Orlando, Fl	*FFP	AMCOM	Apr-99	Sep-00	2000	***142	Yes		**
FY 00	Longbow Limited Liability Company (LLLC) Orlando, Fl	FFP	AMCOM	Dec-00	Sep-01	2200	133	Yes		**
FY 01	Longbow Limited Liability Company (LLLC) Orlando, Fl	FFP	AMCOM	Dec-01	Sep-02	2200	127	Yes		**

REMARKS:
* Five-year multiyear contract.
** Performance-based specifications are used in all production contracts.
***Unit price includes EOQ.

FY 00 / 01 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: LONGBOW HELLFIRE/LBHF+ (C70300)

Date: February 2000

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP. PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 99 / Calendar Year 99 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Fiscal Year 00 / Calendar Year 00 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	LATER
114L/LLLC/FY97	2	97	A	1056	25	1031	30	23		3	12	25	35	55	65	72	98	125	140	104	197	10						37			
114L/LLLC/FY98	2	98	A	1100	0	1100															11		27	170	170	170	170	170	170	42	
114L/LLLC/FY99	2	99	A	2000	0	2000																								117	1883
114L/LLLC/FY00	2	00	A	2200	0	2200																									2200
114L/LLLC/FY01	2	01	A	2200	0	2200																									2200
114L/LLLC/FY02	2	02	A	2200	0	2200																									2200
114L/LLLC/FY03	2	03	A	1797	0	1797																									1797
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	NAME / LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D +
2	Longbow Limited Liability Company (LLLC)	100	*	234	18
	Orlando, Fl				

MFR Number		ADMIN LEAD TIME Prior 1 Oct.	After 1 Oct.	MFR After 1 Oct.	TOTAL After 1 Oct.
	INITIAL	6	3	28	31
	REORDER	6	2	19	21
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				

REMARKS

*FY95 to FY98 facilitizing to achieve a production rate of 184 missile on a 2-8-5 shift. No plans to procure additional tooling/test equipment to build a full rate on 1-8-5 shift.

FY 00 / 01 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: LONGBOW HELLFIRE/LBHF+ (C70300)

Date: February 2000

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP. PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 01 / Calendar Year 01 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Fiscal Year 02 / Calendar Year 02 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	LATER
114L/LLLC/FY97	2	97	A	1056	1056																										
114L/LLLC/FY98	2	98	A	1100	1100																										
114L/LLLC/FY99	2	99	A	2000	117	1883	170	170	170	170	170	170	170	170	173	175	175														
114L/LLLC/FY00	2	00	A	2200	0	2200												183	183	183	183	183	183	183	183	184	184	184	184		
114L/LLLC/FY01	2	01	A	2200	0	2200																								183	2017
114L/LLLC/FY02	2	02	A	2200	0	2200																									2200
114L/LLLC/FY03	2	03	A	1797	0	1797																									1797

MFR	NAME / LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D +
2	Longbow Limited Liability Company (LLLC)	100	*	234	18
	Orlando, Fl				

MFR Number		ADMIN LEAD TIME Prior 1 Oct.	After 1 Oct.	MFR After 1 Oct.	TOTAL After 1 Oct.
	INITIAL	6	3	28	31
	REORDER	6	2	19	21
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				

REMARKS

*FY95 to FY98 facilitizing to achieve a production rate of 184 missile on a 2-8-5 shift. No plans to procure additional tooling/test equipment to build a full rate on 1-8-5 shift.

FY 00 / 01 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: LONGBOW HELLFIRE/LBHF+ (C70300)

Date: February 2000

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP. PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 03 / Calendar Year 03 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Fiscal Year 04 / Calendar Year 04 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	LATER
114L/LLLC/FY97	2	97	A	1056	1056																										
114L/LLLC/FY98	2	98	A	1100	1100																										
114L/LLLC/FY99	2	99	A	2000	2000																										
114L/LLLC/FY00	2	00	A	2200	2200																										
114L/LLLC/FY01	2	01	A	2200	183	2017	183	183	183	183	183	183	183	184	184	184	184														
114L/LLLC/FY02	2	02	A	2200	0	2200												183	183	183	183	183	183	183	184	184	184	184	184		
114L/LLLC/FY03	2	03	A	1797	0	1797																								149	1648

MFR	NAME / LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D +
2	Longbow Limited Liability Company (LLLC)	100	*	234	18
	Orlando, Fl				

MFR Number		ADMIN LEAD TIME Prior 1 Oct.	After 1 Oct.	MFR After 1 Oct.	TOTAL After 1 Oct.
	INITIAL	6	3	28	31
	REORDER	6	2	19	21
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				

REMARKS

*FY95 to FY98 facilitizing to achieve a production rate of 184 missile on a 2-8-5 shift. No plans to procure additional tooling/test equipment to build a full rate on 1-8-5 shift.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 2 / Other Missiles

P-1 Item Nomenclature: HELLFIRE SYS (ADV PROC) (C70000)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0.0	0.0	0.0	0.0	11.6	11.6	11.6	9.5	0.0	0.0	0.0	44.3
Less PY Adv Proc					11.6	11.6	11.6	9.5				44.3
Plus CY Adv Proc				44.3								44.3
Net Proc (P-1)	0.0	0.0	0.0	44.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.3
Initial Spares												
Total Proc Cost	0.0	0.0	0.0	44.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.3
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: Longbow HELLFIRE will be employed on the AH-64D Longbow Apache helicopter. Longbow HELLFIRE will provide the capability to engage targets both day and night in adverse weather and with battlefield obscurants present. Longbow HELLFIRE provides a fire and forget capability against a given target set which complements the semi-active Laser HELLFIRE missile. The Longbow HELLFIRE missile contains a radio frequency guidance section which will provide a lock-on before launch (LOBL) or lock-on after launch (LOAL) capability, depending on target range and movement parameters. All three Longbow program elements (Fire Control Radar, D Model Apache helicopter, and Longbow HELLFIRE missile) were deployed simultaneously and are scheduled to be fielded as a total system. The Laser HELLFIRE and Longbow HELLFIRE are complementary; both are required on the modern battlefield. The production buys support on-going training, fielding, and deployment of the AH-64D Longbow helicopter.

JUSTIFICATION: The advance procurement requirement is the Economic Order Quantity (EOQ) materials required for the FY99-03 multi-year procurement. Cost for the EOQ in FY 99 was $44.3M. EOQ materials include bulk materials for housing, selected electronic components, bulk material for antenna, radome, and gimbal transceiver. FY 01 is the third year of the five-year multi-year contract. The Longbow HELLFIRE will provide the capability to conduct battle both during day and night, in adverse weather and with battlefield obscurants present. With its radio frequency guidance section, the Longbow HELLFIRE provides a true fire and forget capability which dramatically increases the aircraft's survivability as well as maximizing the ability of the Longbow Apache to operate in adverse weather.

Advance Procurement Requirements Analysis-Funding (P-10A)

First System Award Date:

First System Completion Date:

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 2 / Other Missiles

P-1 Line Item Nomenclature / Weapon System: HELLFIRE SYS (ADV PROC) (C70000)

($ in Millions)

	PLT (mos)	When Rqd (mos)	Pr Yrs	1997	1998	1999	2000	2001	2002	2003	2004	2005	To Comp	Total
End Item Quantity:														
All Up Round	13	18					11.6	11.6	11.6	9.5				44.3
Total Advance Procurement							11.6	11.6	11.6	9.5				44.3

Description: The advance procurement requirement is the Economic Order Quantity (EOQ) materials required for the FY 99-03 multi-year procurement. Cost for the EOQ in FY 99 was $44.3M. EOQ materials include bulk materials for housing, selected electronic components, bulk materials for antenna, radome, and gimbal transceiver. The EOQ total of $44.3M remains unchanged from the February 1999 President's Budget submission. However, the recoupment of EOQ in FY 00-03 was adjusted to agree with actual amounts in the multi-year contract signed on April 12, 1999.

Advance Procurement Requirements Analysis-Budget Justification (P-10B)

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 2 / Other Missiles

P-1 Line Item Nomenclature / Weapon System: HELLFIRE SYS (ADV PROC) (C70000)

($ in Millions)

	PLT (mos)	Quantity Per Assembly	Unit Cost	2000 Qty	2000 Contract Forecast Date	2000 Total Cost Request	2001 Qty	2001 Contract Forecast Date	2001 Total Cost Request
End Item									
All Up Round	13	1	0.1	2200	FY 99*	(11.6)**	2200	FY 99*	(11.6)**
Total Advance Procurement						(11.6)**			(11.6)**

Description:

*The Economic Order Quantity (EOQ) requirement of $44.3M is part of the overall multi-year (FY99-03) contract. Funding for the FY99-03 five-year multi-year contract was requested in the FY99 President's budget. The multi-year procurement award date was April 1999. No major end item is procured in advance of the all up round. The FY99 advance procurement was used to purchase bulk metals for housing, selected electornic components, bulk materials for antenna, radome, and gimbal receiver.

**Indicates the funding portion of the prior year (PY) Advance Procurement that is used in the production process for that year. This is not additional procurement.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 2 / Other Missiles

P-1 Item Nomenclature: JAVELIN (AAWS-M) SYSTEM SUMMARY (CC0007)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	2585	1020	894	3569	2525	3754	4061	1397				19805
Gross Cost	635.4	162.6	146.3	363.4	304.6	388.0	395.7	222.1	10.6	0.0	81.0	2709.8
Less PY Adv Proc	18.3		9.1	25.6		15.7	16.1	8.2				93.0
Plus CY Adv Proc	18.3	34.7			40.0							93.0
Net Proc (P-1)	635.4	197.3	137.2	337.8	344.6	372.2	379.7	213.9	10.6	0.0	81.0	2709.8
Initial Spares				3.7	4.5	6.6	7.6	7.8	8.8	0.0		39.1
Total Proc Cost	635.4	197.3	137.2	341.5	349.1	378.9	387.3	221.7	19.5	0.0	81.0	2748.8
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: This project provides procurement funds for Javelin, the medium antitank system for infantry, scouts and combat engineers. These forces must have the capability to defeat numerically superior armored forces. The Javelin, a replacement for the DRAGON, is a medium range, manportable antitank system for use in all forms of maneuver operations. It can be delivered by individual paratrooper, door bundle, tracked/wheeled vehicles, rail, ship or air. This system has a high kill rate against all known armor threats at extended ranges under day/night, adverse weather and battlefield obscurant conditions. The system's soft launch permits firing from a fighting position or an enclosure. Javelin is hardened against countermeasures and does not require extensive training for effective employment. The Command Launch Unit (CLU) is reusable and consists of a target acquisition device, a built-in-test (BIT), a trigger mechanism, and appropriate interfaces. The round includes a missile encased in a disposable launch tube assembly. Attached to the launch tube are a CLU mating connector, front and rear shock attenuators, a removable front end cap, a replaceable battery coolant unit (BCU), an adjustable replaceable shoulder strap, and a replaceable desiccant.

JUSTIFICATION: The operational concept envisioned for fighting the antiarmor battle requires an effective, extended range, manportable, fire-and-forget weapon for dismounted combat forces. Javelin's fire-and-forget technology allows the gunner to fire and immediately take cover, to move to another fighting position, or to reload. The Javelin provides enhanced lethality over the DRAGON through the use of a tandem warhead which will defeat all known armor threats. It is effective against both stationary and moving targets. The Javelin is capable of operating at 2.5 times the range (2500m) of the DRAGON with a day/night integrated sight, capable of target acquisition in adverse weather and through battlefield obscurant conditions. This system will have a secondary mission of destroying bunkers and will provide defensive capability against attacking/ hovering helicopters. The CLU can be used in a stand-alone mode for battlefield surveillance and target selection. There have been 10,593 rounds procured through FY2000. There are 9,212 rounds planned for purchase in three subsequent years as part of a four-year multiyear contract (FY2000-2003) using economic order quantity funded in FY2000. FY2001 funds will be used to procure 3754 missiles and 808 CLUs.

Exhibit P-5, Weapon Missiles Cost Analysis	Appropriation/ Budget Activity/Serial No: MISSILE PROCUREMENT / 2 / Other Missiles	P-1 Line Item Nomenclature: JAVELIN (AAWS-M) (CC0007)	Weapon System Type:	Date: February 2000

Missiles Cost Elements	ID CD	FY 98			FY 99			FY 00			FY 01		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$OOO	Each	$OOO	$OOO	Each	$OOO	$OOO	Each	$OOO	$OOO	Each	$OOO
Missile Hardware- Recurring													
All Up Round					281130	3569	79	162453	2525	64	241525	3754	64
Engineering Services					5098			5550			4828		
Engineering Change Orders					2568			184			208		
Acceptance Testing					3096			2810			2661		
Fielding					2072			4478			2290		
SubTotal Missile Hardware					**293964**			**175475**			**251512**		
Procurement Support													
Government Project Management					6153			6764			6924		
Government Production Engineering					3168			3958			3605		
Publications/Technical Data					403			494			448		
SUBTOTAL					**9724**			**11216**			**10977**		
Plant Closure													
Total Flyaway					**303688**			**186691**			**262489**		
Command & Launch Hardware													
Command Launch Unit					37794	298	127	60604	610	99	80275	808	99
Engineering Services					548			1509			1610		
Engineering Change Orders					726			68			70		
Fielding					1482			8620			7447		
SubTotal C&L Hardware					**40550**			**70801**			**89402**		
Training Devices													
Field Tactical Trainer - Student Station					15178	144	105	36320	475	76	26838	351	76
Field Tactical Trainer - Instructor Station					808	33	24	1424	80	18	1798	101	18
Basic Skills Trainer					2479	19	130	7708	82	94	5546	59	94
Missile Simulation Round					660	330	2	1672	704	2	1886	794	2
SubTotal					**19125**			**47124**			**36068**		
Gross P-1 End Cost					363363			304616			387959		
Less: Prior Year Adv Proc					25613						15711		
Net P-1 Full Funding Cost					337750			304616			372248		
PLUS P-1 CY Adv. Proc.								40000					
Other Non P-1 Costs													
Initial Spares					3712			4479			6614		
MODS													
TOTAL					**341462**			**349095**			**378862**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 2 / Other Missiles

Weapon System Type:

P-1 Line Item Nomenclature: JAVELIN (AAWS-M) (CC0007)

WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $OOO	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
All Up Round										
FY 99	Joint Venture RSC/LMC*	SS/FP**	AMCOM	Dec-98	Jan-01	3569	79	Yes		
FY 00	Joint Venture RSC/LMC*	SS/FP**	AMCOM	Mar-00	Jan-02	2525	64	Yes		Oct 98
FY 01	Joint Venture RSC/LMC*	SS/FP**	AMCOM	Dec-00	Nov-02	3754	64	Yes		Oct 98
Command Launch Unit										
FY 99	Joint Venture RSC/LMC*	SS/FP**	AMCOM	Dec-98	Jan-01	298	127	Yes		
FY 00	Joint Venture RSC/LMC*	SS/FP**	AMCOM	Mar-00	Oct-01	610	99	Yes		Oct 98
FY 01	Joint Venture RSC/LMC*	SS/FP**	AMCOM	Dec-00	Oct-02	808	99	Yes		Oct 98

REMARKS:
* Raytheon Systems/Lockheed Martin Corp/Tucson,AZ/Orlando, FL
** Multiyear contract

FY 00 / 01 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: JAVELIN (AAWS-M) (CC0007)

Date: February 2000

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP. PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 99			Calendar Year 99									Fiscal Year 00			Calendar Year 00						LATER
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
All Up Round	1	FY94-96	A	2585	2585																										
	1	FY97*	A	1020				6	•	•	•	•	•	•	•	•	•	•	•	7	50	141	284	367	165						
	1	FY97	MC	141																26	53	62									
	1	FY 98	A	894	0	894																			94	160	160	160	160	160	
	1	FY98	MC	380	0	380																			63	63	63	63	64	64	
	1	FY 99	A	3569	0	3569																									3569
	1	FY99	MC	741	0	741																									741
	1	FY 00	A	2525	0	2525																									2525
	1	FY00	MC	998	0	998																									998
	1	FY 01	A	3754	0	3754																									3754
	1	FY01	MC	293	0	293																									293
Command Launch Unit	1	FY94-96	A	260	260																										
	1	FY97	A	206				18	11	1		7	2	43	26	33	25			2	19		16	3							
	1	FY97	MC	48				3	10	3			4	12	8		8														
	1	FY 98	A	395	0	395																		24	34	38	39	39	38	38	
	1	FY98	MC	140	0	140																33	15	18	16	12	11	11	12	12	
	1	FY 99	A	298	0	298																									298
	1	FY99	MC	153	0	153																									153
	1	FY 00	A	610	0	610																									610
	1	FY00	MC	77	0	77																									77
	1	FY 01	A	808	0	808																									808
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	NAME / LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D +
1	Joint Venture RSC/LMC*				
	All Up Round Multiyear 1	1320	7080	12390	
	All Up Round Muliyear 2	1320	7080	12390	
	Command Launch Unit Multiyear 1	120	840	1470	
	Command Launch Unit Multiyear 2	120	960	1680	

MFR Number		ADMIN LEAD TIME Prior 1 Oct.	After 1 Oct.	MFR After 1 Oct.	TOTAL After 1 Oct.
1	INITIAL	11	3	22	25
	REORDER	1	1	22	23
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				

REMARKS

With a multi-year procurement, reorders can be accomplished within one month regardless of 1 Oct. Reorders are based on contract options.

*FY97-Major missile subassembly production ongoing; however, insertion into launch tube was delayed until downselection and testing of correction action.

FY 00 / 01 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: JAVELIN (AAWS-M) (CC0007)

Date: February 2000

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP. PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 01 / Calendar Year 01												Fiscal Year 02 / Calendar Year 02												LATER
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
All Up Round	1	FY94-96	A	2585	2585																										
	1	FY97	A	1020	1020																										
	1	FY97	MC	141	141																										
	1	FY 98	A	894	894																										
	1	FY98	MC	380	380																										
	1	FY 99	A	3569	0	3569	298	298	298	298	298	297	297	297	297	297	297	297													
	1	FY99	MC	741	0	741	61	61	61	62	62	62	62	62	62	62	62	62													
	1	FY 00	A	2525	0	2525													210	210	211	211	211	211	211	210	210	210	210	210	
	1	FY00	MC	998	0	998													84	84	83	83	83	83	83	83	83	83	83	83	
	1	FY 01	A	3754	0	3754																									3754
	1	FY01	MC	293	0	293																									293
Command Launch Unit	1	FY94-96	A	260	260																										
	1	FY97	A	206	206																										
	1	FY97	MC	48	48																										
	1	FY 98	A	395	0		37	37	37	34																					
	1	FY98	MC	140	140																										
	1	FY 99	A	298	0	298				3	37	37	37	37	37	38	38	34													
	1	FY99	MC	153	0	153	13	13	13	13	13	13	13	13	13	12	12	12													
	1	FY 00	A	610	0	610													51	51	51	51	51	50	50	51	51	51	51	51	
	1	FY00	MC	77	0	77													6	6	6	6	6	6	6	7	7	7	7	7	
	1	FY 01	A	808	0	808																									808
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	NAME / LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D +
1	Joint Venture RSC/LMC*				
	All Up Round Multiyear 1	1320	7080	12390	
	All Up Round Muliyear 2	1320	7080	12390	
	Command Launch Unit Multiyear 1	120	840	1470	
	Command Launch Unit Multiyear 2	120	960	1680	

MFR Number		ADMIN LEAD TIME Prior 1 Oct.	After 1 Oct.	MFR After 1 Oct.	TOTAL After 1 Oct.
1	INITIAL	11	3	22	25
	REORDER	1	1	22	23
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				

REMARKS

FY 00 / 01 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: JAVELIN (AAWS-M) (CC0007)

Date: February 2000

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP. PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 03 / Calendar Year 03 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Fiscal Year 04 / Calendar Year 04 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	LATER
All Up Round	1	FY 94-96	A	2585	2585																										
	1	FY97	A	1020	1020																										
	1	FY97	MC	141	141																										
	1	FY 98	A	894	894																										
	1	FY98	MC	380	380																										
	1	FY 99	A	3569	3569																										
	1	FY99	MC	741	741																										
	1	FY 00	A	2525	2525																										
	1	FY00	MC	998	998																										
	1	FY 01	A	3754	0	3754	313	313	313	313	313	313	312	312	313	313	313	313													
	1	FY01	MC	293	0	293	24	24	24	24	24	24	25	25	25	25	25	24													
Command Launch Unit	1	FY94-96	A	260	260																										
	1	FY97	A	206	206																										
	1	FY97	MC	48	48																										
	1	FY 98	A	395	395																										
	1	FY98	MC	140	140																										
	1	FY 99	A	298	298																										
	1	FY99	MC	153	153																										
	1	FY 00	A	610	610																										
	1	FY00	MC	77	77																										
	1	FY 01	A	808	0	808	67	67	67	67	67	67	67	67	68	68	68	68													
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	NAME / LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D +
1	Joint Venture RSC/LMC*				
	All Up Round Multiyear 1	1320	7080	12390	
	All Up Round Muliyear 2	1320	7080	12390	
	Command Launch Unit Multiyear 1	120	840	1470	
	Command Launch Unit Multiyear 2	120	960	1680	

MFR Number		ADMIN LEAD TIME Prior 1 Oct.	After 1 Oct.	MFR After 1 Oct.	TOTAL After 1 Oct.
1	INITIAL	11	3	22	25
	REORDER	1	1	22	23
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 2 / Other Missiles

P-1 Item Nomenclature: JAVELIN (AAWS-M) (ADV PROC) (CC0007)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0.0	0.0	0.0	0.0	0.0	15.7	16.1	8.2	0.0	0.0	0.0	40.0
Less PY Adv Proc						15.7	16.1	8.2				40.0
Plus CY Adv Proc					40.0							40.0
Net Proc (P-1)	0.0	0.0	0.0	0.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0	40.0
Initial Spares												
Total Proc Cost	0.0	0.0	0.0	0.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0	40.0
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: Javelin is a medium antitank system for infantry, scouts, and combat engineers. These forces must have the capability to defeat numerically superior armored forces. The Javelin, a replacement for the Dragon, is a medium range, manportable antitank system for use in all forms of maneuver operations. It can be delivered by individual paratrooper, door bundle, tracked/wheeled vehicles, rail, ship and air. This system has a high kill rate against all known armor threats at extended ranges under day/night, adverse weather and battlefield obscurant conditions. The system's soft launch permits firing from a fighting position or from an enclosure. The Javelin is hardened against countermeasures and does not require extensive training for effective employment.

JUSTIFICATION: The Fiscal Year 2000 advance procurement funds will provide economic order quantities for years two through four (FY 2001 through FY 2003) of the second multi-year contract. Advance Procurement will buy parts and materials in support of the All Up Round, the Command Launch Unit (CLU), the Basic Skills Trainer, the Field Tactical Trainer (FTT)-Instructor Station, and the FTT-Student Station.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 2 / Other Missiles

P-1 Item Nomenclature: MLRS ROCKET (C65400)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	480036	1908	624				684	1332	1614	1518	78774	566490
Gross Cost	3634.2	45.3	19.2	0.0	3.7	9.4	40.4	71.4	80.9	80.8	3095.0	7080.5
Less PY Adv Proc	449.8											449.8
Plus CY Adv Proc	449.8											449.8
Net Proc (P-1)	3634.2	45.3	19.2	0.0	3.7	9.4	40.4	71.4	80.9	80.8	3095.0	7080.5
Initial Spares												
Total Proc Cost	3634.2	45.3	19.2	0.0	3.7	9.4	40.4	71.4	80.9	80.8	3095.0	7080.5
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The Extended Range Multiple Launch Rocket System (ER-MLRS), which began production in FY96, includes a tube-launched, spin-stabilized, free-flight rocket. The major assemblies of the rocket are a fuzed warhead, a rocket motor, four fins, a fin-opening/restraint device, and four sabots. The rocket is packaged in a six-rocket pod and can be fired one at a time or in ripples of two to six. The ER-MLRS rocket will enhance the capability of the existing MLRS rocket by providing improvements in range, accuracy and effectiveness, and maneuver force safety (improved submunitions with self-destruct fuzes). Starting in FY 02, the Guided Multiple Launch Rocket System (GMLRS) will integrate a guidance and control package into the ER-MLRS rocket which will result in reduced mission time, enhanced accuracy and increased survivability of the system.

JUSTIFICATION: The objective system provides counterfire and suppression of enemy air defenses, light materiel, and personnel targets. The increased range gives positioning flexibility and improves lateral ranging of targets on tomorrow's wider battlefronts. Operation Desert Storm identified the need for increased range to defeat long-range targets. The ER-MLRS accomplishes this mission. The GMLRS will provide greater range and significantly enhanced accuracy. The GMLRS will have a significantly decreased logistics burden because fewer rockets will be required to defeat a target. FY01 funding provides program support, production engineering support associated with deliveries of rockets in prior years, stockpile reliability and industrial maintenance to support rocket warm-line production.

Exhibit P-5, Weapon Missiles Cost Analysis	Appropriation/ Budget Activity/Serial No: MISSILE PROCUREMENT / 2 / Other Missiles	P-1 Line Item Nomenclature: MLRS EXTENDED RANGE ROCKET (C65402)	Weapon System Type:	Date: February 2000

Cost Elements	ID CD	FY 98			FY 99			FY 00			FY 01		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$OOO	Each	$	$OOO	Each	$	$OOO	Each	$	$OOO	Each	$
FLY-AWAY COSTS													
HARDWARE													
Tactical/Practice Round (Less GFE)													
Submunition													
Engineering Services								262			266		
Industrial Maintenance Contracts											5805		
Production Engineering								1522			1547		
OGA								473			482		
Engineering Change Orders													
Fielding								25			21		
Facilitization													
SUBTOTAL								**2282**			**8121**		
PROCUREMENT SUPPORT													
Project Management Admin								1031			1048		
Test & Evaluation								434			244		
Service Support Contract													
SUBTOTAL								**1465**			**1292**		
Gross P-1 End Cost								**3747**			**9413**		
Less: Prior Year Adv Proc													
Net P-1 Full Funding Cost								**3747**			**9413**		
Plus: P-1 CY Adv Proc													
Other Non P-1 Costs													
Initial Spares													
Mods													
TOTAL								**3747**			**9413**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 2 / Other Missiles

Weapon System Type:

P-1 Line Item Nomenclature: MLRS EXTENDED RANGE ROCKET (C65402)

WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Tactical/Practice Round (Less GFE)										
FY 98	Lockheed Martin M.&F.C. Sys Dallas, TX	SS/FFP	PEO-Tactical Missiles/AMCOM	Jun-98	May-00	VAR	VAR	Yes		

REMARKS:

FY 00 / 01 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: MLRS EXTENDED RANGE ROCKET (C65402)

Date: February 2000

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP. PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 98 / Calendar Year 98												Fiscal Year 99 / Calendar Year 99									LATER
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Tactical/Practice Round (Less GFE)	1	94 & Pr	A	477396	477396																										
	1	94 & Pr	FMS	26244	26244																										
ER-MLRS	2	97 & Pr	A	3546	0	3546						90	162	162	240	240	204	204	204	204	204	204	114					96	204	204	810
	2	FY 97	FMS	1338	0	1338						6	216	108									84	204	204	204	204	108			
	2	FY 98	A	624	0	624									A																624
	2	FY 98	FMS	672	0	672																									672
	2	FY 98	FRA	162	0	162																									162
	2	FY 99	FMS	2616	0	2616																									2616
GMLRS	3	FY 02	A	684	0	684																									684
	3	FY 03	A	1332	0	1332																									1332
	3	FY 04	A	1614	0	1614																									1614
	3	FY 05	A	1518	0	1518																									1518
TOTAL				517746	503640	14106						96	378	270	240	240	204	204	204	204	204	204	198	204	204	204	204	204	204	204	10032
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	NAME / LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D +
1	Lockheed Martin Missile&Fire Control Sys, Dallas, TX	500			12
2	Lockheed Martin Missile&Fire Control Sys, Dallas, TX	500			12
3	Lockheed Martin Missile&Fire Control Sys, Dallas, TX	500			12

MFR Number		ADMIN LEAD TIME Prior 1 Oct.	After 1 Oct.	MFR After 1 Oct.	TOTAL After 1 Oct.
1	INITIAL	8	2	16	18
	REORDER	0	2	16	18
2	INITIAL	8	2	16	18
	REORDER	0	2	16	18
3	INITIAL	8	2	16	18
	REORDER	0	2	16	18
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				

REMARKS

No Tactical Rockets procured in FY 95.

Reduced Range Practice Rockets delivered 1Q98/2Q98.

FY96 & 97 quantities were procured on the FY98 contract.

FY 00 / 01 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: MLRS EXTENDED RANGE ROCKET (C65402)

Date: February 2000

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP. PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 00 / Calendar Year 00 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Fiscal Year 01 / Calendar Year 01 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	LATER
Tactical/Practice Round (Less GFE)	1	94 & Pr	A	477396	477396																										
	1	94 & Pr	FMS	26244	26244																										
ER-MLRS	2	97 & Pr	A	3546	2736	810	198	204				108	204	96																	
	2	FY 97	FMS	1338	1338																										
	2	FY 98	A	624	0	624								108	204	204	108														
	2	FY 98	FMS	672	0	672			168	204	204	96																			
	2	FY 98	FRA	162	0	162											96	66													
	2	FY 99	FMS	2616	0	2616												138	204	204	204	204	204	204	204	204	204	204	204	234	
GMLRS	3	FY 02	A	684	0	684																									684
	3	FY 03	A	1332	0	1332																									1332
	3	FY 04	A	1614	0	1614																									1614
	3	FY 05	A	1518	0	1518																									1518
TOTAL				517746	507714	10032	198	204	168	204	204	204	204	204	204	204	204	204	204	204	204	204	204	204	204	204	204	204	204	234	5148
					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	

MFR	NAME / LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D +
1	Lockheed Martin Missile&Fire Control Sys., Dallas, TX	500			12
2	Lockheed Martin Missle&Fire Control Sys., Dallas, TX	500			12
3	Lockheed Martin Missile&Fire Control Sys., Dallas, TX	500			12

MFR Number		ADMIN LEAD TIME Prior 1 Oct.	After 1 Oct.	MFR After 1 Oct.	TOTAL After 1 Oct.
1	INITIAL	8	2	16	18
	REORDER	0	2	16	18
2	INITIAL	8	2	16	18
	REORDER	0	2	16	18
3	INITIAL	8	2	16	18
	REORDER	0	2	16	18
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				

REMARKS

No Tactical Rockets procured in FY 95.

Reduced Range Practice Rockets delivered 1Q98/2Q98.

FY96 & 97 quantities were procured on the FY98 contract.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 2 / Other Missiles

P-1 Item Nomenclature: MLRS LAUNCHER (C65900)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	754		21	24	39	66	76	95	114	81	341	1611
Gross Cost	1983.0	105.1	123.7	121.1	137.5	188.7	175.6	181.4	182.8	160.1	666.2	4025.4
Less PY Adv Proc	56.9							24.6	22.6			104.1
Plus CY Adv Proc	56.9						28.1	19.1				104.1
Net Proc (P-1)	1983.0	105.1	123.7	121.1	137.5	188.7	203.7	175.9	160.3	160.1	666.2	4025.4
Initial Spares	158.4		0.3	4.8	6.2	6.5	12.2	13.1	13.5	9.3	72.1	296.3
Total Proc Cost	2141.4	105.1	124.0	125.9	143.7	195.1	215.9	188.9	173.8	169.4	738.3	4321.7
Flyaway U/C		2.3	3.6	3.1	2.2	1.8	1.8	1.8	1.5	1.5	1.0	
Wpn Sys Proc U/C		2.6	5.9	5.0	3.5	2.9	2.7	1.9	1.4	2.0	2.0	

DESCRIPTION: The Multiple Launch Rocket System (MLRS) provides a high volume of fire power in a very short timeframe. Operationally, the system is designed for the mobility, flexibility, and range requirements of the modern battlefield. Mounted on a derivative of the Bradley Fighting Vehicle (BFV), the 12-round launcher/loader requires a crew of three persons to conduct launching missions. The range, using the Extended Range rocket, is 45 kilometers. In FY98 and out, procurement of an Improved Fire Control System (IFCS) and an Improved Launcher Mechanical System (ILMS) becomes part of the M270A1 upgrade. The IFCS is a modification to the current Fire Control System which provides the interface with the Fire Direction Center, the Munitions Controls and the MLRS Launcher. The IFCS upgrades the system's electronics, providing increased processing capability, an embedded global positioning system for future munitions and improved fault isolation for ease of launcher maintenance. The ILMS allows faster target engagement on time-sensitive, short-dwell-time targets and greatly reduces time on the firing point and reload operations in order to improve the survivability of the crew and the launcher. FY97 funds provided for remanufactured launchers. Quantities for FY98 and beyond are for M270A1 upgrades. The M270A1 upgrades are needed to fire the Block IA Army Tactical Missile System (TACMS) missile. FY 98-03 funding also provides for rebuilding launchers for deployment to MLRS Heavy Divisions.

JUSTIFICATION: FY 01 funds provide for 66 remanufactured launchers. The objectives of the MLRS are counterfire and suppression of enemy air defenses, light materiel, and personnel targets. The system is designed for adaptation to other warheads such as scatterable mines, terminally guided munitions, and other smart munitions. MLRS is the Army's rocket launch platform for the next decade. The IFCS provides faster response times for high priority targets, enhances survivability, supports attack operations, mitigates electronic hardware obsolescence and reduces operating and support costs. The ILMS decreases stow-to-aim point timeline, enhances effectiveness in engaging and supporting the force, and increases MLRS platform survivability.

Exhibit P-5, Weapon Missiles Cost Analysis	Appropriation/ Budget Activity/Serial No: MISSILE PROCUREMENT / 2 / Other Missiles	P-1 Line Item Nomenclature: MLRS LAUNCHER (C65900)	Weapon System Type:	Date: February 2000

Cost Elements	ID CD	FY 98			FY 99			FY 00			FY 01		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$OOO	Each	$	$OOO	Each	$	$OOO	Each	$	$OOO	Each	$
GROUND EQUIPMENT HARDWARE													
Launcher					56871	24	2369625	68180	39	1748205	96202	66	1457606
Remanufacture					2214			16816			23757		
Launcher Pod/Container (LP/C) Trainer					464	48	9667	847	78	10859	1456	132	11030
2x9/3x6 Launcher					15888			1800			442		
Peculiar Support Equipment					9654			9229			22458		
Restructure								6000			10400		
Engineering Services					17937			14456			13702		
Production Engineering					8880			9760			8408		
OGA					2940			3870			4050		
Engineering Change Orders													
Fielding					400			100			1260		
Facilitization													
SUBTOTAL					**115248**			**131058**			**182135**		
PROCUREMENT SUPPORT													
Project Management Admin					5580			5832			5927		
Service Support Contract					306			617			627		
SUBTOTAL					**5886**			**6449**			**6554**		
Gross P-1 End Cost					**121134**			**137507**			**188689**		
Less: Prior Year Adv Proc													
Net P-1 Full Funding Cost					**121134**			**137507**			**188689**		
Plus: P-1 CY Adv Proc													
Other Non P-1 Costs					27			477			838		
Initial Spares					4792			6196			6456		
Mods					2767			6596			16499		
TOTAL					**128720**			**150776**			**212482**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 2 / Other Missiles

Weapon System Type:

P-1 Line Item Nomenclature: MLRS LAUNCHER (C65900)

WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Launcher M270A1										
FY 98	Lockheed Martin M.& F. C.Sys, Dallas, TX	SS/FFP	PEO-Tactical Missiles/AMCOM	Jul-98	Jun-00	21	2911524	Yes		
FY 99	Lockheed Martin M.& F. C.Sys, Dallas, TX	SS/FFP	PEO-Tactical Missiles/AMCOM	Nov-98	Dec-00	24	2369625	Yes		
FY 00	Lockheed Martin M.& F. C.Sys, Dallas, TX	SS/FFP	PEO-Tactical Missiles/AMCOM	Mar-00	Dec-01	39	1748205	Yes		
FY 01	Lockheed Martin M.& F. C.Sys, Dallas, TX	SS/FFP	PEO-Tactical Missiles/AMCOM	Mar-01	Dec-02	66	1457606	Yes		

REMARKS:

FY 00 / 01 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: MLRS LAUNCHER (C65900)

Date: February 2000

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP. PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 98 / Calendar Year 98 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Fiscal Year 99 / Calendar Year 99 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	LATER
Launcher M270	1	95 & Pr	A	772	755	17								3	2		1								1	2	2	3	3		
	1	95 & Pr	NG	85	85																										
	1	95 & Pr	FMS	108	96	12	4	1		4	3																				
	1	FY 96	FMS	20	6	14	6	5								3															
	1	FY 97	FMS	29	0	29							3	3			1	3	3	3	3	5	1	2	2						
	1	FY 99	FMS	22	0	22																									22
Launcher Remanufacture	2	FY 96	A	29	24	5	3	2																							
	2	FY 97	A	35	0	35		2	3	3	3	3	3	3	3	3	3	3	3												
Launcher M270A1	3	FY 98	A	21	0	21										A															21
	3	FY 99	A	24	0	24														A											24
	3	FY 00	A	39	0	39																									39
	3	FY 01	A	66	0	66																									66
	3	FY 02	A	76	0	76																									76
	3	FY 03	A	74	0	74																									74
	3	FY 04	A	94	0	94																									94
	3	FY 05	A	81	0	81																									81
TOTAL				1575	966	609	13	10	3	7	6	3	6	9	5	6	5	6	6	3	3	5	1	2	3	2	2	3	3		497
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	NAME / LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D +
1	Lockheed Martin M.& F. C.Sys, Dallas, TX	2	4	10	
2	Lockheed Martin M.& F. C.Sys, Dallas, TX	2	6	12	
3	Lockheed Martin M.& F. C.Sys, Dallas, TX	2	8	12	

MFR Number		ADMIN LEAD TIME Prior 1 Oct.	After 1 Oct.	MFR After 1 Oct.	TOTAL After 1 Oct.
1	INITIAL	8	2		2
	REORDER	0	2		2
2	INITIAL	7	2		2
	REORDER	0	2		2
3	INITIAL	8	2	24	26
	REORDER	0	2	24	26
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				

REMARKS

Phase 2 commercial sale deliveries to Japan completed in FY99.

FY 00 / 01 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: MLRS LAUNCHER (C65900)

Date: February 2000

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP. PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 00 / Calendar Year 00 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Fiscal Year 01 / Calendar Year 01 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	LATER
Launcher M270	1	95 & Pr	A	772	772																										
	1	95 & Pr	NG	85	85																										
	1	95 & Pr	FMS	108	108																										
	1	FY 96	FMS	20	20																										
	1	FY 97	FMS	29	29																										
	1	FY 99	FMS	22	0	22		1	3	3	2	2	2	2	2	1	2	2													
Launcher Remanufacture	2	FY 96	A	29	29																										
	2	FY 97	A	35	35																										
Launcher M270A1	3	FY 98	A	21	0	21									1	2	3	3	3	3	3	2	1								
	3	FY 99	A	24	0	24															1	2	2	2	2	2	2	2	3	2	4
	3	FY 00	A	39	0	39						A																			39
	3	FY 01	A	66	0	66																		A							66
	3	FY 02	A	76	0	76																									76
	3	FY 03	A	74	0	74																									74
	3	FY 04	A	94	0	94																									94
	3	FY 05	A	81	0	81																									81
TOTAL				1575	1078	497		1	3	3	2	2	2	2	3	3	5	5	3	3	4	4	3	2	2	2	2	2	3	2	434

MFR	NAME / LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D +
1	Lockheed Martin M.& F. C.Sys, Dallas, TX	2	4	10	
2	Lockheed Martin M.& F. C.Sys, Dallas, TX	2	6	12	
3	Lockheed Martin M.& F. C.Sys, Dallas, TX	2	8	12	

MFR Number		ADMIN LEAD TIME Prior 1 Oct.	After 1 Oct.	MFR After 1 Oct.	TOTAL After 1 Oct.	REMARKS
1	INITIAL	8	2		2	
	REORDER	0	2		2	
2	INITIAL	7	2		2	
	REORDER	0	2		2	
3	INITIAL	8	2	24	26	
	REORDER	0	2	24	26	
	INITIAL					
	REORDER					
	INITIAL					
	REORDER					

FY 00 / 01 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: MLRS LAUNCHER (C65900)

Date: February 2000

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP. PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 02 / Calendar Year 02 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Fiscal Year 03 / Calendar Year 03 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	LATER
Launcher M270	1	95 & Pr	A	772	772																										
	1	95 & Pr	NG	85	85																										
	1	95 & Pr	FMS	108	108																										
	1	FY 96	FMS	20	20																										
	1	FY 97	FMS	29	29																										
	1	FY 99	FMS	22	22																										
Launcher Remanufacture	2	FY 96	A	29	29																										
	2	FY 97	A	35	35																										
Launcher M270A1	3	FY 98	A	21	21																										
	3	FY 99	A	24	20	4	2	2																							
	3	FY 00	A	39	0	39			3	3	3	3	3	3	3	3	3	4	4	4											
	3	FY 01	A	66	0	66						A									5	5	5	5	5	5	5	6	6	6	13
	3	FY 02	A	76	0	76																									76
	3	FY 03	A	74	0	74																									74
	3	FY 04	A	94	0	94																									94
	3	FY 05	A	81	0	81																									81
TOTAL				1575	1141	434	2	2	3	3	3	3	3	3	3	3	3	4	4	4	5	5	5	5	5	5	5	6	6	6	338
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	NAME / LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D +
1	Lockheed Martin M.& F. C.Sys, Dallas, TX	2	4	10	
2	Lockheed Martin M.& F. C.Sys, Dallas, TX	2	6	12	
3	Lockheed Martin M.& F. C.Sys, Dallas, TX	2	8	12	

MFR Number		ADMIN LEAD TIME Prior 1 Oct.	After 1 Oct.	MFR After 1 Oct.	TOTAL After 1 Oct.	REMARKS
1	INITIAL	8	2		2	
	REORDER	0	2		2	
2	INITIAL	7	2		2	
	REORDER	0	2		2	
3	INITIAL	8	2	24	26	
	REORDER	0	2	24	26	
	INITIAL					
	REORDER					
	INITIAL					
	REORDER					

FY 00 / 01 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: MLRS LAUNCHER (C65900)

Date: February 2000

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP. PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 04 / Calendar Year 04 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Fiscal Year 05 / Calendar Year 05 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	LATER
Launcher M270	1	95 & Pr	A	772	772																										
	1	95 & Pr	NG	85	85																										
	1	95 & Pr	FMS	108	108																										
	1	FY 96	FMS	20	20																										
	1	FY 97	FMS	29	29																										
	1	FY 98	FMS	22	22																										
Launcher Remanufacture	2	FY 96	A	29	29																										
	2	FY 97	A	35	35																										
Launcher M270A1	3	FY 98	A	21	21																										
	3	FY 99	A	24	24																										
	3	FY 00	A	39	39																										
	3	FY 01	A	66	53	13	6	7																							
	3	FY 02	A	76	0	76			6	6	6	6	6	6	6	7	7	7	7	6											
	3	FY 03	A	74	0	74															8	8	8	8	7	7	7	7	7	7	
	3	FY 04	A	94	0	94																									94
	3	FY 05	A	81	0	81																									81
TOTAL				1575	1237	338	6	7	6	6	6	6	6	6	6	7	7	7	7	6	8	8	8	8	7	7	7	7	7	7	175
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	NAME / LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D +
1	Lockheed Martin M.& F. C.Sys, Dallas, TX	2	4	10	
2	Lockheed Martin M.& F. C.Sys, Dallas, TX	2	6	12	
3	Lockheed Martin M.& F. C.Sys, Dallas, TX	2	8	12	

MFR Number		ADMIN LEAD TIME Prior 1 Oct.	After 1 Oct.	MFR After 1 Oct.	TOTAL After 1 Oct.	REMARKS
1	INITIAL	8	2		2	
	REORDER	0	2		2	
2	INITIAL	7	2		2	
	REORDER	0	2		2	
3	INITIAL	8	2	24	26	
	REORDER	0	2	24	26	
	INITIAL					
	REORDER					
	INITIAL					
	REORDER					

Exhibit P-40, Budget Item Justification Sheet

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 2 / Other Missiles

P-1 Item Nomenclature: ARMY TACTICAL MSL SYS (ATACMS) - SYS SUM (C98510)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	1717	167	109	96	110							2199
Gross Cost	1143.5	127.2	89.8	90.6	90.8	15.0	9.0	0.0	0.0	0.0	0.0	1565.9
Less PY Adv Proc	75.1											75.1
Plus CY Adv Proc	75.1											75.1
Net Proc (P-1)	1143.5	127.2	89.8	90.6	90.8	15.0	9.0	0.0	0.0	0.0	0.0	1565.9
Initial Spares	2.3	1.0	0.9									4.2
Total Proc Cost	1145.8	128.1	90.8	90.6	90.8	15.0	9.0	0.0	0.0	0.0	0.0	1570.1
Flyaway U/C	0.6	0.8	0.8	0.9	0.9							
Wpn Sys Proc U/C	0.9	0.8	.8	.9	.8							

DESCRIPTION: The Army Tactical Missile System (TACMS) is a ground-launched missile system consisting of a surface-to-surface guided missile with an anti-personnel, anti-materiel (APAM) warhead. The Army TACMS Block IA integrates global positioning system (GPS) components and increases the range of the Block I missile. The inherent GPS accuracies will be achievable independent of range. Army TACMS missiles are fired from the Multiple Launch Rocket System (MLRS) modified M270 launcher and are being deployed within the ammunition loads of corps MLRS battalions and/or division artillery MLRS batteries. Army TACMS includes the Guided Missile and Launcher Assembly, the Test Set, the Training Set, the Trainer, the Test Device, the Modified M270 Launcher and the Army TACMS Missile Facilities (ATMF).

JUSTIFICATION: FY 01 will fund the final production for the Block 1 A missile. The Army TACMS is air-transportable and provides a deep-fire missile system that operates in nearly all weather conditions, day or night. It is used to attack tactical surface-to-surface missile sites, air defense missile sites, logistics elements and command/control/communications complexes. The Block IA missile will destroy high value targets at ranges approximately twice that of the current Block I. The Block IA will be especially suited for destroying enemy surface-to-surface missile system launchers.

Exhibit P-5, Weapon Missiles Cost Analysis	Appropriation/ Budget Activity/Serial No: MISSILE PROCUREMENT / 2 / Other Missiles	P-1 Line Item Nomenclature: ARMY TACTICAL MSL SYS (ATACMS) - SYS SUM (C98510)	Weapon System Type:	Date: February 2000

Cost Elements	ID CD	FY 98			FY 99			FY 00			FY 01		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$OOO	Each	$OOO	$OOO	Each	$OOO	$OOO	Each	$OOO	$OOO	Each	$OOO
Missile Hardware- Recurring													
Prime Contract					64992	96	677	69774	110	634			
GFE					55			100					
Flight Kits					1020								
Engineering Services					8638			8275			1100		
Engineering Change Orders (ECOs)					919			500					
Fielding					100			128			100		
Subtotal Missile Hardware					75724			78777			1200		
Procurement Support													
Project Management					3521			2758			2325		
Production Engineering Support					7150			6101			8419		
Test and Evaluation					3376			2292			2150		
Subtotal Procurement Support					14047			11151			12894		
TOTAL MISSILE FLYAWAY					89771			89928			14094		
Command & Launch Integration													
Command & Launch Integration Spt					815			849			950		
Subtotal C&L Integration					815			849			950		
Support Cost													
Missile Test Device													
ATMF Test and Support Equipment													
Subtotal Support Cost													
Gross P-1 End Cost					**90586**			**90777**			**15044**		
Less: Prior Year Adv Proc													
Net P-1 Full Funding Cost					**90586**			**90777**			**15044**		
Plus: P-1 CY Adv Proc													
Other Non P-1 Costs													
Initial Spares													
Mods													
TOTAL					**90586**			**90777**			**15044**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 2 / Other Missiles

Weapon System Type:

P-1 Line Item Nomenclature: ARMY TACTICAL MSL SYS (ATACMS) - SYS SUM (C98510)

WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $OOO	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Army TACMS Block IA Missile										
FY 99	Lockheed Martin Missiles and Fire Control - Dallas	SS/FP	AMCOM	Dec-98	Feb-00	96	677	Yes		Sep 96
FY 00	Lockheed Martin Missiles and Fire Control - Dallas	SS/FP	AMCOM	Nov-99	Mar-01	110	634	Yes		Sep 96

REMARKS:

FY 00 / 01 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: ARMY TACTICAL MSL SYS (ATACMS) - SYS SUM (C98510)

Date: February 2000

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP. PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 98 / Calendar Year 98 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Fiscal Year 99 / Calendar Year 99 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	LATER
Army TACMS Block I Missile		96 & Pr	A	1647	1647																										
	1	FY 94	N	3	3																										
	1	FY 96	FMS	72	1	71	6	11	10	11	11	11	11																		
	1	FY 97	FMS	41		41									6	7	7	7	7	7											
	1	FY 98	FMS	141		141												8	8	8	8	12	12	12	9	2			4	4	54
	1	FY 99	FMS	30																											30
Army TACMS Block IA Missile	1	FY 96	A	70	14	56	8	8	8	8	8	8	8																		
	1	FY 97	A	167		167								8	8	8	8	8	8	8	8	8	8	8	9	7	10	7	11	13	22
	1	FY 98	A	109		109								A												15	11	17	15	17	34
	1	FY 99	A	96		96															A										96
	1	FY 00	A	110		110																									110

MFR	NAME / LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D +
1	Lockheed Martin Missiles and Fire Control - Dallas	10	38	48	15

MFR Number		ADMIN LEAD TIME Prior 1 Oct.	After 1 Oct.	MFR After 1 Oct.	TOTAL After 1 Oct.
	INITIAL		1	16	17
	REORDER		1	16	17
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				
	INITIAL				
	REORDER				

REMARKS

FY 98 reflects accelerated production schedule (May - Dec 99).

FY 00 / 01 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: ARMY TACTICAL MSL SYS (ATACMS) - SYS SUM (C98510)

Date: February 2000

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP. PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 00 / Calendar Year 00 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Fiscal Year 01 / Calendar Year 01 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	LATER
Army TACMS Block I Missile		96 & Pr	A	1647	1647																										
	1	FY 94	N	3	3																										
	1	FY 96	FMS	72	72																										
	1	FY 97	FMS	41	41																										
	1	FY 98	FMS	141	87	54	3		2	11	9	6	6	6	6	5															
	1	FY 99	FMS	30												1	6	5	5	6	7										
Army TACMS Block IA Missile	1	FY 96	A	70	70																										
	1	FY 97	A	167	145	22	9	7	6																						
	1	FY 98	A	109	75	34	12	13	9																						
	1	FY 99	A	96		96					5	8	8	7	7	7	7	8	8	8	7	7	9								
	1	FY 00	A	110		110		A																11	11	11	11	11	11	11	33
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	NAME / LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D +	MFR Number		ADMIN LEAD TIME Prior 1 Oct.	After 1 Oct.	MFR After 1 Oct.	TOTAL After 1 Oct.
1	Lockheed Martin Missiles and Fire Control - Dallas	10	38	48	15		INITIAL		1	16	17
							REORDER		1	16	17
							INITIAL				
							REORDER				
							INITIAL				
							REORDER				
							INITIAL				
							REORDER				
							INITIAL				
							REORDER				

REMARKS

FY 98 reflects accelerated production schedule (May - Dec 99).

FY 00 / 01 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: ARMY TACTICAL MSL SYS (ATACMS) - SYS SUM (C98510)

Date: February 2000

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP. PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 02 / Calendar Year 02 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Fiscal Year 03 / Calendar Year 03 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	LATER
Army TACMS Block I Missile		96 & Pr	A	1647	1647																										
	1	FY 94	N	3	3																										
	1	FY 96	FMS	72	72																										
	1	FY 97	FMS	41	41																										
	1	FY 98	FMS	141	141																										
	1	FY 99	FMS	30	30																										
Army TACMS Block IA Missile	1	FY 96	A	70	70																										
	1	FY 97	A	167	167																										
	1	FY 98	A	109	109																										
	1	FY 99	A	96	96																										
	1	FY 00	A	110	77	33	11	11	11																						

MFR	NAME / LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D +	MFR Number		ADMIN LEAD TIME Prior 1 Oct.	After 1 Oct.	MFR After 1 Oct.	TOTAL After 1 Oct.
1	Lockheed Martin Missiles and Fire Control - Dallas	10	38	48	15		INITIAL		1	16	17
							REORDER		1	16	17
							INITIAL				
							REORDER				
							INITIAL				
							REORDER				
							INITIAL				
							REORDER				
							INITIAL				
							REORDER				

REMARKS

FY 98 reflects accelerated production schedule (May - Dec 99).

Exhibit P-40, Budget Item Justification Sheet

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 2 / Other Missiles

P-1 Item Nomenclature: ATACMS BLK II SYS SUMMARY (CA6101)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty				24	48	55	67	104	94	91	723	1206
Gross Cost	0.0	0.0	0.0	149.7	228.1	230.3	261.2	375.7	315.9	309.3	2300.3	4170.5
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	0.0	149.7	228.1	230.3	261.2	375.7	315.9	309.3	2300.3	4170.5
Initial Spares						1.4	1.4					2.8
Total Proc Cost	0.0	0.0	0.0	149.7	228.1	231.7	262.5	375.7	315.9	309.3	2300.3	4173.2
Flyaway U/C*				6.1	4.7	4.1	3.9	3.6	3.4	3.4	3.2	3.4
Wpn Sys Proc U/C*				6.2	4.8	4.2	3.9	3.6	3.4	3.4	3.2	3.5

DESCRIPTION: The Army Tactical Missile System Block II (ATACMS BLK II), a version of the currently fielded and combat-proven Army TACMS Block I missile is a ground-launched, solid propellant, inertially guided (Global Positioning System aided) missile system with 13 BATs or P3I BATs as its payload. It is launched from the Multiple Launch Rocket System (MLRS) M270A1 launcher and will be deployed within the ammunition loads of corps MLRS battalions and/or division artillery MLRS batteries. The BAT submunition employs acoustic and infrared (IR) sensors to detect, acquire and engage moving armored vehicles. The P3I BAT will add a millimeter wave radar and IR enhancements to increase Block II system capabilities in the presence of countermeasures and expand the target set to include stationary (warm and cold) armored vehicles.

JUSTIFICATION: The primary mission of the ATACMS BLK II is to delay, disrupt, neutralize, or destroy armored combat vehicles/organization. ATACMS BLK II carries BAT and P3I BAT submunitions deep into enemy territory where these submunitions can automatically track and destroy targets. FY99 procured 24 ATACMS Block II missiles to support low rate initial production (LRIP). FY 00 procured 48 ATACMS BLK II missiles to support LRIP II. The FY01 funding will procure 55 ATACMS BLK II missiles for a Full Rate Production Award.

*Note: Unit cost reflects total BLK II with BAT system dollars.

Exhibit P-5, Weapon Missiles Cost Analysis	Appropriation/ Budget Activity/Serial No: MISSILE PROCUREMENT / 2 / Other Missiles	P-1 Line Item Nomenclature: ATACMS BLK II SYS SUMMARY CA6101	Weapon System Type:	Date: February 2000

Cost Elements	ID CD	FY 98			FY 99			FY 00			FY 01		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$OOO	Each	$OOO	$OOO	Each	$OOO	$OOO	Each	$OOO	$OOO	Each	$OOO
Missile Hardware- Recurring													
Prime Contract (BLK II Missile)					46536	24	1939	76752	48	1599	77165	55	1403
Prime Contract (BAT Submunition)					87552	304	288	127890	609	210	115596	741	156
Flight Kits								1200			1590		
Engineering Services					2300			4900			9813		
Engineering Change Orders (ECOs)													
Fielding					360			103			100		
Subtotal Missile Hardware					136748			210845			204264		
Procurement Support													
Project Management					4218			4033			5998		
Production Engineering Support					3741			6581			9990		
Test and Evaluation					1320			5199			6553		
Subtotal Procurement Support					9279			15813			22541		
TOTAL MISSILE FLYAWAY					146027			226658			226805		
Command & Launch Integration													
Command & Launch Integration Spt								910			929		
Subtotal C&L Integration								910			929		
Support Cost													
Missile Test Device and Trainer					1080								
Army Tac Msl Fac Test & Spt Equipment					2568			483			2600		
Subtotal Support Cost					3648			483			2600		
Gross P-1 End Cost					**149675**			**228051**			**230334**		
Less: Prior Year Adv Proc													
Net P-1 Full Funding Cost					**149675**			**228051**			**230334**		
Plus: P-1 CY Adv Proc													
Other Non P-1 Costs													
Initial Spares											1372		
Mods													
TOTAL					**149675**			**228051**			**231706**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 2 / Other Missiles

Weapon System Type:

P-1 Line Item Nomenclature: ATACMS BLK II SYS SUMMARY CA6101

WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $OOO	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
ATACMS BLK II/BAT										
FY 99	Lockheed Martin Missiles and Fire Control - Dallas	SS/FPI	AMCOM	Jun-99	Mar-01	24	6236	Yes		Jun 98
FY 00	Lockheed Martin Missiles and Fire Control - Dallas	SS/FPI	AMCOM	Dec-99	Jan-02	48	4751	Yes		Aug 99
FY 01	Lockheed Martin Missiles and Fire Control - Dallas	SS/FFP	AMCOM	May-01	Oct-02	55	4213	Yes		Jun 00
FY 02	Lockheed Martin Missiles and Fire Control - Dallas	SS/FFP	AMCOM	Dec-01	Oct-03	67	3918	Yes		Jun 00
FY 03	Lockheed Martin Missiles and Fire Control - Dallas	SS/FFP	AMCOM	Dec-02	Oct-04	104	3612			
FY 04	Lockheed Martin Missiles and Fire Control - Dallas	SS/FFP	AMCOM	Dec-03	Oct-05	94	3361			
FY 05	Lockheed Martin Missiles and Fire Control - Dallas	SS/FFP	AMCOM	Dec-04	Oct-06	91	3399			

REMARKS: The unit cost reflects total weapon system procurement dollars for both the BLK II and the BAT.

FY 00 / 01 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: ATACMS BLK II SYS SUMMARY CA6101

Date: February 2000

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP. PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 98 / Calendar Year 98												Fiscal Year 99 / Calendar Year 99									LATER
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
ATACMS BLK II	1	99	A	24		24																					A				24
ATACMS BLK II	1	00	A	48		48																									48
ATACMS BLK II	1	01	A	55		55																									55
ATACMS BLK II	1	02	A	67		67																									67
ATACMS BLK II	1	03	A	104		104																									104
ATACMS BLK II	1	04	A	94		94																									94
ATACMS BLK II	1	05	A	91		91																									91

MFR	NAME / LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D +
1	Lockheed Martin Missiles and Fire Control - Dallas	10	38	48	15

MFR Number		ADMIN LEAD TIME Prior 1 Oct.	After 1 Oct.	MFR After 1 Oct.	TOTAL After 1 Oct.	REMARKS
	INITIAL		5	16	21	
	REORDER					
	INITIAL					
	REORDER					
	INITIAL					
	REORDER					
	INITIAL					
	REORDER					
	INITIAL					
	REORDER					

FY 00 / 01 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: ATACMS BLK II SYS SUMMARY CA6101

Date: February 2000

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP. PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 00 / Calendar Year 00												Fiscal Year 01 / Calendar Year 01										LATER
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
ATACMS BLK II	1	99	A	24		24																		1	1	2	2	3	4	5	6
ATACMS BLK II	1	00	A	48		48			A																						48
ATACMS BLK II	1	01	A	55		55																				A					55
ATACMS BLK II	1	02	A	67		67																									67
ATACMS BLK II	1	03	A	104		104																									104
ATACMS BLK II	1	04	A	94		94																									94
ATACMS BLK II	1	05	A	91		91																									91

MFR	NAME / LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D +
1	Lockheed Martin Missiles and Fire Control - Dallas	10	38	48	15

MFR Number			ADMIN LEAD TIME Prior 1 Oct.	After 1 Oct.	MFR After 1 Oct.	TOTAL After 1 Oct.	REMARKS
	INITIAL			5	16	21	
	REORDER						
	INITIAL						
	REORDER						
	INITIAL						
	REORDER						
	INITIAL						
	REORDER						
	INITIAL						
	REORDER						

FY 00 / 01 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: ATACMS BLK II SYS SUMMARY CA6101

Date: February 2000

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP. PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 02 / Calendar Year 02 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Fiscal Year 03 / Calendar Year 03 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	LATER
ATACMS BLK II	1	99	A	24	18	6	2	2	2																						
ATACMS BLK II	1	00	A	48		48				2	3	4	4	5	5	6	6	7	6												
ATACMS BLK II	1	01	A	55		55													1	6	5	4	4	5	5	5	5	5	5	5	
ATACMS BLK II	1	02	A	67		67			A																						67
ATACMS BLK II	1	03	A	104		104															A										104
ATACMS BLK II	1	04	A	94		94																									94
ATACMS BLK II	1	05	A	91		91																									91

MFR	NAME / LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D +
1	Lockheed Martin Missiles and Fire Control - Dallas	10	38	48	15

MFR Number		ADMIN LEAD TIME Prior 1 Oct.	After 1 Oct.	MFR After 1 Oct.	TOTAL After 1 Oct.	REMARKS
	INITIAL		5	16	21	
	REORDER					
	INITIAL					
	REORDER					
	INITIAL					
	REORDER					
	INITIAL					
	REORDER					
	INITIAL					
	REORDER					

FY00 / 01 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: ATACMS BLK II SYS SUMMARY CA6101

Date: February 2000

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP. PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 04 / Calendar Year 04 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Fiscal Year 05 / Calendar Year 05 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	LATER
ATACMS BLK II	1	99	A	24	24																										
ATACMS BLK II	1	00	A	48	48																										
ATACMS BLK II	1	01	A	55	55																										
ATACMS BLK II	1	02	A	67		67	5	5	5	5	5	6	6	6	6	6	6	6													
ATACMS BLK II	1	03	A	104		104													8	8	8	8	9	9	9	9	9	9	9	9	
ATACMS BLK II	1	04	A	94		94			A																						94
ATACMS BLK II	1	05	A	91		91															A										91

MFR	NAME / LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D +
1	Lockheed Martin Missiles and Fire Control - Dallas	10	38	48	15

MFR Number		ADMIN LEAD TIME Prior 1 Oct.	After 1 Oct.	MFR After 1 Oct.	TOTAL After 1 Oct.	REMARKS
	INITIAL		5	16	21	
	REORDER					
	INITIAL					
	REORDER					
	INITIAL					
	REORDER					
	INITIAL					
	REORDER					
	INITIAL					
	REORDER					

FY 00 / 01 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature: ATACMS BLK II SYS SUMMARY CA6101

Date: February 2000

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP. PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 06 / Calendar Year 06 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Fiscal Year 07 / Calendar Year 07 OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	LATER
ATACMS BLK II	1	99	A	24	24																										
ATACMS BLK II	1	00	A	48	48																										
ATACMS BLK II	1	01	A	55	55																										
ATACMS BLK II	1	02	A	67	67																										
ATACMS BLK II	1	03	A	104	104																										
ATACMS BLK II	1	04	A	94		94	7	7	8	8	8	8	8	8	8	8	8	8													
ATACMS BLK II	1	05	A	91		91													7	7	7	7	7	8	8	8	8	8	8	8	
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	NAME / LOCATION	PRODUCTION RATES MIN.	1-8-5	MAX.	REACHED D +
1	Lockheed Martin Missiles and Fire Control - Dallas	10	38	48	15

MFR Number		ADMIN LEAD TIME Prior 1 Oct.	After 1 Oct.	MFR After 1 Oct.	TOTAL After 1 Oct.	REMARKS
	INITIAL		5	16	21	
	REORDER					
	INITIAL					
	REORDER					
	INITIAL					
	REORDER					
	INITIAL					
	REORDER					
	INITIAL					
	REORDER					

Exhibit P-40, Budget Item Justification Sheet

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 2 / Other Missiles

P-1 Item Nomenclature: MULTI PURPOSE INDV MUN (C09100)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	To Complete	Total Prog
Proc Qty							222	576	956	1767		3521
Gross Cost	0.0	0.0	0.0	0.0	0.0	0.0	23.8	23.0	47.3	47.2		141.4
Less PY Adv Proc							3.5					3.5
Plus CY Adv Proc						3.5						3.5
Net Proc (P-1)	0.0	0.0	0.0	0.0	0.0	3.5	20.3	23.0	47.3	47.2		141.4
Initial Spares												
Total Proc Cost	0.0	0.0	0.0	0.0	0.0	3.5	20.3	23.0	47.3	47.2		141.4
Flyaway U/C												
Wpn Sys Proc U/C												

Mission Description: Provides for the production of a lightweight, shoulder-fired, multiple purpose weapon. Provides the infantry with a fire and forget weapon for defeating enemy forces in buildings, bunkers, and lightly armored vehicles. The Multi-Purpose Individual Munition/Short Range Assault Weapon (MPIM/SRAW) is capable of being fired quickly from its carrying configuration and can be safely fired from an enclosure for the close battle. It is more versatile than the AT4 system because it can be fired from enclosures and defeat bunkers and various field fortifications. This system will have tremendously increased lethality over the AT4 and will be multiple target capable. System design will allow for growth, service life extension and technology insertion to support the U.S. Army mission of crisis response to regionally based threats. The Army and U.S. Marine Corps have signed a memorandum of agreement for a horizontal technology integration effort using the USMC SRAW flight module/launcher as the carrier for the MPIM warhead.

Justification: Production dollars in FY01 are required for tooling for rate production of the grenade safe and arm, tooling and test equipment for the auto pilot and flight motor, and long lead material primarily for the rocket motor.

Exhibit P-5, Weapon Missiles Cost Analysis	Appropriation/ Budget Activity/Serial No: MISSILE PROCUREMENT / 2 / Other Missiles	P-1 Line Item Nomenclature: MULTI PURPOSE INDV MUN (C09100)	Weapon System Type:	Date: February 2000

Cost Elements	ID CD	FY98			FY99			FY00			FY01		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
HARDWARE (ADV.PROCUREMENT)													
ROCKET MOTORS											900	222	
TOOLING AND TEST EQUIPMENT											2147	1	
MISC. MATERIAL											500	1	
TOTAL											**3547**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 2 / Other Missiles

P-1 Item Nomenclature: MULTI PURPOSE INDV MUN (ADV PROC) (C09100)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost												
Less PY Adv Proc							3.5					3.5
Plus CY Adv Proc						3.5						3.5
Net Proc (P-1)												
Initial Spares												
Total Proc Cost												
Flyaway U/C												
Wpn Sys Proc U/C												

MISSION DESCRIPTION: Provides for the production of a lightweight, shoulder fired, multiple purpose weapon. Provides the infantry with a fire and forget weapon system. The Multi Purpose Individual Munition/Short Range Assault Weapon(MPIM/SRAW) can be fired quickly and safely from an enclosure for the close battle. It is more versatile and has increased lethality over the AT4 and will be multiple target capable. Advance Procurement will buy parts and components in support of the warhead, rocket motors, grenade safe & arm, generator and rate sensors. Long Lead Items are critical to meeting program scheduled First Unit Equipped (FUE) for the 75th Ranger Regiment in the 4th qtr. FY02.

JUSTIFICATION: Advance Procurement dollars are required to purchase long lead items to support an Low Rate Initial Production (LRIP) start in 2QFY02. LRIP will culminate with an FUE in late 4QFY02.

Advance Procurement Requirements Analysis-Funding (P-10A)

First System Award Date:

First System Completion Date:

Date: February 2000

Appropriation / Budget Activity/Serial No:

P-1 Line Item Nomenclature / Weapon System:

($ in Millions)

	PLT (mos)	When Rqd (mos)	Pr Yrs	FY 95	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	To Comp	Total
End Item Quantity: 222														
Rocket Motors	12									0.9				.9
Tooling and Test Equipment	12									2.1				2.1
Misc Long Lead Material	12									0.5				.5
Total Advance Procurement										3.5				3.5

Description: Advance Procurement dollars are required to purchase long lead items to support an Low Rate Initial Production (LRIP) start in FY 02.

Advance Procurement Requirements Analysis-Budget Justification (P-10B)

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 2 / Other Missiles

P-1 Line Item Nomenclature / Weapon System: MULTI PURPOSE INDV MUN (ADV PROC) (C09100)

($ in Millions)

	PLT (mos)	Quantity Per Assembly	Unit Cost	2000 Qty	2000 Contract Forecast Date	2000 Total Cost Request	2001 Qty	2001 Contract Forecast Date	2001 Total Cost Request
End Item									
Rocket Motors	12	1					222	Nov 01	0.9
Tooling and Test Equipment	12	1					1	Nov 01	2.1
Misc Long Lead Material	12	1					1	Nov 01	0.5
Total Advance Procurement									3.5

Description: Single year procurement for Long Lead Item (LLI) will be used in FY 01 with follow on Low Rate Initial Production (LRIP) contract in FY 02.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 3 / Modification of Missles

P-1 Item Nomenclature: PATRIOT MODS (C50700)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	400.0	23.3	7.7	14.2	49.6	22.9	25.9	22.6	41.2	41.2	206.5	855.2
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	400.0	23.3	7.7	14.2	49.6	22.9	25.9	22.6	41.2	41.2	206.5	855.2
Initial Spares	44.5	5.2	2.7	4.9	3.6	2.6	0.7	1.5	3.9	3.9	25.3	98.9
Total Proc Cost	444.5	28.5	10.4	19.1	53.3	25.6	26.7	24.1	45.1	45.1	231.8	954.1
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The PATRIOT Weapon System Growth Program is in response to a Report of the Defense Science Board Task Force on PATRIOT Vulnerability (1978) (SECRET) and the Air Threat to Central Europe (1978-1988) ATCE-1988 (SECRET) dated 1 Aug 78, and was part of the Mid 1980 Army System Acquisition Review Council/Defense System Acquisition Review Council (ASARC/DSARC) process approving the initiation of PATRIOT production.

JUSTIFICATION: The FY01 funding is required to support the planned system Growth Program which will add hardware enhancements/improvements to the PATRIOT Weapon System. Detailed justification by modification kit follows which includes installation costs.

Exhibit P-40M Budget Item Justification Sheet

Date: February 2000

Appropriation / Budget Activity/Serial No.: MISSILE PROCUREMENT / 3 / Modification of Missles

P-1 Item Nomenclature: PATRIOT MODS (C50700)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

Description		Fiscal Years									
OSIP NO.	Classification	FY 98 & Prior	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TC	Total
RLCEU											
1-92-03-1233		2.8	8.7	14.6	12.6	14.7	0.0	0.0	0.0	0.0	53.4
Block VII (No P3a Set)											
1-88-03-1224		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Block VIII (RAM Mods)											
1-89-03-1230		4.4	5.5	6.4	5.6	6.2	3.0	3.6	0.0	0.0	34.7
Integrated Diagnostic Support System											
1-97-03-1244		6.1	0.0	4.7	2.1	0.0	0.0	0.0	0.0	0.0	12.9
RLCEU (LINK 16/JTIDS)											
1-97-03-1246		0.0	0.0	2.6	2.6	6.0	8.0	21.8	15.5	0.0	56.5
RAM MODS (No P3a Set)											
1-98-03-1249		0.0	0.0	0.0	0.0	0.0	11.6	15.8	25.7	0.0	53.1
Tactical Command System											
1-98-03-1251		0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	2.5
GEM Plus/Minus (No P3a Set)											
1-97-03-1245		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Service Life Extension Program											
1-00-03-1252		0.0	0.0	18.8	0.0	0.0	0.0	0.0	0.0	0.0	18.8
Totals		13.3	14.2	49.6	22.9	26.9	22.6	41.2	41.2	0.0	231.9

INDIVIDUAL MODIFICATION | Date February 2000

MODIFICATION TITLE: RLCEU 1-92-03-1233

MODELS OF SYSTEMS AFFECTED: Radar, ECS, CRG

DESCRIPTION / JUSTIFICATION:

The Remote Launch/Communication Enhancement Upgrade (RLCEU) effort focuses on improving communications at the "below" battalion level through the introduction of new switching equipment and a new communications processor at the battery level in conjunction with a conversion to Bank IV UHF throughout the battalion. Additionally, the project will develop and field a remote launch capability permitting emplacement of a remote launcher farm in excess of 30 Km from the parent Engagement Control Station (ECS). This project is required to meet PAC-3 requirements for increased battlespace, lethality and rate of fire; additionally Operational Requirement Document (ORD) requirements for interoperability and communications are satisfied by this effort.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

	Planned	Accomplished
Preliminary Design Review	2QFY96	3QFY96
Critical Design Review (CDR)	4QFY96	4QFY96
Configuration Development Test & Evaluation (CDTE)	4QFY99	
Force Development Test Experimentation (FDTE)	1QFY00	
Limited User Testing (LUT)	2QFY00	

Installation Schedule:

	Pr Yr	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	5							8	3			4	4	6		6	4			4	3
Outputs	5								4	4	3		4	4	3	3	3	3	4		4

Jan-00

	FY 2004				FY 2005				FY 2006			5	FY 2007				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs			4	3														54
Outputs	3			4	3													54

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

Contract Dates:	FY 1999	Dec 98	FY 2000	Dec 99	FY 2001	Dec 00
Delivery Date:	FY 1999	Jun 00	FY 2000	Jun 01	FY 2001	Jun 02

INDIVIDUAL MODIFICATION

Date February 2000

MODIFICATION TITLE (Cont): RLCEU 1-92-03-1233

FINANCIAL PLAN: ($ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
PROCUREMENT																				
Kit Quantity	16	2.6	14	8.0	10	13.4	7	11.1	7	13.4									54	48.5
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment																				
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware																				
FY 1998 & Prior Eqpt -- Kits	16	0.2																	16	0.2
FY 1999 Eqpt -- Kits			14	0.7															14	0.7
FY 2000 Eqpt -- Kits					10	1.2													10	1.2
FY 2001 Eqpt -- Kits							7	1.5											7	1.5
FY 2002 Eqpt -- kits									7	1.3									7	1.3
FY 2003 Eqpt -- kits																				
FY 2004 Eqpt -- kits																				
FY 2005 Eqpt -- kits																				
TC Equip-Kits																				
Total Installment	16	0.2	14	0.7	10	1.2	7	1.5	7	1.3									54	4.9
Total Procurement Cost		2.8		8.7		14.6		12.6		14.7										53.4

INDIVIDUAL MODIFICATION | Date February 2000

MODIFICATION TITLE: Block VIII (RAM Mods) 1-89-03-1230

MODELS OF SYSTEMS AFFECTED: Radar, ECS, ICC, LS, BME, BMG, CRG

DESCRIPTION / JUSTIFICATION:

This modification provides corrections to problems in the field which have been identified and incorporated into Engineering Change Proposals (ECPs). Corrections included in this Materiel Change involve improvements to the Radar, Engagement Control Station (ECS), Information and Coordination Central (ICC), Launching Station (LS), Battalion Maintenance Equipment/Group (BME/BMG), Communications Relay Group (CRG) and ISE/PFASC Shop Sets. The purpose of this modification is the acquisition and installation of retrofit modification kits to bring fielded PATRIOT hardware up to the production baseline configuration.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

Major milestones not applicable.

Installation Schedule:

	Pr Yr	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	64	32	31	53	53	53	52	93	92	92	92	103	103	103	102	89	90	89	89	50	50
Outputs	32	32	32	31	53	53	53	52	93	92	92	92	103	103	103	102	89	90	89	89	50

	FY 2004				FY 2005				FY 2006				FY 2007				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs	50	50	75	75	75	75												1975
Outputs	50	50	50	75	75	75	75											1975

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

Contract Dates:	FY 1999	Dec 98	FY 2000	Dec 99	FY 2001	Dec 00
Delivery Date:	FY 1999	Jun 99	FY 2000	Jun 00	FY 2001	Jun 01

INDIVIDUAL MODIFICATION

Date February 2000

MODIFICATION TITLE (Cont): Block VIII (RAM Mods) 1-89-03-1230

FINANCIAL PLAN: ($ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
PROCUREMENT																				
Kit Quantity	127	4.0	211	4.9	369	5.8	411	5.1	357	5.4	200	2.6	300	3.0					1975	30.8
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment																				
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware																				
FY 1998 & Prior Eqpt -- Kits	127	0.4																	127	0.4
FY 1999 Eqpt -- Kits			211	0.6															211	0.6
FY 2000 Eqpt -- Kits					369	0.6													369	0.6
FY 2001 Eqpt -- Kits							411	0.5											411	0.5
FY 2002 Eqpt -- kits									357	0.8									357	0.8
FY 2003 Eqpt -- kits											200	0.4							200	0.4
FY 2004 Eqpt -- kits													300	0.6					300	0.6
FY 2005 Eqpt -- kits																				
TC Equip-Kits																				
Total Installment	127	0.4	211	0.6	369	0.6	411	0.5	357	0.8	200	0.4	300	0.6					1975	3.9
Total Procurement Cost		4.4		5.5		6.4		5.6		6.2		3.0		3.6						34.7

INDIVIDUAL MODIFICATION | Date | February 2000

MODIFICATION TITLE: Integrated Diagnostic Support System 1-97-03-1244

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION / JUSTIFICATION:

At the fire unit level, maintenance monitors detect faults and automatically access diagnostic/repair procedures in electronic Tech Manuals (TM) and expert systems. Digital communications enable secure telemaintenance from weapons platform to factory for remote diagnostics and adjustments.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

Major milestones not applicable.

Installation Schedule:

	Pr Yr	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	7									7				5							
Outputs	7										7				5						

	FY 2004				FY 2005				FY 2006				FY 2007				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		19
Outputs																		19

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 9 Months

Contract Dates:	FY 1999	FY 2000	Feb 00	FY 2001	Feb 01
Delivery Date:	FY 1999	FY 2000	Nov 00	FY 2001	Nov 01

INDIVIDUAL MODIFICATION

Date February 2000

MODIFICATION TITLE (Cont): Integrated Diagnostic Support System 1-97-03-1244

FINANCIAL PLAN: ($ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
PROCUREMENT																				
Kit Quantity	7	5.9			7	4.3	5	2.0											19	12.2
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment																				
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware																				
FY 1998 & Prior Eqpt -- Kits	7	0.2																	7	0.2
FY 1999 Eqpt -- Kits																				
FY 2000 Eqpt -- Kits					7	0.4													7	0.4
FY 2001 Eqpt -- Kits							5	0.1											5	0.1
FY 2002 Eqpt -- kits																				
FY 2003 Eqpt -- kits																				
FY 2004 Eqpt -- kits																				
FY 2005 Eqpt -- kits																				
TC Equip-Kits																				
Total Installment	7	0.2			7	0.4	5	0.1											19	0.7
Total Procurement Cost		6.1				4.7		2.1												12.9

INDIVIDUAL MODIFICATION | Date February 2000

MODIFICATION TITLE: RLCEU (LINK 16/JTIDS) 1-97-03-1246

MODELS OF SYSTEMS AFFECTED: ECS

DESCRIPTION / JUSTIFICATION:

This modification will integrate the hardware required for an M-109 van based Link-16 terminal, terminal control and communications processing equipment required to receive and process the Link-16 Joint Data Net Information and to provide this information, in the PADIL Data Link (PADIL) format, to the PATRIOT Engagement Control Station (ECS). This will permit the PATRIOT firing battery to function as a limited participant (receive-only) in the joint net. Told-in tracks will be displayed in the Battery Communications Post and in the Engagement Control Station.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

Major milestones not applicable

Installation Schedule:

	Pr Yr	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs										2	2	2	2	2	2	2	1	3	3	3	2
Outputs											2	2	2	2	2	2	2	1	3	3	3

	FY 2004				FY 2005				FY 2006				FY 2007				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs	4	4	4	4	3	3	3	4	4									59
Outputs	2	4	4	4	4	3	3	3	4	4								59

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

Contract Dates: FY 1999 FY 2000 Apr 00 FY 2001 Apr 01

Delivery Date: FY 1999 FY 2000 Oct 00 FY 2001 Oct 01

INDIVIDUAL MODIFICATION

Date February 2000

MODIFICATION TITLE (Cont): RLCEU (LINK 16/JTIDS) 1-97-03-1246

FINANCIAL PLAN: ($ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
PROCUREMENT																				
Kit Quantity					8	2.3	7	2.3	11	5.4	18	7.1	11	19.2	4	15.1			59	51.4
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment																				
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware																				
FY 1998 & Prior Eqpt -- Kits																				
FY 1999 Eqpt -- Kits																				
FY 2000 Eqpt -- Kits					8	0.3													8	0.3
FY 2001 Eqpt -- Kits							7	0.3											7	0.3
FY 2002 Eqpt -- kits									11	0.6									11	0.6
FY 2003 Eqpt -- kits											18	0.9							18	0.9
FY 2004 Eqpt -- kits													11	2.6					11	2.6
FY 2005 Eqpt -- kits															4	0.4			4	0.4
TC Equip-Kits																				
Total Installment					8	0.3	7	0.3	11	0.6	18	0.9	11	2.6	4	0.4			59	5.1
Total Procurement Cost						2.6		2.6		6.0		8.0		21.8		15.5				56.5

INDIVIDUAL MODIFICATION | Date | February 2000

MODIFICATION TITLE: Tactical Command System 1-98-03-1251

MODELS OF SYSTEMS AFFECTED:

DESCRIPTION / JUSTIFICATION:

Provides for a modification/integration of a Joint Tactical Terminal into existing Tactical Command System shelters. Terminals are necessary to receive and process the Integrated Broadcast Service (IBS) transmission.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

Major milestones not applicable.

Installation Schedule:

	Pr Yr	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs								8	8												
Outputs									8	8											

	FY 2004				FY 2005				FY 2006				FY 2007				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		16
Outputs																		16

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

Contract Dates: FY 1999 FY 2000 Oct 99 FY 2001

Delivery Date: FY 1999 FY 2000 Apr 00 FY 2001

INDIVIDUAL MODIFICATION

Date February 2000

MODIFICATION TITLE (Cont): Tactical Command System 1-98-03-1251

FINANCIAL PLAN: ($ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
PROCUREMENT																				
Kit Quantity					16	2.4													16	2.4
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment																				
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware																				
FY 1998 & Prior Eqpt -- Kits																				
FY 1999 Eqpt -- Kits																				
FY 2000 Eqpt -- Kits					16	0.1													16	0.1
FY 2001 Eqpt -- Kits																				
FY 2002 Eqpt -- kits																				
FY 2003 Eqpt -- kits																				
FY 2004 Eqpt -- kits																				
FY 2005 Eqpt -- kits																				
TC Equip-Kits																				
Total Installment					16	0.1													16	0.1
Total Procurement Cost						2.5														2.5

INDIVIDUAL MODIFICATION | Date | February 2000

MODIFICATION TITLE: Service Life Extension Program 1-00-03-1252

MODELS OF SYSTEMS AFFECTED: Missile

DESCRIPTION / JUSTIFICATION:

Congressional supplemental funding for Service Life Extension Program. Authority to obligate pending assessment of various PATRIOT Missile Modification Programs, including but not limited to, the PATRIOT Anti-Cruise Missile nd the GEM upgrade program

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

TBA.

Installation Schedule:

	Pr Yr	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

	FY 2004				FY 2005				FY 2006				FY 2007				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		
Outputs																		

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 24 Months PRODUCTION LEADTIME: 24 Months

Contract Dates:	FY 1999	Enter Date	FY 2000	Enter Date	FY 2001	Enter Date
Delivery Date:	FY 1999	Enter Date	FY 2000	Enter Date	FY 2001	Enter Date

INDIVIDUAL MODIFICATION | Date February 2000

MODIFICATION TITLE (Cont): Service Life Extension Program 1-00-03-1252

FINANCIAL PLAN: ($ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
PROCUREMENT																				
Kit Quantity					0	18.3														18.3
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment																				
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware																				
FY 1998 & Prior Eqpt -- Kits																				
FY 1999 Eqpt -- Kits																				
FY 2000 Eqpt -- Kits					0	0.5														0.5
FY 2001 Eqpt -- Kits																				
FY 2002 Eqpt -- kits																				
FY 2003 Eqpt -- kits																				
FY 2004 Eqpt -- kits																				
FY 2005 Eqpt -- kits																				
TC Equip-Kits																				
Total Installment						0.5														0.5
Total Procurement Cost						18.8														18.8

Exhibit P-40, Budget Item Justification Sheet

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 3 / Modification of Missles

P-1 Item Nomenclature: STINGER MODS (C20000)

Program Elements for Code B Items:

Code:

Other Related Program Elements: Manpads, Avenger, Bradley Linebacker, Kiowa Warrior

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	31.2	8.0	21.0	13.4	21.9	21.8	27.5	27.1	32.2	35.6	0.0	239.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	31.2	8.0	21.0	13.4	21.9	21.8	27.5	27.1	32.2	35.6		239.6
Initial Spares												
Total Proc Cost	31.2	8.0	21.0	13.4	21.9	21.8	27.5	27.1	32.2	35.6	0.0	239.6
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: **Stinger Block I Missile Upgrades:** Hardware and software modifications to the Stinger-RMP Missile System improve performance against targets which are slow-moving, employ advanced counter-measures, or operate at night. The Stinger Block I Upgrade modifications maintain compatibility with all current and planned command and launch platforms, including Air-To-Air Stinger, Avenger, and the gripstock used in shoulder-fired applications.
Stinger Block I Platform Upgrades: In order to take advantage of the Block I missile's improved capability, each firing platform must be modified. For Man Portable Air Defense System (MANPADS) gripstocks, new Electronically Erasable Read Only Memory Modules must be procured and installed in existing, fielded gripstocks. For Air-to-Air Stinger, Bradley Linebacker, and Avenger, new circuit card assemblies must be procured and installed in each system's Interface Electronics Assembly. **Stinger Troop Proficiency Trainer** is the primary trainer for Stinger gunners. It is scenario-driven and field-deployable.

JUSTIFICATION: FY 01 funds continue Stinger Block I upgrades for both the missile and platform. **Stinger Block I Missile Upgrade**: The Stinger Block I Upgrade corrects deficiencies in engagements against head/tail-on and slow-moving targets, counter-measures, and night-time engagements. The Block I Upgrade corrects a safety deficiency whereby aviation platforms must super-elevate to fire the missile. This materiel change was recommended as the near-term solution by the Air-to-Air Missile General Officer's Steering Committee. **Stinger Block I Platform Upgrades**: In order to take advantage of the Block I missile's improved capability, each firing platform must be modified. Without modifications, Block I missiles fired from these platforms will perform as Stinger-RMP missiles, negating the Block I missile's improved performance.

Exhibit P-40M Budget Item Justification Sheet	Date February 2000
Appropriation / Budget Activity/Serial No. MISSILE PROCUREMENT / 3 / Modification of Missles	P-1 Item Nomenclature STINGER BLK I UPGRADES (C21300)
Program Elements for Code B Items	Code	Other Related Program Elements Manpads, Avenger, Bradley Linebacker, Kiowa Warrior

Description		Fiscal Years									
OSIP NO.	Classification	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TC	Total
Stinger Block I Missile Upgrades (C21300)											
01-87-03-1510	Operational	69.6	13.3	20.1	19.8	23.4	24.8	29.5	27.6		228.1
Stinger Block I Platform Upgrades (C21300)											
01-87-03-1510	Operational	3.9	0.1	1.8	2.0	4.1	1.2	0.2	0.0		13.2
Stinger Troop Proficiency Trainer (No P-3a set)											
01-87-03-1510	TBD	0.0	0.0	0.0	0.0	0.0	1.1	2.0	0.0		3.1
Linebacker TTT & PGS (No P-3a set)											
01-87-03-1510	TBD	0.0	0.0	0.0	0.0	0.0	0.0	0.5	8.0		8.5
Totals		73.5	13.4	21.9	21.8	27.5	27.1	32.2	35.6		252.9

INDIVIDUAL MODIFICATION | Date February 2000

MODIFICATION TITLE: Stinger Block I Missile Upgrades 01-87-03-1510

MODELS OF SYSTEMS AFFECTED: Manpads, Avenger, Bradley Linebacker, Kiowa Warrior

DESCRIPTION / JUSTIFICATION:

The Stinger Block I Missile Upgrade materiel change incorporates hardware and software modifications into the Stinger-RMP missile system to increase overall missile performance in certain engagement scenarios and to resolve a key aviation deficiency which requires aviation platforms to super-elevate. The engagement scenarios in which missile performance improves include head/tail-on and slow-moving targets, counter-measures, and night-time engagements. These changes include hardware changes to the missile and software changes to the command and launch platforms, to include Air-to-Air Stinger, Avenger, and gripstocks used in shoulder-fired applications. This materiel change was recommended by the Air-to-Air Missile General Officer's Steering Committee as the near-term solution to the Stinger-RMP deficiencies.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

Development has been completed

Installation Schedule:

	Pr Yr	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	2240	390	390	390	390	478	523	525	171	173	174	174	237	237	238	240	201	203	204	204	222
Outputs	1530	320	390	390	390	390	390	478	523	525	171	173	174	174	237	237	238	240	201	203	204

	FY 2004				FY 2005				FY 2006				FY 2007				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs	222	222	224	227	228	228	228	245	246	246	246	195	196	198	198			11,353
Outputs	204	222	222	222	224	227	228	228	228	245	246	246	246	195	196	198	198	11,353

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 4 Months PRODUCTION LEADTIME: 18 Months

Contract Dates: FY 1999 2 Qtr, FY99 FY 2000 2 Qtr, FY00 FY 2001 2 Qtr, FY01

Delivery Date: FY 1999 4 Qtr, FY00 FY 2000 4 Qtr, FY01 FY 2001 4 Qtr, FY02

INDIVIDUAL MODIFICATION

Date February 2000

MODIFICATION TITLE (Cont): Stinger Block I Missile Upgrades 01-87-03-1510

FINANCIAL PLAN: ($ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E		34.5																		34.5
PROCUREMENT																				
Kit Quantity	5326		692		952		812		890		911		983		787				11,353	
Installation Kits		69.6		13.3		20.1		19.8		23.4		24.8		29.5		27.6				228.1
Installation Kits, Nonrecurring																				
Equipment																				
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware	"Installation of Hardware" costs are included in "Installation Kits" above.																			
FY 98 & Prior Eqpt -5326	2240		1560		1526														5,326	
FY 1999 Eqpt --692 Kits					171		521												692	
FY 2000 Eqpt -- 952 Kits							237		715										952	
FY 2001 Eqpt -- 812 Kits									201		611								812	
FY 2002 Eqpt -- 890 kits											222		668						890	
FY 2003 Eqpt -- 911 kits													227		684				911	
FY 2004 Eqpt -- 983 kits															245		738		983	
FY 2005 Eqpt -- 787 kits																	787		787	
TC Equip - 0 Kits																				
Total Installment	2240		1560		1697		758		916		833		895		929		1,525		11,353	
Total Procurement Cost		69.6		13.3		20.1		19.8		23.4		24.8		29.5		27.6				228.1

INDIVIDUAL MODIFICATION | Date February 2000

MODIFICATION TITLE: Stinger Block I Platform Upgrades 01-87-03-1510

MODELS OF SYSTEMS AFFECTED: Manpads, Avenger, Bradley Linebacker, Kiowa Warrior

DESCRIPTION / JUSTIFICATION:

In order to take advantage of the Block I missile's improved capability, each firing platform must be modified. For MANPADS gripstocks, new Electronically Eraseable Read Only Memory (EEPROM) Modules must be procured and installed in existing, fielded gripstocks. For Air-to-Air Stinger, Bradley Linebacker, and Avenger, new A-1 Circuit Card Assemblies must be procured and installed in each system's Interface Electronics Assembly. Without modifications, Block I missiles fired from these platforms will perform the same as Stinger-RMP missiles, negating the Block I missile's improved performance.

ROM Modules are installed by government employees; A-1 Circuit Card Assemblies are installed by contractors.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

Development has been completed.

Installation Schedule:

	Pr Yr	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs					320	853	854	854	854	401	401	402	402	248	249	248	248	333	333	334	334
Outputs					320	853	854	854	854	401	401	402	402	248	249	248	248	333	333	334	334

	FY 2004				FY 2005				FY 2006				FY 2007				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs	200	200	200	199														8,467
Outputs	200	200	200	199														8,467

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

Contract Dates:	FY 1999	1st Qtr, FY99	FY 2000	FY 2001
Delivery Date:	FY 1999	3rd Qtr, FY99	FY 2000	FY 2001

INDIVIDUAL MODIFICATION

Date February 2000

MODIFICATION TITLE (Cont): Stinger Block I Platform Upgrades 01-87-03-1510

FINANCIAL PLAN: ($ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
PROCUREMENT																				
Kit Quantity	3,962	3.9			717	1.0	1,655	1.7	1,819	3.8	314	0.8							8,467	11.1
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment																				
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware																				
FY 1998 & Prior Eqpt-3962			320	0.1	3,065	0.7	577	0.1											3,962	0.9
FY 1999 Eqpt -- Kits																				
FY 2000 Eqpt -- 717 Kits					350	0.1	367	0.1											717	0.2
FY 2001 Eqpt -- 1655 kits							662	0.1	993	0.3									1,655	0.4
FY 2002 Eqpt -- 1819 kits											1,334	0.4	485	0.1					1,819	0.5
FY 2003 Eqpt -- 314 kits													314	0.1					314	0.1
FY 2004 Eqpt -- kits																				
FY 2005 Eqpt -- kits																				
TC Equip-Kits																				
Total Installment			320	0.1	3,415	0.8	1,606	0.3	993	0.3	1,334	0.4	799	0.2					8,467	2.1
Total Procurement Cost		3.9		0.1		1.8		2.0		4.1		1.2		0.2						13.2

Exhibit P-40, Budget Item Justification Sheet

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 3 / Modification of Missiles

P-1 Item Nomenclature: AVENGER MODS (CE8710)

Program Elements for Code B Items:

Code:

Other Related Program Elements: C14900 AVENGER SYSTEM SUMMARY, C15200 AVENGER TRAINING DEVICES, C16000 AVENGER PEDESTAL MOUNTED STINGER (MYP), CAO260 AVENGER SPARES, CA0286 AVENGER MOD SPARES

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	19.4	0.0	7.2	8.4	4.2	6.8	9.4	8.6	37.2	37.1	169.0	307.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	19.4	0.0	7.2	8.4	4.2	6.8	9.4	8.6	37.2	37.1	169.0	307.3
Initial Spares	1.0											1.0
Total Proc Cost	20.4	0.0	7.2	8.4	4.2	6.8	9.4	8.6	37.2	37.1	169.0	308.3
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The Avenger is fielded in divisional and corps Short Range Air Defense (SHORAD) battalions and US Marine Corps units. The Avenger system is a lightweight, highly mobile, and transportable surface-to-air missile and .50 caliber machine gun system. Eight Stinger missiles and a .50 caliber machine gun are mounted on a heavy High Mobility Multi-Purpose Wheeled Vehicle (HMMWV). The Avenger is operated by a two-man crew for stationary or shoot-on-the-move defense against Unmanned Aerial Vehicles (UAV), cruise missiles, helicopters, and fixed-wing aircraft in all weather conditions.

JUSTIFICATION: FY 01 funds supports Avenger Slew-to-Cue and related modifications. These are series of upgrades required to enhance the performance of the Avenger System. The **Slew-To-Cue (STC)** upgrade accepts sensor-track data from the Forward Area Air Defense Command, Control and Intelligence System (FAAD C2I) and automatically slews the Avenger turret in azimuth and elevation, placing targets in the gunner's field of view. The STC provides a 55% increase in the number of engagements and a greater increase in the number of kills. The STC was approved by the Warfighting Rapid Acquisition Panel (WRAP) Council in December 1996. The STC capability will be embedded into a new **Common Fire Control Computer (CFCC).** The CFCC replaces the existing fire control computer which is obsolete and cannot be cost effectively sustained. The new CFCC provides additional growth and 1553 data bus architecture capabilities to enhance future system performance at lower costs. The **Automatic Video Tracker (AVT)** is redesigned to improve clutter tracking performance against low observables such as rotary wing aircraft and cruise missiles. The AVT will be incorporated as an additional circuit card within the new CFCC. The single card AVT replaces the existing AVT Line Replaceable Unit (LRU). This MOD also fixes an obsolescence problem, simplifies maintenance, and reduces logistics burden. Development and integration is occurring with the current engineering effort and 637 units will be procured from FY00 through FY05.

Exhibit P-40M Budget Item Justification Sheet	Date February 2000
Appropriation / Budget Activity/Serial No. MISSILE PROCUREMENT / 3 / Modification of Missles	P-1 Item Nomenclature AVENGER MODS (CE8710)
Program Elements for Code B Items	Code	Other Related Program Elements

Description		Fiscal Years									
OSIP NO.	Classification	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TC	Total
AVENGER SLEW-TO-CUE/COMMON FIRE CONTROL COMPUTER/AUTOMATIC VIDEO TRACKER											
	OPERATIONAL	7.2	8.4	4.2	6.8	9.4	8.6	37.2	37.1	7.5	126.4
Totals		7.2	8.4	4.2	6.8	9.4	8.6	37.2	37.1	7.5	126.4

INDIVIDUAL MODIFICATION | Date February 2000

MODIFICATION TITLE: AVENGER SLEW-TO-CUE/COMMON FIRE CONTROL COMPUTER/AUTOMATIC VIDEO TRACKER

MODELS OF SYSTEMS AFFECTED: Avenger

DESCRIPTION / JUSTIFICATION:

The Slew-to-cue (STC) upgrade accepts sensor track data from the FAADC2I and automatically slews the Avenger turret in azimuth and elevation, placing targets in the gunner's field of view. The STC provides a 55% increase in the number of engagements and a greater increase in the number of kills. The STC was approved by the WRAP Council in December 1996 which provided $5.8M in FY 97 R&D funds for the Development/Prototype contract. The STC will be embedded into the CFCC. The redesigned AVT will improve clutter tracking performance (especially of low observable) minimize the adverse impacts of obsolescence, reduce the logistics burden and simplify maintenance. The AVT is part of the Avenger Obsolescence Mitigation & Low Observable Enhancements.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

FUNDING RECEIVED 10/97
LRIP/PROTOTYPE CONTRACT AWARD 13 MAR 98 (Funded with WRAP R&D provided by TRADOC)
DELIVERIES (PROTOTYPE CFCC) JUL-AUG 98
MSIII (PRODUCTION OPTION) 30 MAR 99
QUALIFICATION TEST COMPLETE MAR 00
PRODUCTION OPTION APR 00

Installation Schedule:

	Pr Yr	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	24				56				35				40				49				48
Outputs	24				56				35				40				49				48

	FY 2004				FY 2005				FY 2006				FY 2007				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs	63	63	63	63	54	54	54	55				43						764
Outputs	63	63	63	63	54	54	54	55				43						764

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 1 Months PRODUCTION LEADTIME: 7 Months

Contract Dates:	FY 1999	MAR 99	FY 2000	FY 2001	NOV 00
Delivery Date:	FY 1999	DEC 99	FY 2000	FY 2001	AUG 01

INDIVIDUAL MODIFICATION | Date February 2000

MODIFICATION TITLE (Cont): AVENGER SLEW-TO-CUE/COMMON FIRE CONTROL COMPUTER /AVT (STC/CFCC/AVT)

FINANCIAL PLAN: ($ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
PROCUREMENT																				
Kit Quantity	24		56		35		40		49		48		252		217		43		764	
Installation Kits																				
Installation Kits, Nonrecurring Equipment		3.8		6.8		4.2		4.9		6.1		5.6		32.9		28.9		5.9		99.0
Equipment, Nonrecurring I&KP Training		0.2								0.4										0.6
FAT/PCI		0.4								0.4				0.4		0.3				1.5
Kit Refurbishment				0.6																0.6
Specs & Tech Support																				
Other										0.5										0.5
Project Management Support				0.6				0.5		0.3		0.5		0.8		1.9		0.6		5.2
Contractor Logistics Support		2.5						1.1		1.4		0.9		1.4		2.9		0.5		10.8
Installation of Hardware																				
FY 1998 & Prior Eqpt 24 Kits	24	0.3																	24	0.3
FY 1999 Eqpt 56 Kits			56	0.4															56	0.4
FY 2000 Eqpt 35 Kits					35														35	
FY 2001 Eqpt 40 Kits							40	0.3											40	0.3
FY 2002 Eqpt 49 kits									49	0.4									49	0.4
FY 2003 Eqpt 48 kits											48	1.6							48	1.6
FY 2004 Eqpt 252 kits													252	1.8					252	1.8
FY 2005 Eqpt 217 kits															217	3.0			217	3.0
TC Equip 43 Kits																	43	0.5	43	0.5
Total Installment	24	0.3	56	0.4	35		40	0.3	49	0.4	48	1.6	252	1.8	217	3.0	43	0.5	764	8.3
Total Procurement Cost		7.2		8.4		4.2		6.8		9.4		8.6		37.2		37.1		7.5		126.4

Exhibit P-40, Budget Item Justification Sheet

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 3 / Modification of Missles

P-1 Item Nomenclature: ITAS/TOW MODS (C61700)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	546.8	2.8	62.8	63.0	67.7	64.6	67.4	59.8	63.5	59.9	644.3	1702.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	546.8	2.8	62.8	63.0	67.7	64.6	67.4	59.8	63.5	59.9	644.3	1702.6
Initial Spares*	25.2		4.4	5.4	4.0							39.0
Total Proc Cost	572.0	2.8	67.2	68.4	71.7	64.6	67.4	59.8	63.5	59.9	644.3	1741.6
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The TOW Improved Target Acquisition System (ITAS) program provides the 'first to fight' Infantry Forces with a significant improvement in anti-armor capability through an upgrade of the TOW Heavy Antitank Weapon System. The ITAS makes the Light Infantry Force more lethal and survivable against threat armor by more than doubling the target detection and recognition ranges, improving the probability of hit and enhancing fire control capabilities. The missile modification Missile Ordnance Inhibit Circuit (MOIC) and Missile Conversion (MC) are required to meet training and safety requirements in order to maintain TOW gunner proficiency. The Counter Active Protection System (CAPS) modification provides the TOW 2B missile with the capability to counter the Active Protection System (APS) currently being deployed on threat armor systems.

JUSTIFICATION: Funding is required for the procurement of ITAS in order to equip the Army's Infantry Forces with a more lethal, survivable and rapidly deployable anti-armor capability. With the widespread proliferation of modernized armor systems to potential adversaries, the procurement and fielding of ITAS mitigates the Army's operational risks associated with the time frame between the insertion of Infantry Forces in response to a regional crisis and the arrival of friendly follow-on Mechanized Forces. The procurement and fielding of ITAS significantly improves the Army's posture against regionally based threats, promotes effective crisis response, and increases overall readiness. This is the platform for the future TOW Fire and Forget missile.

Exhibit P-40M Budget Item Justification Sheet

Date: February 2000

Appropriation / Budget Activity/Serial No.: MISSILE PROCUREMENT / 3 / Modification of Missles

P-1 Item Nomenclature: ITAS/TOW MODS (C61700)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

Description		Fiscal Years									
OSIP NO.	Classification	FY97-98	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TC	Total
MISSILE CONVERSION (HEAT TO PRACTICE)											
MC-1-82-03-3020	SAFETY	35.8	1.4	0.0	0.0	0.0	5.2	6.0	6.0	39.4	93.8
MISSILE MODIFICATION (MOIC) (No P3a Set)											
MC-1-82-03-3021	SAFETY	13.8	0.2	0.0	0.0	0.0	0.3	0.7	0.7	4.8	20.5
ITAS (IMPROVED TARGET ACQUISITION SYSTEM)											
MC-1-89-03-3028	OPERATIONAL	100.1	61.4	60.9	64.6	67.4	54.3	56.8	53.2	600.1	1,118.8
CAPS(COUNTER ACTIVE PROTECTIVE SYSTEMS)											
MC-1-98-03-3030	OPERATIONAL	0.0	0.0	6.8	0.0	0.0	0.0	0.0	0.0	0.0	6.8
Totals		149.7	63.0	67.7	64.6	67.4	59.8	63.5	59.9	644.3	1,239.9

INDIVIDUAL MODIFICATION

Date February 2000

MODIFICATION TITLE: MISSILE CONVERSION (HEAT TO PRACTICE) MC-1-82-03-3020

MODELS OF SYSTEMS AFFECTED: ITAS/TOW MISSILE SYSTEM BGM 71A, C, D) BTM 71A (C61700)

DESCRIPTION / JUSTIFICATION:

To convert TOW Basic, ITOW and TOW 2 heat missiles to practice missiles and to install a Missile Ordnance Inhibit Circuit (MOIC) on missiles used for training. To prevent flyback, the MOIC opens the circuit between the missile battery and flight motor ignition, the safe and arming unlatch mechanism, in the event of delay in ignition of the flight motor. Epoxy-coated T250 maraging steel was incorporated into a new design as a result of launch motor failures.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

N/A

Installation Schedule:

	Pr Yr	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	60213	1500	1500																		
Outputs	58747	1116	1116	1117	1117																

	FY 2004				FY 2005				FY 2006				FY 2007				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs	1250	1250	1250	577	1250	1250	684		1250	1250	991		1250	1250	1007		16230	93952
Outputs		1442	1442	1443		1250	1250	684		1250	1250	991		1250	1250	1007	16230	93952

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 12 Months PRODUCTION LEADTIME: 12 Months

Contract Dates:	FY 1999	N/A	FY 2000	N/A	FY 2001	N/A
Delivery Date:	FY 1999	N/A	FY 2000	N/A	FY 2001	N/A

INDIVIDUAL MODIFICATION

Date February 2000

MODIFICATION TITLE (Cont): MISSILE CONVERSION (HEAT TO PRACTICE) MC-1-82-03-3020

FINANCIAL PLAN: ($ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
PROCUREMENT																				
Kit Quantity																				
Installation Kits																				
Installation Kits, Nonrecurring Equipment	63213	22.3									4327	5.2	3184	3.9	3491	4.4	19737	26.9	93952	62.7
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware																				
FY 1998 & Prior Eqpt -- Kits	60213	13.5	3000	1.4															63213	14.9
FY 1999 Eqpt -- Kits																				
FY 2000 Eqpt -- Kits																				
FY 2001 Eqpt -- Kits																				
FY 2002 Eqpt -- kits																				
FY 2003 Eqpt -- kits													4327	2.1					4327	2.1
FY 2004 Eqpt -- kits															3184	1.6			3184	1.6
FY 2005 Eqpt -- kits																	3491	1.8	3491	1.8
TC Equip-Kits																	19737	10.7	19737	10.7
Total Installment	60213	13.5	3000	1.4									4327	2.1	3184	1.6	23228	12.5	93952	31.1
Total Procurement Cost		35.8		1.4								5.2		6.0		6.0		39.4		93.8

INDIVIDUAL MODIFICATION | Date February 2000

MODIFICATION TITLE: ITAS (IMPROVED TARGET ACQUISITION SYSTEM) MC-1-89-03-3028

MODELS OF SYSTEMS AFFECTED: TOW Missile System Launcher (59300)

DESCRIPTION / JUSTIFICATION:

TOW ITAS Program is a technology insertion program to upgrade the current TOW Target Acquisition and Fire Control Subsystems. ITAS provides improved target detection and acquisition range, improved probability of hit and enhanced fire control capabilities that upgrades the anti-armor capability of 'first to fight' Infantry Forces using the TOW system. ITAS supports the U.S. Army mission of crisis response to regionally based threats.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

	PLANNED	ACCOMPLISHED
FUE	Sep 98	Sep 98
Milestone III Decision	May 99	Jun 99
Contract Conversion to Multiyear	Nov 99	Dec 99

Installation Schedule:

	Pr Yr	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	22	2	1		20	50	4		19	29	27	27	30	30	30	31	30	30	30	33	33
Outputs	8		1		2	60				60		60	5	40	32	20	26	40	20	46	20

	FY 2004				FY 2005				FY 2006				FY 2007				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs	32	30	24	25	24	26	26	28	25	27	24	24	24	24	27		973	1841
Outputs	40	44	18			36	82	12			68		68			60	973	1841

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 10 Months PRODUCTION LEADTIME: 18 Months

Contract Dates:	FY 1999	3Q99	FY 2000	1Q00	FY 2001	1Q01
Delivery Date:	FY 1999	4Q00	FY 2000	4Q01	FY 2001	3Q02

INDIVIDUAL MODIFICATION

Date February 2000

MODIFICATION TITLE (Cont): ITAS (IMPROVED TARGET ACQUISITION SYSTEM) MC-1-89-03-3028

FINANCIAL PLAN: ($ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E		105.0		0.2																105.2
PROCUREMENT																				
Kit Quantity	99		102		122		121		126		93		106		99		973		1841	
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment		84.9		57.4		56.7		57.1		58.4		45.3		50.3		48.0		527.8		985.9
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data		0.8				0.1		0.1		0.1		0.1		0.1		0.1		0.8		2.2
Training Equipment		11.2				2.9		2.8		2.4		1.9		2.2		2.2		26.4		52.0
Support Equipment																				
Other		1.0		0.4		0.3		0.4		0.4		0.4		0.4		0.4		3.5		7.2
ICS/CLS		2.1		3.6		0.8		4.0		5.9		6.3		3.6		2.2		39.1		67.6
Installation of Hardware																				
FY 1998 & Prior Eqpt -- Kits	8	0.1	3		60	0.1	28	0.1											99	0.3
FY 1999 Eqpt -- Kits							97	0.1	5										102	0.1
FY 2000 Eqpt -- Kits									113	0.2	9								122	0.2
FY 2001 Eqpt -- Kits											117	0.3	4						121	0.3
FY 2002 Eqpt -- kits													98	0.2	28	0.1			126	0.3
FY 2003 Eqpt -- kits															93	0.2			93	0.2
FY 2004 Eqpt -- kits															9		97	0.2	106	0.2
FY 2005 Eqpt -- kits																	99	0.2	99	0.2
TC Equip-Kits																	973	2.1	973	2.1
Total Installment	8	0.1	3		60	0.1	125	0.2	118	0.2	126	0.3	102	0.2	130	0.3	1169	2.5	1841	3.9
Total Procurement Cost		100.1		61.4		60.9		64.6		67.4		54.3		56.8		53.2		600.1		1118.8

INDIVIDUAL MODIFICATION | Date February 2000

MODIFICATION TITLE: CAPS(COUNTER ACTIVE PROTECTIVE SYSTEMS) MC-1-98-03-3030

MODELS OF SYSTEMS AFFECTED: TOW Missile System (C59300)

DESCRIPTION / JUSTIFICATION:

To procure and apply Counter Active Protection Systems (CAPS) modification kits to a contingency stock of TOW 2B missiles. The CAPS modification will provide the TOW 2B missile with the capability to counter the Active Protection Systems (APS) currently being deployed on threat armor systems.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

N/A

Installation Schedule:

	Pr Yr	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs										200	600	200									
Outputs										200	600	200									

	FY 2004				FY 2005				FY 2006				FY 2007				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		1000
Outputs																		1000

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 8 Months PRODUCTION LEADTIME: 9 Months

Contract Dates: FY 1999 FY 2000 2Q00 FY 2001

Delivery Date: FY 1999 FY 2000 1Q00 FY 2001

INDIVIDUAL MODIFICATION

Date February 2000

MODIFICATION TITLE (Cont): CAPS(COUNTER ACTIVE PROTECTIVE SYSTEMS) MC-1-98-03-3030

FINANCIAL PLAN: ($ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
PROCUREMENT																				
Kit Quantity					1000														1000	
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment						6.8														6.8
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware																				
FY 1998 & Prior Eqpt -- Kits																				
FY 1999 Eqpt -- Kits																				
FY 2000 Eqpt -- Kits																				
FY 2001 Eqpt -- Kits																				
FY 2002 Eqpt -- kits																				
FY 2003 Eqpt -- kits																				
FY 2004 Eqpt -- kits																				
FY 2005 Eqpt -- kits																				
TC Equip-Kits																				
Total Installment																				
Total Procurement Cost					6.8														6.8	

Exhibit P-40, Budget Item Justification Sheet

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 3 / Modification of Missles

P-1 Item Nomenclature: MLRS MODS (C67500)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	224.0	12.8	0.6	2.8	6.6	16.5	24.3	25.2	23.4	17.4	181.1	534.7
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	224.0	12.8	0.6	2.8	6.6	16.5	24.3	25.2	23.4	17.4	181.1	534.7
Initial Spares	12.8	1.8		0.0	0.5	0.8	0.9	5.7	1.4	6.0	47.5	77.3
Total Proc Cost	236.8	14.7	0.6	2.8	7.1	17.3	25.2	30.9	24.8	23.4	228.6	612.1
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: Modification kits are procured for previously manufactured Multiple Launch Rocket System (MLRS) launchers and associated training and ground support equipment. The following page provides a list of approved modifications.

JUSTIFICATION: The FY 01 program funds Transmission Electronic Controller upgrades, Vehicular Intercommunication (VIC), Interim Improved Position Determining System (IPDS) Launcher contractor logistics support, Joint Technical Architecture-Army (JTA-A), Improved Communications Processor (ICMP), Suspension Lockout System Improvements and Obsolescence Mitigation/Engineering Change Proposal Reliability Integration.

Exhibit P-40M Budget Item Justification Sheet											Date February 2000
Appropriation / Budget Activity/Serial No. MISSILE PROCUREMENT / 3 / Modification of Missles						P-1 Item Nomenclature MLRS MODS (C67500)					
Program Elements for Code B Items			Code	Other Related Program Elements							
Description		Fiscal Years									
OSIP NO.	Classification	FY 98&PY	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TC	Total
Inactive Mods											
Prior Year MCs	Oper/Safety/Reliab	184.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	184.8
Transmission Electronic Controller (TEC)											
1-94-03-0522	Operational	33.0	0.4	1.1	1.2	0.9	1.5	1.6	1.6	1.8	43.1
Interim Improved Position Determining System (IPDS) Launcher											
1-94-03-0528	Operational	19.6	1.3	1.3	1.3	1.4	1.4	1.4	0.0	0.0	27.7
Selective Availability Anti-Spoofing Module (SAASM) (No P3a Set)											
1-97-03-0534	Operational	0.0	0.0	0.0	0.0	3.8	3.2	0.0	0.0	0.0	7.0
Joint Technical Architecture-Army (JTA-A)											
1-98-03-0537	Operational	0.0	0.0	0.0	8.9	0.1	0.0	0.0	0.0	0.0	9.0
Improved Communications Processor (ICMP)											
1-98-03-0540	Operational	0.0	0.0	1.0	0.7	0.0	0.0	0.0	0.0	0.0	1.7
Streamlined Tech Enhancement Program (STEP) (No P3a Set)											
1-98-03-0541	Operational	0.0	0.0	0.0	0.0	5.4	9.9	9.8	11.7	48.3	85.1
Engine/Transmission Diagnostic (No P3a Set)											
1-98-03-0542	Operational	0.0	0.0	0.0	0.0	0.0	0.0	6.5	0.3	0.0	6.8
Vehicular Intercommunication (V(C) - 3											
1-99-03-0544	Operational	0.0	0.0	0.8	0.2	0.0	0.0	0.0	0.0	0.0	1.0
Azimuth Geared Bearing Dust Cover Modification											
1-99-03-0545	Reliability	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.6
Weapons Interface Unit Modification (No P3a Set)											
1-99-03-0546	Operational	0.0	0.0	0.0	0.0	8.8	5.3	0.2	0.0	0.0	14.3
Suspension Lockout (SLO) Improvement											
1-99-03-0547	Reliability	0.0	0.0	0.4	0.5	0.3	0.4	0.5	0.5	2.0	4.5

Exhibit P-40M Budget Item Justification Sheet

Date: February 2000

Appropriation / Budget Activity/Serial No.: MISSILE PROCUREMENT / 3 / Modification of Missles

P-1 Item Nomenclature: MLRS MODS (C67500)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

Description		Fiscal Years									
OSIP NO.	Classification	FY 98&PY	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TC	Total
Obsolescence Mitigation/ECP Reliability Integration											
1-99-03-Obsc	Operational	0.0	1.1	1.4	3.6	3.6	3.5	3.4	3.3	129.0	148.9
Totals		237.4	2.8	6.6	16.5	24.3	25.2	23.4	17.4	181.1	534.6

INDIVIDUAL MODIFICATION | Date February 2000

MODIFICATION TITLE: Transmission Electronic Controller (TEC) 1-94-03-0522

MODELS OF SYSTEMS AFFECTED: Multiple Launch Rocket System (MLRS)

DESCRIPTION / JUSTIFICATION:

The TEC, which is an automatic electronically controlled transmission, upgrades the previous hydromechanical transmission. The benefits of the TEC modification are increased power availability, ability to tow in neutral, decreased maintenance, improvements in slope capability, shift synchronism, fuel consumption, cold temperature performance, and maneuverability in restricted areas. Through the modification of the MLRS fleet of vehicles, this will allow a commonality of transmissions between all vehicle subsystems for the M270 MLRS. Additional modifications are required to improve reliability for the M993 Carrier for MLRS usage. The TEC II program will replace the Electronics Assembly (EA) and the Interface Assembly (IA) with an improved remanufactured version that has reduced vibration and better steering control inputs to the transmission. This program is an ownership cost reduction initiative and is planned for expedient application. The TEC III program will procure new reinforced hardware for installation into the transmission during remanufacture.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

Development complete - incorporated into Engineering Release Record

Installation Schedule:

	Pr Yr	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	1632				52		54				71				90				140		
Outputs	773		5		66	132	132	132	132	132	132	102		17	18	18	18	22	22	22	24

	FY 2004				FY 2005				FY 2006				FY 2007				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs		145				145				125				35				2489
Outputs	35	35	35	35	36	36	36	37	36	36	36	37	31	31	31	32	35	2489

METHOD OF IMPLEMENTATION: Contractor/Depot ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 6 Months

Contract Dates: FY 1999 Dec 98 FY 2000 Jan 00 FY 2001 Jan 01

Delivery Date: FY 1999 Aug 99 FY 2000 Jun 00 FY 2001 Jun 01

INDIVIDUAL MODIFICATION

Date February 2000

MODIFICATION TITLE (Cont): Transmission Electronic Controller (TEC) 1-94-03-0522

FINANCIAL PLAN: ($ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
PROCUREMENT																				
Kit Quantity	1632	25.4	52	0.3	54	0.5	71	0.7	90	0.9	140	1.5	145	1.6	145	1.6	160	1.8	2489	34.4
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment																				
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
*Note:																				
In FY 02 and subsequent																				
years installation will be																				
concurrent with M270A1																				
launcher remanufacture																				
program.																				
Installation of Hardware																				
FY 1998 & Prior Eqpt -- Kits	773	7.6	71	0.1	528	0.6	260	0.2											1632	8.5
FY 1999 Eqpt -- Kits							28	0.3											28	0.3
FY 2000 Eqpt -- Kits																				
FY 2001 Eqpt -- Kits																				
FY 2002 Eqpt -- kits																				
FY 2003 Eqpt -- kits																				
FY 2004 Eqpt -- kits																				
FY 2005 Eqpt -- kits																				
TC Equip-Kits																				
Total Installment	773	7.6	71	0.1	528	0.6	288	0.5											1660	8.8
Total Procurement Cost		33.0		0.4		1.1		1.2		0.9		1.5		1.6		1.6		1.8		43.1

INDIVIDUAL MODIFICATION | Date February 2000

MODIFICATION TITLE: Interim Improved Position Determining System (IPDS) Launcher 1-94-03-0528

MODELS OF SYSTEMS AFFECTED: Multiple Launch Rocket System (MLRS)

DESCRIPTION / JUSTIFICATION:

A special interim launcher configuration was required to allow the current M270 platform to fire all of its existing fielded M270 Family of Munitions and to incorporate a new requirement to fire the Army Tactical Missile System (ATACMS) Block IA. The Block IA missile was fielded in 1QFY98 and required Global Positioning System (GPS) interface at the time of launch. This modification was accelerated because the pre-planned product improvement for GPS was not planned until the fielding of the Position Navigational Unit with the Improved Fire Control System in FY 00. The modification incorporated the Interim Launcher Improved Position Determining System (IPDS) Line Replaceable Unit, a GPS antenna, associated cabling with armor protection, hoist bumper pads, a modification to the existing M68 Missile/Launch Pod Assembly trainer, and sufficient Random Access Memory, with the Non Volatile Memory Module to support the software loaded into the Improved Electronic Unit. Installation was included in the cost of the modification kit. The remaining funds in FY 99 through FY 04 are to provide interim contractor support.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

Modification has been integrated into the launchers as an interim program in support of the ATACMS Block 1A.

Installation Schedule:

	Pr Yr	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	29																				
Outputs	29																				

	FY 2004				FY 2005				FY 2006				FY 2007				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		29
Outputs																		29

METHOD OF IMPLEMENTATION: Contractor | ADMINISTRATIVE LEADTIME: 6 Months | PRODUCTION LEADTIME: 12 Months

Contract Dates: FY 1999 Jan 99 | FY 2000 Jan 00 | FY 2001 Jan 01

Delivery Date: FY 1999 | FY 2000 | FY 2001

INDIVIDUAL MODIFICATION

Date February 2000

MODIFICATION TITLE (Cont): Interim Improved Position Determining System (IPDS) Launcher 1-94-03-0528

FINANCIAL PLAN: ($ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
PROCUREMENT																				
Kit Quantity																				
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment	29	18.0																	29	18.0
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support		1.6		1.3		1.3		1.3		1.4		1.4		1.4						9.7
Installation of Hardware																				
FY 1998 & Prior Eqpt -- Kits																				
FY 1999 Eqpt -- Kits																				
FY 2000 Eqpt -- Kits																				
FY 2001 Eqpt -- Kits																				
FY 2002 Eqpt -- kits																				
FY 2003 Eqpt -- kits																				
FY 2004 Eqpt -- kits																				
FY 2005 Eqpt -- kits																				
TC Equip-Kits																				
Total Installment																				
Total Procurement Cost		19.6		1.3		1.3		1.3		1.4		1.4		1.4						27.7

IN REPLY
REFER TO

DEFENSE INFORMATION SYSTEMS AGENCY
DEFENSE TECHNICAL INFORMATION CENTER
8725 JOHN J KINGMAN RD STE 0944
FT BELVOIR VA 22060-6218

INDIVIDUAL MODIFICATION — Date: February 2000

MODIFICATION TITLE: Joint Technical Architecture-Army (JTA-A) 1-98-03-0537

MODELS OF SYSTEMS AFFECTED: Multiple Launch Rocket System (MLRS)

DESCRIPTION / JUSTIFICATION:

JTA-A is a Department of the Army mandated program that standardizes communication protocols and message formats for data transport among the Department of Defense services. It provides the M270A1 Launcher with soldier-computer interface, external communication interfaces, and internal system interfaces. It will also provide a standard for information security as well as a standard for the Department of the Army FORCE XXI directed situational awareness enhancements to the soldier, ultimately reducing the chances of fratricide on the battlefield. Quantities reflected in FY 01 are to retrofit the M270A1 LRIP in order to provide the soldier a new fire control panel to be compatible with the multiyear configuration.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

Development in progress - requirement for First Digitized Division

Installation Schedule:

	Pr Yr	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs										21	21	21	21								
Outputs											21	21	21	21							

	FY 2004				FY 2005				FY 2006				FY 2007				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		84
Outputs																		84

METHOD OF IMPLEMENTATION: Contractor — ADMINISTRATIVE LEADTIME: 3 Months — PRODUCTION LEADTIME: 2 Months

Contract Dates: FY 1999 — FY 2000 — FY 2001 Oct 01

Delivery Date: FY 1999 — FY 2000 — FY 2001 Dec 01

INDIVIDUAL MODIFICATION

Date February 2000

MODIFICATION TITLE (Cont): Joint Technical Architecture-Army (JTA-A) 1-98-03-0537

FINANCIAL PLAN: ($ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
PROCUREMENT																				
Kit Quantity							84	8.6											84	8.6
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment																				
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware																				
FY 1998 & Prior Eqpt -- Kits																				
FY 1999 Eqpt -- Kits																				
FY 2000 Eqpt -- Kits																				
FY 2001 Eqpt -- Kits							63	0.4	21	0.1									84	0.5
FY 2002 Eqpt -- kits																				
FY 2003 Eqpt -- kits																				
FY 2004 Eqpt -- kits																				
FY 2005 Eqpt -- kits																				
TC Equip-Kits																				
Total Installment							63	0.4	21	0.1									84	0.5
Total Procurement Cost								8.9		0.1										9.0

INDIVIDUAL MODIFICATION | Date February 2000

MODIFICATION TITLE: Improved Communications Processor (ICMP) 1-98-03-0540

MODELS OF SYSTEMS AFFECTED: Multiple Launch Rocket System (MLRS)

DESCRIPTION / JUSTIFICATION:

The current ICMP does not adhere to ICD 11508910, Level 4 for national protocol. This software glitch causes digital network problems, not allowing everyone to communicate in the same time period. The current plan is for all ICMPs to be swapped out. The Communications Controller Circuit Card Assemblies in the ICMP will be modified correcting the "Net Access Delay" problem.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

Development in progress - ECP planned approval Feb 00

Installation Schedule:

	Pr Yr	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs							690			610											
Outputs								345	345	200	205	205									

	FY 2004				FY 2005				FY 2006				FY 2007				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		1300
Outputs																		1300

METHOD OF IMPLEMENTATION:	Depot	ADMINISTRATIVE LEADTIME:	6	Months	PRODUCTION LEADTIME:	2	Months	
Contract Dates:	FY 1999	FY 2000	Feb 00		FY 2001	Oct 00		
Delivery Date:	FY 1999	FY 2000	Apr 00		FY 2001	Dec 00		

INDIVIDUAL MODIFICATION

Date February 2000

MODIFICATION TITLE (Cont): Improved Communications Processor (ICMP) 1-98-03-0540

FINANCIAL PLAN: ($ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
PROCUREMENT																				
Kit Quantity					800	0.4	500	0.3											1300	0.7
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment																				
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware																				
FY 1998 & Prior Eqpt -- Kits																				
FY 1999 Eqpt -- Kits																				
FY 2000 Eqpt -- Kits					690	0.6													690	0.6
FY 2001 Eqpt -- Kits							610	0.4											610	0.4
FY 2002 Eqpt -- kits																				
FY 2003 Eqpt -- kits																				
FY 2004 Eqpt -- kits																				
FY 2005 Eqpt -- kits																				
TC Equip-Kits																				
Total Installment					690	0.6	610	0.4											1300	1.0
Total Procurement Cost						1.0		0.7												1.7

INDIVIDUAL MODIFICATION | Date February 2000

MODIFICATION TITLE: Vehicular Intercommunication (VIC) - 3 1-99-03-0544

MODELS OF SYSTEMS AFFECTED: Multiple Launch Rocket System (MLRS)

DESCRIPTION / JUSTIFICATION:

A requirement exists for an improved intercommunication and radio-control system within ground mobile combat vehicles. The Vehicular Intercommunication (VIC)-3 system was developed by the Vehicle Intercommunications System (VIS) Special Projects Office. This modification offers both operational and safety enhancement to the M270 and M270A1 Launcher. These improvements are digital enhancements to improve speech quality and articulation, headsets that incorporate active noise reduction circuitry to increase the effectiveness of vehicle communications, and increased hearing protection in the noisy environment of combat vehicles.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

Development complete on VIC-3 system.

Installation Schedule:

	Pr Yr	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs					146	220	216	216	72												
Outputs							207	207	208	159	89										

	FY 2004				FY 2005				FY 2006				FY 2007				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		870
Outputs																		870

METHOD OF IMPLEMENTATION: Contractor/Depot ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 6 Months

Contract Dates: FY 1999 Nov 98 FY 2000 FY 2001

Delivery Date: FY 1999 Jul 99 FY 2000 FY 2001

INDIVIDUAL MODIFICATION

Date February 2000

MODIFICATION TITLE (Cont): Vehicular Intercommunication (V(C) - 3 1-99-03-0544

FINANCIAL PLAN: ($ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
PROCUREMENT																				
Kit Quantity																				
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment																				
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
* NOTE:																				
FY 99 kits procurred under																				
M270A1. Balance of installation																				
funded by M270A1 program.																				
Installation of Hardware																				
FY 1998 & Prior Eqpt -- Kits																				
FY 1999 Eqpt -- Kits					622	0.8	175	0.2											797	1.0
FY 2000 Eqpt -- Kits																				
FY 2001 Eqpt -- Kits																				
FY 2002 Eqpt -- kits																				
FY 2003 Eqpt -- kits																				
FY 2004 Eqpt -- kits																				
FY 2005 Eqpt -- kits																				
TC Equip-Kits																				
Total Installment					622	0.8	175	0.2											797	1.0
Total Procurement Cost						0.8		0.2												1.0

INDIVIDUAL MODIFICATION | Date February 2000

MODIFICATION TITLE: Azimuth Geared Bearing Dust Cover Modification 1-99-03-0545

MODELS OF SYSTEMS AFFECTED: Multiple Launch Rocket System (MLRS)

DESCRIPTION / JUSTIFICATION:

A dust cover to shield sand and dust intrusion into the Azimuth Geared Bearing was developed to prevent contamination to the line replaceable unit, thus preventing the bearing from seizing. This modification will increase reliability of the Azimuth Geared Bearing, thus reducing cost to the fielded units. Procurement is planned for 900 Azimuth Geared Bearing dust cover kits in FY 00. Installation is planned for 45 in FY 00 and 137 in FY 01. The balance of the modification kits will be incorporated in conjunction with remanufacture.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

Development complete.

Installation Schedule:

	Pr Yr	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs							900														
Outputs									45	47	90				90				90		

	FY 2004				FY 2005				FY 2006				FY 2007				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		900
Outputs		90				90				110				110			138	900

METHOD OF IMPLEMENTATION: Contractor/Depot ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 6 Months

Contract Dates: FY 1999 FY 2000 Jan 00 FY 2001

Delivery Date: FY 1999 FY 2000 Jul 00 FY 2001

INDIVIDUAL MODIFICATION

Date February 2000

MODIFICATION TITLE (Cont): Azimuth Geared Bearing Dust Cover Modification 1-99-03-0545

FINANCIAL PLAN: ($ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
PROCUREMENT																				
Kit Quantity					900	0.6													900	0.6
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment																				
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
* NOTE																				
Installation of kits funded under																				
remanufacture program.																				
Installation of Hardware																				
FY 1998 & Prior Eqpt -- Kits																				
FY 1999 Eqpt -- Kits																				
FY 2000 Eqpt -- Kits																				
FY 2001 Eqpt -- Kits																				
FY 2002 Eqpt -- kits																				
FY 2003 Eqpt -- kits																				
FY 2004 Eqpt -- kits																				
FY 2005 Eqpt -- kits																				
TC Equip-Kits																				
Total Installment																				
Total Procurement Cost					0.6														0.6	

INDIVIDUAL MODIFICATION | Date February 2000

MODIFICATION TITLE: Suspension Lockout (SLO) Improvement 1-99-03-0547

MODELS OF SYSTEMS AFFECTED: Multiple Launch Rocket System (MLRS)

DESCRIPTION / JUSTIFICATION:

Suspension Lockout (SLO) seals have suffered contamination due to environmental constraints such that the M270 Launcher system must leave its drain plugs in at all times to avoid petroleum, oils, lubricants, and other contaminants from polluting the environment. The six boots that are connected from the torsion bars to the 17 SLO clutch pack housings were not designed to prevent the SLO system from internal water intrusion and internal contaminants. The procurement of SLO Boot kits will support the upgrade of 900 M270A1 Launchers with 92 planned for initial retrofit.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

Development complete on SLO Pump Handle upgrade. Engineering Change Proposal (ECP) for SLO Boot change to be completed in 3QFY00.

Installation Schedule:

	Pr Yr	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs								15	15	15	15	15	17	10	10	12		33	33	33	33
Outputs									30		20	20	22		10	10	12		33	33	33

	FY 2004				FY 2005				FY 2006				FY 2007				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	116	900
Outputs		33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	182	900

METHOD OF IMPLEMENTATION: Depot | ADMINISTRATIVE LEADTIME: 2 Months | PRODUCTION LEADTIME: 3 Months

Contract Dates: FY 1999 | FY 2000 Mar 00 | FY 2001 Oct 00

Delivery Date: FY 1999 | FY 2000 Jun 00 | FY 2001 Jan 01

INDIVIDUAL MODIFICATION

Date February 2000

MODIFICATION TITLE (Cont): Suspension Lockout (SLO) Improvement 1-99-03-0547

FINANCIAL PLAN: ($ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
PROCUREMENT																				
Kit Quantity					60	0.3	60	0.3	60	0.3	100	0.4	100	0.5	110	0.5	410	2.0	900	4.1
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment																				
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Balance of installation to be performed under M270A1 program.																				
Installation of Hardware																				
FY 1998 & Prior Eqpt -- Kits																				
FY 1999 Eqpt -- Kits																				
FY 2000 Eqpt -- Kits					30	0.1	62	0.3											92	0.4
FY 2001 Eqpt -- Kits																				
FY 2002 Eqpt -- kits																				
FY 2003 Eqpt -- kits																				
FY 2004 Eqpt -- kits																				
FY 2005 Eqpt -- kits																				
TC Equip-Kits																				
Total Installment					30	0.1	62	0.3											92	0.4
Total Procurement Cost						0.4		0.5		0.3		0.4		0.5		0.5		2.0		4.5

INDIVIDUAL MODIFICATION | Date February 2000

MODIFICATION TITLE: Obsolescence Mitigation/ECP Reliability Integration 1-99-03-Obsc

MODELS OF SYSTEMS AFFECTED: Multiple Launch Rocket System (MLRS)

DESCRIPTION / JUSTIFICATION:

Technology obsolescence is dictating the replacement of many launcher components. Because of rapid electronic obsolesence, this modification plans for future replacement of launcher electronic components. Circuit Cards in the Line Replaceable Units, e.g., Improved Electronic Unit and Fire Control Unit, are already obsolete or rapidly approaching obsolescence. The funding on this program will procure modification kits which will incorporate the improved components necessary to replace parts no longer available. In addition, this modification will reestablish the MLRS baseline at the optimal configuration for integration of the Improved Fire Control System and the Improved Launcher Mechanical System by aiding in the calibration of the system, providing required accuracy levels for new and future munitions, increasing reliability of early configuration of the launcher which reduces operational and support costs, and eliminating noise and multiple software requirements.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:

Will incorporate ongoing obsolescence analysis and determination into production.

Installation Schedule:

	Pr Yr	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003			
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs																					
Outputs																					

	FY 2004				FY 2005				FY 2006				FY 2007				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
Inputs																		
Outputs																		

METHOD OF IMPLEMENTATION: Contractor/Depot ADMINISTRATIVE LEADTIME: Months PRODUCTION LEADTIME: Months

Contract Dates: FY 1999 FY 2000 FY 2001

Delivery Date: FY 1999 FY 2000 FY 2001

INDIVIDUAL MODIFICATION

Date February 2000

MODIFICATION TITLE (Cont): Obsolescence Mitigation/ECP Reliability Integration 1-99-03-Obsc

FINANCIAL PLAN: ($ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL	
	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$	Qty	$
RDT&E																				
PROCUREMENT																				
Kit Quantity																				
Installation Kits																				
Installation Kits, Nonrecurring Equipment				1.1		1.4		3.6		3.6		3.5		3.4		3.3		129.0		148.9
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware																				
FY 1998 & Prior Eqpt -- Kits																				
FY 1999 Eqpt -- Kits																				
FY 2000 Eqpt -- Kits																				
FY 2001 Eqpt -- Kits																				
FY 2002 Eqpt -- kits																				
FY 2003 Eqpt -- kits																				
FY 2004 Eqpt -- kits																				
FY 2005 Eqpt -- kits																				
TC Equip-Kits																				
Total Installment																				
Total Procurement Cost				1.1		1.4		3.6		3.6		3.5		3.4		3.3		129.0		148.9

Exhibit P-40, Budget Item Justification Sheet

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 4 / Spares and Repair Parts

P-1 Item Nomenclature: SPARES AND REPAIR PARTS (CA0250)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	2702.5	8.0	8.4	18.8	18.8	20.8	25.7	34.0	37.3	24.9	205.1	3104.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	2702.4	8.0	8.4	18.8	18.8	20.8	25.7	34.0	37.3	24.9	201.8	3100.9
Initial Spares												
Total Proc Cost	2702.4	8.0	8.4	18.8	18.8	20.8	25.7	34.0	37.3	24.9	201.8	3100.9
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: Provides for procurement of spares to support initial fielding of new or modified end items.

JUSTIFICATION: The funds in this account procure depot-level reparable (DLR) secondary items from the Supply Management, Army, (SMA) activity of the Army Working Capital Fund. To provide initial support, funds are normally required in the same year that end items are fielded. The Initial spares breakout follows:

	FY 99	FY 00	FY 01
JAVELIN	3.7	4.5	6.6
MLRS	4.8	6.2	6.5
ATACMS BLK II			1.4
PATRIOT MODS	4.9	3.6	2.6
AVENGER			2.9
ITAS/TOW MODS	5.4	4.0	
MLRS MODS		.5	.8
Total	18.8	18.8	20.8

Exhibit P-40, Budget Item Justification Sheet

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 5 / Support Equipment and Facilities

P-1 Item Nomenclature: AIR DEFENSE TARGETS (C93000)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	356.4	6.2	1.0	2.5	2.4	2.4	2.5	2.5	2.5	2.6	0.0	380.9
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	356.4	6.2	1.0	2.5	2.4	2.4	2.5	2.5	2.5	2.6	0.0	380.9
Initial Spares												
Total Proc Cost	356.4	6.2	1.0	2.5	2.4	2.4	2.5	2.5	2.5	2.6	0.0	380.9
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The Air Defense Targets program provides fixed wing, rotary wing, target control systems and ancillary equipment for worldwide active Army and reserve component air defense training. This training consists of guns live fire and precision gunnery system (PGS) training, quality assurance, lot acceptance, production qualification, and first article tests.

During the budget years, the following items will be procured: the 1/5th scale Remotely Piloted Vehicle Target (RPVT) and ancillary hardware consisting of scoring equipment and control systems in support of gun and PGS training.

JUSTIFICATION: In support of soldier training, targets are provided to support these fielded systems: Avenger, MANPADS, Air-to-Air Stinger, Bradley Stinger Fighting Vehicle (BSFV) and Linebacker. Major items of target hardware which support or will support soldier training include the 1/5th Scale RPVT, the target control systems and ancillary equipment. Training requirements are generated by Department of Army major field commands, Training Centers, and Division Level Commands. These field requirements have been reviewed against fielding and force restructuring plans; they are consistent with approved training doctrine.

Exhibit P-5, Weapon Missiles Cost Analysis	Appropriation/ Budget Activity/Serial No: MISSILE PROCUREMENT / 5 / Support Equipment and Facilities	P-1 Line Item Nomenclature: AIR DEFENSE TARGETS (C93000)	Weapon System Type:	Date: February 2000

Cost Elements	ID CD	FY 98			FY 99			FY 00			FY 01		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$OOO	Each	$OOO	$OOO	Each	$OOO	$OOO	Each	$OOO	$OOO	Each	$OOO
MQM-107													
-Airframe/Engine													
-Technical Publications													
-Operating Costs					254			225					
-Other Costs					725			221					
SUBTOTAL					**979**			**446**					
RCMAT													
-Hardware													
-Operating Costs					27								
-Other Costs					17								
SUBTOTAL					**44**								
1/5 SCALE													
-Hardware					470	235	2	795	265	3	1999	650	3
-Operating Costs					156			160			157		
-Other Costs					531			691			126		
SUBTOTAL					**1157**			**1646**			**2282**		
BATS													
-Hardware													
-Operating Costs					8			8					
-Other Costs					46			43					
SUBTOTAL					**54**			**51**					
TOWED TARGETS													
-Hardware													
-Operating Costs					5								
-Other Costs					2								
SUBTOTAL					**7**								
GROUND CONTROL SYSTEMS													
-Hardware													
-Operating Costs													
-Other Costs													
SUBTOTAL													
ANCILLARY/AUGMENTATION													
-Hardware					28	1	28	53	2	27			
-Operating Costs					99			82			110		
-Other Costs					144			74			2		
SUBTOTAL					**271**			**209**			**112**		
GRAND TOTAL					**2512**			**2352**			**2394**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 5 / Support Equipment and Facilities

Weapon System Type:

P-1 Line Item Nomenclature: AIR DEFENSE TARGETS (C93000)

WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $OOO	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
1/5 Scale										
FY99	Continental RPV, Barstow, CA	FP	AMCOM	Nov-98	Jan-99	235		Yes		Option
FY00	Continental RPV, Barstow, CA	FP	AMCOM	Oct-99	Dec-99	265		Yes		Option
FY01	Continental RPV, Barstow, CA	FP	AMCOM	Oct-00	Dec-00	650		Yes		Option
ANCILLARY/AUGMENTATION										
FY99										
- GSQ-102 Scoring Ground Stations	Cartwright Eng., Fullerton, CA	FP	AMCOM	Mar-99	May-99	1		Yes		Option
FY00										
- GSQ-102 Scoring Ground Stations	Cartwright Eng., Fullerton, CA	FP	AMCOM	Nov-99	Jul-00	2		Yes		Option

REMARKS:

Exhibit P-40, Budget Item Justification Sheet

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 5 / Support Equipment and Facilities

P-1 Item Nomenclature: ITEMS LESS THAN $5.0M (MISSILES) (CL2000)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	35.0	1.0	0.9	0.9	1.0	1.0	1.0	0.9	0.9	1.0	0.0	43.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	35.0	1.0	0.9	0.9	1.0	1.0	1.0	0.9	0.9	1.0	0.0	43.6
Initial Spares												
Total Proc Cost	35.0	1.0	0.9	0.9	1.0	1.0	1.0	0.9	0.9	1.0	0.0	43.6
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION:
Provides for procurement of various tools and shop sets to support the Army's missile systems worldwide.

JUSTIFICATION:
Funding is required for procurement of tools and shop sets to support the following systems:

MLRS
TOW
AVENGER

Exhibit P-5, Weapon Missiles Cost Analysis	Appropriation/ Budget Activity/Serial No: MISSILE PROCUREMENT / 5 / Support Equipment and Facilities	P-1 Line Item Nomenclature: ITEMS LESS THAN $5.0M (MISSILES) (CL2000)	Weapon System Type:	Date: 36557

Cost Elements	ID CD	FY 98			FY 99			FY 00			FY 01		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
1. MLRS													
COMPONENTS					457			459			453		
ASSEMBLY					238			279			279		
1. TOW													
COMPONENTS					14			22			22		
ASSEMBLY					6			12			9		
1. AVENGER													
COMPONENTS					131			120			120		
ASSEMBLY					68			89			86		
TOTAL					914			981			969		

NOTE: AL ARE MISSILE TOOL KITS
NO MODS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 5 / Support Equipment and Facilities

P-1 Item Nomenclature: MISSILE DEMILITARIZATION (HL2000)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	1.6	1.5	1.5	1.5	1.4	1.3	1.4	5.0	7.3	13.1		35.5
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	1.6	1.5	1.5	1.5	1.4	1.3	1.4	5.0	7.3	13.1		35.5
Initial Spares												
Total Proc Cost	1.6	1.5	1.5	1.5	1.4	1.3	1.4	5.0	7.3	13.1		35.5
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The Missile Demilitarization Program provides for the demilitarization of Army missiles and missile components that are obsolete or excess to Army requirements, in accordance with the guidelines of the Resource Conservation and Recovery Act.

JUSTIFICATION: Demilitarization of tactical missiles employs the Resource Recovery and Recycling (R3) method. This approach is consistent with national and international environmental policies and Army Materiel Command directives. The tactical missiles and component stockpiles will expand dramatically by FY 04. The stockpiles will grow to over 600,000 missiles and components by 2014. Approximately 50,000 missiles/components are in the current stockpile awaiting demilitarization. Because the current stockpile is small, the Army relies on the Open Burn Open Detonation (OB/OD) destruction method. The increasing quantity of missiles and components requiring disposition makes continued use of this method infeasible. The OB/OD approach cannot continue to be relied upon to handle the large and emerging Army missile demilitarization requirements. The funding in FY01 will continue the process of demilitarization of priority one (obsolete, excess, environment-sensitive and using valuable storage space) missiles, i.e., SHILLELAGH, NIKE-HERCULES, and TOW.

Exhibit P-5, Weapon Missiles Cost Analysis	Appropriation/ Budget Activity/Serial No: MISSILE PROCUREMENT / 5 / Support Equipment and Facilities	P-1 Line Item Nomenclature: MISSILE DEMILITARIZATION (HL2000)	Weapon System Type:	Date: February 2000

Cost Elements	ID CD	FY 98			FY 99			FY 00			FY 01		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$OOO	Each	$OOO	$OOO	Each	$OOO	$OOO	Each	$OOO	$OOO	Each	$OOO
SHILLELAGH					880	4,668	-	801	5,588	0	809	5,800	0
NIKE - HERCULES					275	255	1	85	135	1			
HAWK Motors					235	258	1						
STINGER					9	13	1						
TOW								499	3,000	0	532	2,900	0
R3 Assessment					54								
TOTAL					**1,453**			**1,385**			**1,341**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2000

Appropriation / Budget Activity/Serial No: MISSILE PROCUREMENT / 5 / Support Equipment and Facilities

P-1 Item Nomenclature: PRODUCTION BASE SUPPORT (CA0100)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	591.3	1.7	3.3	3.2	3.2	3.1	3.4	3.4	3.5	3.5	0.0	619.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	591.3	1.7	3.3	3.2	3.2	3.1	3.4	3.4	3.5	3.5	0.0	619.6
Initial Spares												
Total Proc Cost	591.3	1.7	3.3	3.2	3.2	3.1	3.4	3.4	3.5	3.5	0.0	619.6
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: This program provides for Production Support and Equipment Replacement (PSR) of Government-owned equipment used in production and production testing of missile systems or missile components. Funds are used to establish, modernize, expand or replace Army-owned industrial facilities.

JUSTIFICATION: The FY01 funds include above routine maintenance on real property, replacement/rehabilitation of existing equipment or instrumentation and modernization of test facilities at the Redstone Arsenal Technical Test Center and White Sands Missile Range. The FY01 funds will also be important to sustain the Army's missile warhead production capability, to eliminate safety hazards, etc., at the Iowa Army Ammunition Plant.

Examples of projects funded include:

Redstone Technical Test Center - production test range instrumentation upgrade, tape recorder upgrade
White Sands Missile Range - test equipment replacement, dynamic vibration test equipment
Iowa Army Ammunition Plant - 800 ton warhead billet press, coordinate measurement machine, mass spectrometer with thermal analyzer.

Exhibit P-5, Weapon Missiles Cost Analysis	Appropriation/ Budget Activity/Serial No: MISSILE PROCUREMENT / 5 / Support Equipment and Facilities	P-1 Line Item Nomenclature: PRODUCTION BASE SUPPORT (CA0100)	Weapon System Type:	Date: February 2000

Cost Elements	ID CD	FY 98			FY 99			FY 00			FY 01		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
These funds purchase new or upgrade existing production acceptance test equipment and instrumentation for Redstone Technical Test Center and White Sands Missile Range.					1486			1468			1446		
Iowa Army Ammo Plant (IAAP). Funds are essential to sustain the Army's missile warhead production capability, to eliminate safety hazards by replacing worn equipment and to refurbish facilities.					1743			1724			1698		
TOTAL					**3229**			**3192**			**3144**		