

DEPARTMENT OF THE ARMY

Procurement Programs



Committee Staff Procurement Backup Book
FY 2004/ FY 2005 Biennial Budget Submission

MISSILE PROCUREMENT, ARMY

APPROPRIATION

February 2003

MISSILE PROCUREMENT, ARMY

For construction, procurement, production, modification, and modernization of missiles, equipment, including ordnance, ground handling equipment, spare parts, and accessories therefor; specialized equipment and training devices; expansion of public and private plants, including the land necessary therefor, for the foregoing purposes, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to approval of title; and procurement and installation of equipment, appliances, and machine tools in public and private plants; reserve plant and Government and contractor-owned equipment layaway; and other expenses necessary for the foregoing purposes, \$1,459,462,000, to remain available for obligation until September 30, 2006.

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APPROPRIATION SUMMARY

APPROPRIATION

Missile Procurement, Army

TOTAL PROCUREMENT PROGRAM

DOLLARS IN THOUSANDS

<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
1,028,981	1,077,448	1,459,462	1,408,639
1,028,981	1,077,448	1,459,462	1,408,639

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APPROPRIATION Missile Procurement, Army ACTIVITY		DOLLARS IN THOUSANDS				PAGE
		<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	
02	Other missiles	893,675	769,896	1,152,385	1,249,774	4
03	Modification of missiles	110,211	240,237	249,640	117,748	6
04	Spares and repair parts	15,116	54,950	50,542	34,082	7
05	Support equipment and facilities	9,979	12,365	6,895	7,035	8
APPROPRIATION TOTALS		1,028,981	1,077,448	1,459,462	1,408,639	

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APPROPRIATION Missile Procurement, Army

ACTIVITY 02 Other missiles

DOLLARS IN THOUSANDS

LINE NO	ITEM NOMENCLATURE	ID	FY 2002		FY 2003		FY 2004		FY 2005	
			QTY	COST	QTY	COST	QTY	COST	QTY	COST
<i>SURFACE-TO-AIR MISSILE SYSTEM</i>										
1	PATRIOT SYSTEM SUMMARY (C49100)	A					108	561,555	131	490,754
2	STINGER SYSTEM SUMMARY (C18500)	A	300	28,847	160	25,442		2,942		
3	AVENGER SYSTEM SUMMARY (C14900)			11,486						
4	Surface-Launched AMRAAM System Summary: (C81001)	A						7,452		22,016
	<i>SUB-ACTIVITY TOTAL</i>			<u>40,333</u>		<u>25,442</u>		<u>571,949</u>		<u>512,770</u>
<i>AIR-TO-SURFACE MISSILE SYSTEM</i>										
5	HELLFIRE SYS SUMMARY (C70000)	A		(249,938)		(190,662)		(33,061)		(28,526)
	Less: Advance Procurement (PY)			<u>(-11,599)</u>		<u>(-9,479)</u>				
				238,339		181,183		33,061		28,526
6	APKWS (Advanced Precision Kill Weapon System) (C70301)									14,442
7	APKWS (Advanced Precision Kill Weapon System) (C70301)									6,124
	Advance Procurement (CY)									
	<i>SUB-ACTIVITY TOTAL</i>			<u>238,339</u>		<u>181,183</u>		<u>33,061</u>		<u>49,092</u>
<i>ANTI-TANK/ASSAULT MISSILE SYSTEM</i>										
8	JAVELIN (AAWS-M) SYSTEM SUMMARY (CC0007)		4,139	(425,847)	1,478	(228,117)	901	(133,115)	1,062	(123,264)
	Less: Advance Procurement (PY)			<u>(-17,171)</u>		<u>(-8,950)</u>				<u>(-7,600)</u>
				408,676		219,167		133,115		115,664
9	JAVELIN (AAWS-M) SYSTEM SUMMARY (CC0007)									
	Advance Procurement (CY)							7,600		
10	LINE OF SIGHT ANTI-TANK (LOSAT) SYSTEM SUM (H09000)					(111)	76	(43,232)	165	(86,585)
	Less: Advance Procurement (PY)					<u>(-111)</u>				<u>(86,585)</u>
						0		43,232		86,585
11	LINE OF SIGHT ANTI-TANK (LOSAT) SYSTEM SUM (H09000)									
	Advance Procurement (CY)				111					

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APPROPRIATION Missile Procurement, Army

ACTIVITY 02 Other missiles

DOLLARS IN THOUSANDS

LINE NO	ITEM NOMENCLATURE	ID	FY 2002		FY 2003		FY 2004		FY 2005	
			QTY	COST	QTY	COST	QTY	COST	QTY	COST
12	TOW 2 SYSTEM SUMMARY (C59300) Less: Advance Procurement (PY)	A					200	(10,010)	500	(39,267)
										(-12,946)
								10,010		26,321
13	TOW 2 SYSTEM SUMMARY (C59300) Advance Procurement (CY)							16,366		
14	GUIDED MLRS ROCKET (GMLRS) (C65404)				108	36,550	786	107,759	1,026	112,646
15	MLRS REDUCED RANGE PRACTICE ROCKETS (RRPR) (C65405)				3,366	15,647	2,934	14,646	3,054	15,530
16	MLRS LAUNCHER SYSTEMS (C66400)		41	130,606	34	134,742		40,155		41,326
17	HIMARS LAUNCHER (C03000)				28	128,621	24	124,191	37	169,778
18	ARMY TACTICAL MSL SYS (ATACMS) - SYS SUM (C98510)	B	24	34,962	16	28,544	50	50,301	50	51,569
19	ATACMS BLKII SYSTEM SUMMARY (CA6101)	A		40,648						
20	ATACMS Penetrator (CA6111)	A							39	68,493
	<i>SUB-ACTIVITY TOTAL</i>			<u>615,003</u>		<u>563,271</u>		<u>547,375</u>		<u>687,912</u>
	ACTIVITY TOTAL			893,675		769,896		1,152,385		1,249,774

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APPROPRIATION Missile Procurement, Army

ACTIVITY 03 Modification of missiles

DOLLARS IN THOUSANDS

LINE NO	ITEM NOMENCLATURE	ID	FY 2002		FY 2003		FY 2004		FY 2005		
			QTY	COST	QTY	COST	QTY	COST	QTY	COST	
	<i>MODIFICATIONS</i>										
21	PATRIOT MODS (C50700)			24,819		148,671		212,575		86,131	
22	STINGER MODS (C20000)			5,761		1,467		973			
23	AVENGER MODS (CE8710)			1,877							
24	ITAS/TOW MODS (C61700)			64,316		58,918		15,707		9,814	
25	MLRS MODS (C67500)			13,438		31,181		19,918		21,328	
26	HIMARS MODIFICATIONS: (NON AAO) (C67501)							467		475	
	<i>SUB-ACTIVITY TOTAL</i>				110,211		240,237		249,640	117,748	
	ACTIVITY TOTAL				110,211		240,237		249,640	117,748	

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APPROPRIATION Missile Procurement, Army

ACTIVITY 04 Spares and repair parts

DOLLARS IN THOUSANDS

LINE NO	ITEM NOMENCLATURE	ID	FY 2002		FY 2003		FY 2004		FY 2005	
			QTY	COST	QTY	COST	QTY	COST	QTY	COST
	<i>SPARES AND REPAIR PARTS</i>									
27	SPARES AND REPAIR PARTS (CA0250)			15,116		54,950		50,542		34,082
	<i>SUB-ACTIVITY TOTAL</i>			<u>15,116</u>		<u>54,950</u>		<u>50,542</u>		<u>34,082</u>
	ACTIVITY TOTAL			15,116		54,950		50,542		34,082

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APPROPRIATION Missile Procurement, Army

ACTIVITY 05 Support equipment and facilities

DOLLARS IN THOUSANDS

LINE NO	ITEM NOMENCLATURE	ID	FY 2002		FY 2003		FY 2004		FY 2005	
			QTY	COST	QTY	COST	QTY	COST	QTY	COST
<i>SUPPORT EQUIPMENT AND FACILITIES</i>										
28	AIR DEFENSE TARGETS (C93000)			3,286		3,349		3,464		3,556
29	ITEMS LESS THAN \$5.0M (MISSILES) (CL2000)			1,027		891		10		10
30	MISSILE DEMILITARIZATION (HL2000)			2,330		4,811				
31	PRODUCTION BASE SUPPORT (CA0100)			3,336		3,314		3,421		3,469
<i>SUB-ACTIVITY TOTAL</i>				9,979		12,365		6,895		7,035
ACTIVITY TOTAL				9,979		12,365		6,895		7,035
APPROPRIATION TOTAL				1,028,981		1,077,448		1,459,462		1,408,639

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NOMENCLATURE INDEX

SSN	LINE	PAGE	NOMENCLATURE
C93000	28	8	AIR DEFENSE TARGETS (C93000)
C70301	6	4	APKWS (Advanced Precision Kill Weapon System) (C70301)
C70301	7	4	APKWS (Advanced Precision Kill Weapon System) (C70301)
C98510	18	5	ARMY TACTICAL MSL SYS (ATACMS) - SYS SUM (C98510)
CA6101	19	5	ATACMS BLKII SYSTEM SUMMARY (CA6101)
CA6111	20	5	ATACMS Penetrator (CA6111)
CE8710	23	6	AVENGER MODS (CE8710)
C14900	3	4	AVENGER SYSTEM SUMMARY (C14900)
C65404	14	5	GUIDED MLRS ROCKET (GMLRS) (C65404)
C70000	5	4	HELLFIRE SYS SUMMARY (C70000)
C03000	17	5	HIMARS LAUNCHER (C03000)
C67501	26	6	HIMARS MODIFICATIONS: (NON AAO) (C67501)
C61700	24	6	ITAS/TOW MODS (C61700)
CL2000	29	8	ITEMS LESS THAN \$5.0M (MISSILES) (CL2000)
CC0007	8	4	JAVELIN (AAWS-M) SYSTEM SUMMARY (CC0007)
CC0007	9	4	JAVELIN (AAWS-M) SYSTEM SUMMARY (CC0007)
C70000	5	4	Less: Advance Procurement (PY)
CC0007	8	4	Less: Advance Procurement (PY)
H09000	10	4	Less: Advance Procurement (PY)
C59300	12	5	Less: Advance Procurement (PY)
H09000	10	4	LINE OF SIGHT ANTI-TANK (LOSAT) SYSTEM SUM (H09000)
H09000	11	4	LINE OF SIGHT ANTI-TANK (LOSAT) SYSTEM SUM (H09000)
HL2000	30	8	MISSILE DEMILITARIZATION (HL2000)
C66400	16	5	MLRS LAUNCHER SYSTEMS (C66400)
C67500	25	6	MLRS MODS (C67500)
C65405	15	5	MLRS REDUCED RANGE PRACTICE ROCKETS (RRPR) (C65405)
C50700	21	6	PATRIOT MODS (C50700)
C49100	1	4	PATRIOT SYSTEM SUMMARY (C49100)
CA0100	31	8	PRODUCTION BASE SUPPORT (CA0100)
CA0250	27	7	SPARES AND REPAIR PARTS (CA0250)
C20000	22	6	STINGER MODS (C20000)
C18500	2	4	STINGER SYSTEM SUMMARY (C18500)
C81001	4	4	Surface-Launched AMRAAM System Summary: (C81001)
C59300	12	5	TOW 2 SYSTEM SUMMARY (C59300)
C59300	13	5	TOW 2 SYSTEM SUMMARY (C59300)

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SSN	LINE	PAGE	NOMENCLATURE
C03000	17	5	HIMARS LAUNCHER (C03000)
C14900	3	4	AVENGER SYSTEM SUMMARY (C14900)
C18500	2	4	STINGER SYSTEM SUMMARY (C18500)
C20000	22	6	STINGER MODS (C20000)
C49100	1	4	PATRIOT SYSTEM SUMMARY (C49100)
C50700	21	6	PATRIOT MODS (C50700)
C59300	12	5	TOW 2 SYSTEM SUMMARY (C59300)
C59300	12	5	Less: Advance Procurement (PY)
C59300	13	5	TOW 2 SYSTEM SUMMARY (C59300)
C61700	24	6	ITAS/TOW MODS (C61700)
C65404	14	5	GUIDED MLRS ROCKET (GMLRS) (C65404)
C65405	15	5	MLRS REDUCED RANGE PRACTICE ROCKETS (RRPR) (C65405)
C66400	16	5	MLRS LAUNCHER SYSTEMS (C66400)
C67500	25	6	MLRS MODS (C67500)
C67501	26	6	HIMARS MODIFICATIONS: (NON AAO) (C67501)
C70000	5	4	HELLFIRE SYS SUMMARY (C70000)
C70000	5	4	Less: Advance Procurement (PY)
C70301	6	4	APKWS (Advanced Precision Kill Weapon System) (C70301)
C70301	7	4	APKWS (Advanced Precision Kill Weapon System) (C70301)
C81001	4	4	Surface-Launched AMRAAM System Summary: (C81001)
C93000	28	8	AIR DEFENSE TARGETS (C93000)
C98510	18	5	ARMY TACTICAL MSL SYS (ATACMS) - SYS SUM (C98510)
CA0100	31	8	PRODUCTION BASE SUPPORT (CA0100)
CA0250	27	7	SPARES AND REPAIR PARTS (CA0250)
CA6101	19	5	ATACMS BLKII SYSTEM SUMMARY (CA6101)
CA6111	20	5	ATACMS Penetrator (CA6111)
CC0007	8	4	JAVELIN (AAWS-M) SYSTEM SUMMARY (CC0007)
CC0007	8	4	Less: Advance Procurement (PY)
CC0007	9	4	JAVELIN (AAWS-M) SYSTEM SUMMARY (CC0007)
CE8710	23	6	AVENGER MODS (CE8710)
CL2000	29	8	ITEMS LESS THAN \$5.0M (MISSILES) (CL2000)
H09000	10	4	LINE OF SIGHT ANTI-TANK (LOSAT) SYSTEM SUM (H09000)
H09000	10	4	Less: Advance Procurement (PY)
H09000	11	4	LINE OF SIGHT ANTI-TANK (LOSAT) SYSTEM SUM (H09000)
HL2000	30	8	MISSILE DEMILITARIZATION (HL2000)

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Exhibit P-1M, Procurement Programs - Modification Summary

<u>System/Modification</u>	<u>2002 & Prior</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>To Complete</u>	<u>Total Program</u>
PATRIOT MODS (C50700)										
RLCEU	53.4	22.5	43.2	10.7						129.8
Integrated Diagnostic Support System	12.9									12.2
BCP (Link 16/JTIDS)	11.2	13.8	19.1	7.3						51.4
Tactical Command System	2.5									2.4
RAM MODS	26.9	10.8	11.5	23.2	20.9	38.1	51.0	27.4		209.7
Radar Phase III		43.7	65.6							109.3
CDI Phase III		17.0	25.5							42.5
TCS (TIBS/IBS, FO, C4I, NMNG)		14.3	11.4	11.3	9.1	9.8				56.0
Recapitalization		26.6	36.3	33.6	45.4	29.6	20.9	14.5		206.9
Total	106.9	148.7	212.6	86.1	75.4	77.5	71.9	41.9		820.2
STINGER BLK I UPGRADES (C21300)										
Stinger Block I Platform Upgrades (C21300)	14.2	1.5	1.0							16.7
Stinger Block I Missile Upgrades (C21300)	138.9									138.9
Stinger Troop Proficiency Trainer	3.1									3.1
Linebacker Training Devices	5.8									5.8
Total	162.0	1.5	1.0							164.5
AVENGER MODS (CE8710)										
Slew-To-Cue (STC)	27.9									27.9
Environmental Control Unit/Prime Power Unit	20.0									20.0
Total	47.8									47.8
ITAS/TOW MODS (C61700)										
Missile Conversion (HEAT TO PRACTICE)	40.7	5.4	1.4						0.4	47.9
MISSILE MODIFICATION (MOIC)	14.0									
ITAS (IMPROVED TARGET ACQUISITION SYSTEM)	352.0	53.5	14.3	9.8	9.7					439.3

Exhibit P-1M, Procurement Programs - Modification Summary

<u>System/Modification</u>	<u>2002 & Prior</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>To Complete</u>	<u>Total Program</u>
CAPS (COUNTER ACTIVE PROTECTION SYSTEM)	13.6									6.8
Total	420.3	58.9	15.7	9.8	9.7				0.4	494.0
MLRS MODS (C67500)										
Inactive Mods	220.3									220.3
Interim Improved Position Determining System Lchr	23.9	1.4	1.4							26.7
Selective Availability Anti-Spoofing Module							13.1	2.3	6.3	21.7
Joint Technical Architecture-Army (JTA-A)	11.1	0.3	0.3	7.2	4.1	3.7				27.2
Improved Weapons Interface Unit Modification MOD		14.5	4.4	4.7	2.8	0.7				27.2
Engine/Transmission Diagnostic (Common IEDB)				1.1	1.7	2.4	2.9	2.6	0.2	10.8
Streamlined Technology Enhancement Program (STEP)									105.8	105.8
M270A1 Generator Improvements			1.1	0.8	0.8	0.1				2.8
Obsolescence Mitigation/ECP Reliability Intg	11.2	4.8	3.3	3.2	2.8	2.3	2.9	1.9	27.8	60.2
600 hp Engine Conversion		5.9	6.5	0.5						13.0
Environmental Control Unit/Auxiliary Power Unit		4.2	2.8	3.8	3.9	0.8				15.5
Total	266.5	31.2	19.8	21.4	16.1	9.9	19.3	6.7	140.1	531.1
HIMARS MODIFICATIONS: (NON AAO) (C67501)										
Block Reliability MODs			0.2	0.2	3.2	8.4	12.7	5.0	119.0	148.7
Cordless Vehicular Intercommunication System (VIS)					4.1	2.6	2.6	2.6	1.9	13.8
Obsolescence Mitigation			0.3	0.3	0.7	0.9	0.8	0.7	10.9	14.7
Total			0.5	0.5	8.1	12.0	16.1	8.4	131.8	177.3
Grand Total	1003.6	240.2	249.5	117.8	109.4	99.4	107.3	56.9	272.3	2234.9

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: P-1 Item Nomenclature
 Missile Procurement, Army /2/Other missiles Patriot System Summary (C49100)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	6575				108	131	144	144	184	184		7470
Gross Cost	9766.1				561.6	490.8	490.9	490.8	620.5	626.6		13047.1
Less PY Adv Proc	123.3											123.3
Plus CY Adv Proc	123.3											123.3
Net Proc (P-1)	9766.1				561.6	490.8	490.9	490.8	620.5	626.6		13047.1
Initial Spares	344.3											344.3
Total Proc Cost	10110.3				561.6	490.8	490.9	490.8	620.5	626.6		13391.4
Flyaway U/C												
Wpn Sys Proc U/C					5.2	3.7	3.4	3.4	3.4	3.4		

Description:

DESCRIPTION: PATRIOT is an advanced Surface-to-Air guided missile system with a high single shot kill probability capable of operation in the presence of Electronic Countermeasures (ECM) and able to conduct multiple simultaneous engagements against high performance air breathing targets and ballistic missiles likely to be encountered by US Forces. The system utilizes a multifunction Phased Array Radar, a digital computer controlling system function, a guidance system combining command and homing (track-via-missile) features, and provides the operator the ability to control operations. PATRIOT totally replaced Nike Hercules and partially replaced HAWK. It has the advantage of reducing manpower and logistics costs associated with replaced systems while providing improved high and medium altitude air defense. The system is integrated with the U.S. Air Force and U.S. Navy in the overall air defense of theater operations. The PATRIOT Advanced Capability (PAC-3) program is a result of a series of integrated, phased system improvements in combination with the PAC-3 missile which uses hit-to-kill technology. Modification to the system, which includes radar enhancements, communications upgrades, and increased command, control, and computer capability, will increase PATRIOT's effectivity, survivability, flexibility of defense design, footprint, and detection of smaller low radar cross section targets. Funds will ensure PAC-3 will remain interoperable in the BMDS. The PAC-3 program was transferred from the Army back to the Missile Defense Agency (MDA) in FY03 per Congressional direction. The Army requirement for PAC-3 supports the Legacy to Objective transition path of the Transformation Campaign Plan (TCP).

Justification:

JUSTIFICATION: FY04/05 funding is required to support the planned PAC-3 PATRIOT system through modification of existing ground support equipment and procurement of the PAC-3 missiles.

Note: Missile quantities may be reduced (FY04-FY09) as a result of inflation adjustments and negotiations with the contractor. The prior year funding and quantities shown above reflect pre-PAC-3 configuration.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: P-1 Item Nomenclature
Missile Procurement, Army /2/Other missiles Patriot PAC-3 (C49200)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	6475				108	131	144	144	184	184		7370
Gross Cost	5064.5				561.6	490.8	490.9	490.8	620.5	626.6		8345.5
Less PY Adv Proc	123.3											123.3
Plus CY Adv Proc	123.3											123.3
Net Proc (P-1)	5064.5				561.6	490.8	490.9	490.8	620.5	626.6		8345.5
Initial Spares												
Total Proc Cost	5064.5				561.6	490.8	490.9	490.8	620.5	626.6		8345.5
Flyaway U/C												
Wpn Sys Proc U/C					5.2	3.7	3.4	3.4	3.4	3.4		

Description:

DESCRIPTION: PATRIOT is an advanced Surface-to-Air guided missile system with a high single shot kill probability capable of operation in the presence of Electronic Countermeasures (ECM) and able to conduct multiple simultaneous engagements against high performance air breathing targets and ballistic missiles likely to be encountered by US Forces. The system utilizes a multifunction Phased Array Radar, a digital computer controlling system function, a guidance system combining command and homing (track-via-missile) features, and provides the operator the ability to control operations. PATRIOT totally replaced Nike Hercules and partially replaced HAWK. It has the advantage of reducing manpower and logistics costs associated with replaced systems while providing improved high and medium altitude air defense. The system is integrated with the U.S. Air Force and U.S. Navy in the overall air defense of theater operations. The PATRIOT Advanced Capability (PAC-3) program is a result of a series of integrated, phased system improvements in combination with the PAC-3 missile which uses hit-to-kill technology. Modification to the system, which includes radar enhancements, communications upgrades, and increased command, control, and computer capability, will increase PATRIOT's effectivity, survivability, flexibility of defense design, footprint, and detection of smaller low radar cross section targets. Funds will ensure PAC-3 will remain interoperable in the BMDS. The PAC-3 program was transferred from the Army back to the Missile Defense Agency (MDA) in FY03 per Congressional direction. The Army requirement for PAC-3 supports the Legacy to Objective transition path of the Transformation Campaign Plan (TCP).

Justification:

JUSTIFICATION: FY04/05 funding is required to support the planned PAC-3 PATRIOT system through modification of existing ground support equipment and procurement of the PAC-3 missiles.

Note: Missile quantities may be reduced (FY04-FY09) as a result of inflation adjustments and negotiations with the contractor. The prior year funding and quantities shown above reflect pre-PAC-3 configuration.

Exhibit P-5, Weapon MSLS Cost Analysis		Appropriation/Budget Activity/Serial No. Missile Procurement, Army / 2 / Other missiles			P-1 Line Item Nomenclature: PATRIOT PAC-3 (C49200)			Weapon System Type:			Date: February 2003		
MSLS Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000
Missile Hardware - Recurring													
Missile Hardware							341045	108	3157.8		316689	131	2417.5
Field Surveillance							24276				21180		
Obsolescence							8372				8504		
SUBTOTAL							373693				346373		
Non-Recurring Costs													
Initial Production Facilitization							45000						
SUBTOTAL							45000						
Ground Support Equipment													
Radar Phase III													
CDI Phase III													
RLCEU													
Command Launch System							34084				33630		
MIDS													
Initial Spares													
SUBTOTAL							34084				33630		
Support Cost													
Contractor Engineering							36592				37249		
Government/Software Engineering							27419				28076		
Sys Engrg/Proj Mgmt (SEPM)							20776				21318		
Integrated Logistics Support							14191				14308		
Depot Maint Plant Equipment (DMPE)							1500				1500		
Fielding							8300				8300		
SUBTOTAL							108778				110751		
Note: Missile quantities may be reduced (FY04-FY09) as a result of inflation adjustments and negotiations with the contractor.													
Total							561555				490754		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No: Missile Procurement, Army / 2 / Other missiles		Weapon System Type:			P-1 Line Item Nomenclature: PATRIOT PAC3 (C49200)					
WBS Cost Elements:	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
Missile Hardware										
FY 1999 LRIPB MDA	LMMFC Dallas, TX	SS/CPIF	AMCOM	Dec 99	Sep 01	20	5124	NA		Jun 97
FY 2000 LRIP1 MDA	LMMFC Dallas, TX	SS/CPIF	AMCOM	May 00	May 02	32	5141	NA		Nov 99
FY 2001 LRIP2 MDA	LMMFC Dallas, TX	SS/CPIF	AMCOM	Dec 00	Feb 03	40	4535	NA		Aug 00
FY 2002 LRIP3 MDA	LMMFC Dallas, TX	SS/FPIS	AMCOM	Mar 02	Apr 04	72	4411	NA		Oct 01
FY 2003 MDA	LMMFC Dallas, TX	SS/FPIS	AMCOM	Dec 02	Apr 04	88	3680	NA		Aug 02
FY 2004	LMMFC Dallas, TX	SS/FFP	AMCOM	Nov 03	Mar 05	108	3158	NA		
FY 2005	LMMFC Dallas, TX	SS/FFP	AMCOM	Dec 04	Mar 06	131	2417	NA		
FY 2006	LMMFC Dallas, TX	SS/FFP	AMCOM	Dec 05	Mar 07	144	2246	NA		
FY 2007	LMMFC Dallas, TX	SS/FFP	AMCOM	Dec 06	Mar 08	144	2233	NA		
FY 2008	LMMFC Dallas, TX	SS/FFP	AMCOM	Dec 07	Mar 09	184	2486	NA		
FY 2009	LMMFC Dallas, TX	SS/FFP	AMCOM	Dec 08	Mar 10	184	2517	NA		

REMARKS: The pending FY03 Congressional Prior Approval reprogramming action will provide \$104M for the acceleration of LRIP 2 and LRIP 3 deliveries and 12 additional missiles in the FY03 Block 02 production buy. Schedule will be changed to reflect the acceleration once funds are received and contract actions taken. After the reprogramming action is approved the FY03 Block 02 quantity will reflect 100 PAC-3 missiles.

Note: Missile quantities may be reduced (FY04-FY09) as a result of inflation adjustments and negotiations with the contractor.

FY 02 / 03 BUDGET PRODUCTION SCHEDULE										P-1 Item Nomenclature: PATRIOT PAC-3 (C49200)										Date: February 2003																							
COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 02												Fiscal Year 03												LATER												
							Calendar Year 02												Calendar Year 03																								
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP													
PAC-3 MISSILE (LRIP-BASIC) MDA																																											
	1	FY 98	A	20	16	4																																		0			
PAC-3 MISSILE (LRIP-1) MDA																																								0			
	1	FY 00	A	32	0	32								2	4	4	4	4	4	6	4	4																		10			
PAC-3 MISSILE (LRIP-2) MDA																																								10			
	1	FY 01	A	40	0	40																																		72			
PAC-3 MISSILE (LRIP-3) MDA																																									72		
PAC-3 Missile (FY03)																																									88		
	1	FY 03	A	88	0	88																																		88			
PAC-3 Missile (FY04)																																									108		
	1	FY 04	A	108	0	108																																		131			
PAC-3 Missile (FY05)																																									131		
	1	FY 05	A	131	0	131																																		144			
PAC-3 Missile (FY06)																																									144		
	1	FY 06	A	144	0	144																																			144		
PAC-3 Missile (FY07)																																										144	
	1	FY 07	A	144	0	144																																				144	
PAC-3 Missile (FY08)																																											

MFR	NAME/LOCATION	PRODUCTION RATES			REACHED	MFR Number	ADMINLEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
		MIN.	1-8-5	MAX.			Prior 1 Oct	After 1 Oct			
1	LMMFC, Dallas, TX	6.00	20.00	30.00	0	1	INITIAL	7	1	25	26
							REORDER	8	1	16	17
							INITIAL				
							REORDER				
							INITIAL				
							REORDER				
							INITIAL				
							REORDER				
							INITIAL				
							REORDER				

FY 04 / 05 BUDGET PRODUCTION SCHEDULE							P-1 Item Nomenclature: PATRIOT PAC-3 (C49200)															Date: February 2003																				
COST ELEMENTS	M F R	FY	S E R V	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 04												Fiscal Year 05												L A T E R											
							Calendar Year 04												Calendar Year 05																							
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P												
	1	FY 08	A	184	0	184																																	184			
PAC-3 Missile (FY09)																																									184	
	1	FY 09	A	184	0	184																																				
Total				1147	82	1065	6	4					8	8	16	14	18	16	16	20	16	12	12	8	8	8	8	8	8	10	8	8							841			
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P												
M F R	NAME/LOCATION				PRODUCTION RATES			MFR	ADMINLEAD TIME		MFR	TOTAL	REMARKS																													
					MIN.	1-8-5	MAX.	REACHED	Number	Prior 1 Oct	After 1 Oct	After 1 Oct	After 1 Oct																													
1	LMMFC, Dallas, TX				6.00	20.00	30.00	0	1	INITIAL	7	1	25	26	The pending FY 03 Reprogramming action will provide \$104M for the acceleration of LRIP 2 and LRIP 3 deliveries; and 12 additional missiles in the FY 03 Block 02 production buy. Schedule will be changed to reflect the acceleration once funds are received and contract actions taken. After the reprogramming action is approved the FY 03 Block 02 quantity will reflect 100 PAC-3 missiles. Missile quantities may be reduced (FY04-FY09) due to inflation.																											
										REORDER	8	1	16	17																												
										INITIAL																																
										REORDER																																
										INITIAL																																
										REORDER																																

FY 06 / 07 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature:
PATRIOT PAC-3 (C49200)

Date:
February 2003

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 06												Fiscal Year 07												LATER
							Calendar Year 06												Calendar Year 07												
							Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
PAC-3 MISSILE (LRIP-BASIC) MDA																															
	1	FY 98	A	20	20	0																						0			
PAC-3 MISSILE (LRIP-1) MDA																															
	1	FY 00	A	32	32	0																						0			
PAC-3 MISSILE (LRIP-2) MDA																															
	1	FY 01	A	40	40	0																						0			
PAC-3 MISSILE (LRIP-3) MDA																															
	1	FY 02	A	72	72	0																						0			
PAC-3 Missile (FY03)																															
	1	FY 03	A	88	88	0																						0			
PAC-3 Missile (FY04)																															
	1	FY 04	A	108	54	54	12	10	12	8	12																	0			
PAC-3 Missile (FY05)																															
	1	FY 05	A	131	0	131						8	8	8	12	12	12	11	12	12	12	12	12				0				
PAC-3 Missile (FY06)																															
	1	FY 06	A	144	0	144			A															12	12	12	14	12	12	58	
PAC-3 Missile (FY07)																															
	1	FY 07	A	144	0	144															A							144			
PAC-3 Missile (FY08)																															

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			REACHED D+	MFR Number	ADMINLEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS	
		MIN.	1-8-5	MAX.			Prior 1 Oct	After 1 Oct				
1	LMMFC, Dallas, TX	6.00	20.00	30.00	0	1	INITIAL REORDER	7 8	1 1	25 16	26 17	The pending FY03 Congressional Prior Approval reprogramming action will provide \$104M for the acceleration of LRIP 2 and LRIP 3 deliveries and 12 additional missiles in the FY03 Block 02 production buy. Schedule will be changed to reflect the acceleration once funds are received and contract actions taken. After the reprogramming action is approved the FY03 Block 02 quantity will reflect 100 PAC-3 missiles. Missile quantities may be reduced (FY04-FY09) due to inflation.
							INITIAL REORDER					
							INITIAL REORDER					
							INITIAL REORDER					
							INITIAL REORDER					
							INITIAL REORDER					
							INITIAL REORDER					
							INITIAL REORDER					

FY 08 / 09 BUDGET PRODUCTION SCHEDULE							P-1 Item Nomenclature: PATRIOT PAC-3 (C49200)													Date: February 2003											
COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 08												Fiscal Year 09												LATER
							Calendar Year 08												Calendar Year 09												
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
PAC-3 MISSILE (LRIP-BASIC) MDA																															
PAC-3 MISSILE (LRIP-1) MDA	1	FY 98	A	20	20	0																									
PAC-3 MISSILE (LRIP-2) MDA	1	FY 00	A	32	32	0																									
PAC-3 MISSILE (LRIP-3) MDA	1	FY 01	A	40	40	0																									
PAC-3 MISSILE (LRIP-3) MDA	1	FY 02	A	72	72	0																									
PAC-3 Missile (FY03)	1	FY 03	A	88	88	0																									
PAC-3 Missile (FY04)	1	FY 04	A	108	108	0																									
PAC-3 Missile (FY05)	1	FY 05	A	131	131	0																									
PAC-3 Missile (FY06)	1	FY 06	A	144	86	58	12	14	12	8	12																				
PAC-3 Missile (FY07)	1	FY 07	A	144	0	144						12	12	12	14	12	12	12	12	14	12	8	12								
PAC-3 Missile (FY08)																															
							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			REACHED D+	MFR Number	ADMINLEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS																				
		MIN.	1-8-5	MAX.			Prior 1 Oct	After 1 Oct																							
1	LMMFC, Dallas, TX	6.00	20.00	30.00	0	1	INITIAL	7	1	25	26	The pending FY03 Congressional Prior Approval reprogramming action will provide \$104M for the acceleration of LRIP 2 and LRIP 3 deliveries and 12 additional missiles in the FY03 Block 02 production buy. Schedule will be changed to reflect the acceleration once funds are received and contract actions taken. After the reprogramming action is approved the FY03 Block 02 quantity will reflect 100 PAC-3 missiles. Missile quantities may be reduced (FY04-FY09) due to inflation.																			
							REORDER	8	1	16	17																				
							INITIAL																								
							REORDER																								
							INITIAL																								
							REORDER																								
							INITIAL																								
							REORDER																								
							INITIAL																								
							REORDER																								

FY 10 / 11 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature:
PATRIOT PAC-3 (C49200)

Date:
February 2003

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 10												Fiscal Year 11												LATER
							Calendar Year 10												Calendar Year 11												
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
PAC-3 MISSILE (LRIP-BASIC) MDA																															
	1	FY 98	A	20	20	0																								0	
PAC-3 MISSILE (LRIP-1) MDA																															
	1	FY 00	A	32	32	0																								0	
PAC-3 MISSILE (LRIP-2) MDA																															
	1	FY 01	A	40	40	0																								0	
PAC-3 MISSILE (LRIP-3) MDA																															
	1	FY 02	A	72	72	0																								0	
PAC-3 Missile (FY03)																															
	1	FY 03	A	88	88	0																								0	
PAC-3 Missile (FY04)																															
	1	FY 04	A	108	108	0																								0	
PAC-3 Missile (FY05)																															
	1	FY 05	A	131	131	0																								0	
PAC-3 Missile (FY06)																															
	1	FY 06	A	144	144	0																								0	
PAC-3 Missile (FY07)																															
	1	FY 07	A	144	144	0																								0	
PAC-3 Missile (FY08)																															

MFR	NAME/LOCATION	PRODUCTION RATES			REACHED D+	MFR Number	ADMINLEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
		MIN.	1-8-5	MAX.			Prior 1 Oct	After 1 Oct			
1	LMMFC, Dallas, TX	6.00	20.00	30.00	0	1	INITIAL	7	1	25	26
							REORDER	8	1	16	17
							INITIAL				
							REORDER				
							INITIAL				
							REORDER				
							INITIAL				
							REORDER				
							INITIAL				
							REORDER				

The pending FY03 Congressional Prior Approval reprogramming action will provide \$104M for the acceleration of LRIP 2 and LRIP 3 deliveries and 12 additional missiles in the FY03 Block 02 production buy. Schedule will be changed to reflect the acceleration once funds are received and contract actions taken. After the reprogramming action is approved the FY03 Block 02 quantity will reflect 100 PAC-3 missiles. Missile quantities may be reduced (FY04-FY09) as a result of inflation.

FY 10 / 11 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature:
PATRIOT PAC-3 (C49200)

Date:
February 2003

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 10												Fiscal Year 11												L A T E R						
							Calendar Year 10												Calendar Year 11																		
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P							
PAC-3 Missile (FY09)	1	FY 08	A	184	106	78	16	18	16	12	16																										0
	1	FY 09	A	184	0	184							16	16	16	18	16	16	16	16	16	18	16	12	8											0	
Total				1147	885	262	16	18	16	12	16	16	16	16	18	16	16	16	16	16	18	16	12	8													

MFR	NAME/LOCATION	PRODUCTION RATES			REACHED D+	MFR Number	ADMINLEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS	
REORDER		MIN.	1-8-5	MAX.			Prior 1 Oct	After 1 Oct				
1	LMMFC, Dallas, TX	6.00	20.00	30.00	0	1	INITIAL REORDER	7 8	1 1	25 16	26 17	The pending FY03 Congressional Prior Approval reprogramming action will provide \$104M for the acceleration of LRIP 2 and LRIP 3 deliveries and 12 additional missiles in the FY03 Block 02 production buy. Schedule will be changed to reflect the acceleration once funds are received and contract actions taken. After the reprogramming action is approved the FY03 Block 02 quantity will reflect 100 PAC-3 missiles. Missile quantities may be reduced (FY04-FY09) as a result of inflation.
							INITIAL REORDER					
							INITIAL REORDER					
							INITIAL REORDER					
							INITIAL REORDER					
							INITIAL REORDER					

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: P-1 Item Nomenclature
 Missile Procurement, Army /2/Other missiles STINGER SYSTEM SUMMARY (C18500)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	2266		300	160								2726
Gross Cost	1143.3		28.8	25.4	2.9							1200.5
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	1143.3		28.8	25.4	2.9							1200.5
Initial Spares	1.6											1.6
Total Proc Cost	1144.9		28.8	25.4	2.9							1202.1
Flyaway U/C												
Wpn Sys Proc U/C			0.1	0.2								

Description:

The Stinger Block I missile incorporates the latest hardware and software modifications which increase the overall missile performance against low observable targets, cruise missiles and unmanned aerial vehicles. The Block I missile also resolves a key aviation deficiency by incorporating a Roll Frequency Sensor/Seeker that eliminates the need for super-elevation on aviation platforms. The Stinger Block I missile is compatible with all current and planned launch platforms, including Air-To-Air Stinger, Avenger, Bradley Linebacker and manportable, shoulder-fired applications. The Block I missile program also incorporates component redesign and replacement to address service life and obsolescence issues. The system supports the Legacy transition path of the Transformation Campaign Plan (TCP).

Justification:

FY04 funds the final year of procurement for the Stinger Block I program. The Stinger Block I program has been terminated after FY03 in order to fund Transformation and other higher Army priorities.

Note: Due to a \$5.15 million FY02 rescission, the missile buy has been reduced by a quantity of 34 in FY02. The FY03 missile quantities have been reduced by 21 missiles due to \$5.0 million Congressional funding reduction.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: P-1 Item Nomenclature
 Missile Procurement, Army /2/Other missiles STINGER BLK 1 (C18600)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	2266		266	139								2671
Gross Cost	775.0		28.8	25.4	2.9							832.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	775.0		28.8	25.4	2.9							832.3
Initial Spares	0.8											0.8
Total Proc Cost	775.8		28.8	25.4	2.9							833.1
Flyaway U/C												
Wpn Sys Proc U/C			0.1	0.2								

Description:

The Stinger Block I missile incorporates the latest hardware and software modifications which increase the overall missile performance against low observable targets, cruise missiles and unmanned aerial vehicles. The Block I missile also resolves a key aviation deficiency by incorporating a Roll Frequency Sensor/Seeker that eliminates the need for super-elevation on aviation platforms. The Stinger Block I missile is compatible with all current and planned launch platforms, including Air-To-Air Stinger, Avenger, Bradley Linebacker and manportable, shoulder-fired applications. The Block I missile program also incorporates component redesign and replacement to address service life and obsolescence issues. The system supports the Legacy transition path of the Transformation Campaign Plan (TCP).

Justification:

FY04 funds the final year of procurement for the Stinger Block I program. The Stinger Block I program has been terminated after FY03 in order to fund Transformation and other higher Army priorities.

Note: Due to a \$5.15 million FY02 rescission, the missile buy has been reduced by a quantity of 34 in FY02. The FY03 missile quantities have been reduced by 21 missiles due to \$5.0 million Congressional funding reduction.

Exhibit P-5, Weapon MSLS Cost Analysis		Appropriation/Budget Activity/Serial No. Missile Procurement, Army / 2 / Other missiles			P-1 Line Item Nomenclature: STINGER BLK 1 (C18600)			Weapon System Type:			Date: February 2003		
MSLS Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
MISSILE HARDWARE - RECURRING													
Missile		23641	266	88.876	14533	139	104.554						
Warhead & Fuze		1500											
Dual Detectors		411											
Battery Coolant Unit					5005								
Containers		45			24								
Total Hardware Cost		25597			19562								
Flyaway Cost		25597			19562								
SUPPORT COST													
Government Engineering		1869			3000			1599					
Contractor Engineering		1031			2880			1343					
ECP		350											
Subtotal Support Cost		3250			5880			2942					
Total		28847			25442			2942					

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No: Missile Procurement, Army / 2 / Other missiles		Weapon System Type:			P-1 Line Item Nomenclature: STINGER BLK 1 (C18600)					
WBS Cost Elements:	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
Missile										
FY 2002	Raytheon Systems Company Tucson, AZ	SS/FP(Opt)	AMCOM	May-02	Jan-04	266	88.876	yes		
FY 2003	Raytheon Systems Company Tucson, AZ	SS/FP(Opt)	AMCOM	Jan-03	Sept-04	139	104.554	yes		

REMARKS: Note: Due to a \$5.15 million FY02 rescission, the missile buy has been reduced by a quantity of 34 in FY02. The FY03 missile quantities have been reduced by 21 missiles due to \$5.0 million Congressional funding reduction.

FY 02 / 03 BUDGET PRODUCTION SCHEDULE	P-1 Item Nomenclature: STINGER BLK 1 (C18600)	Date: February 2003
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COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 02												Fiscal Year 03												LATER
							Calendar Year 02												Calendar Year 03												
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Missile																															
	1	FY 02	A	266	0	266																						266			
	1	FY 03	A	139	0	139															A							139			
Total				405		405																						405			

	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			REACHED D+	MFR Number	ADMINLEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS	
		MIN.	1-8-5	MAX.			Prior 1 Oct	After 1 Oct				
1	Raytheon Systems Company, Tucson, AZ	32.00	83.00	375.00	0	1	INITIAL	0	4	20	24	
							REORDER	0	0	0	0	
							INITIAL					
							REORDER					
							INITIAL					
							REORDER					
							INITIAL					
							REORDER					

FY 06 / 07 BUDGET PRODUCTION SCHEDULE
 P-1 Item Nomenclature: STINGER BLK 1 (C18600)
 Date: February 2003

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 06												Fiscal Year 07												L A T E R
							Calendar Year 06												Calendar Year 07												
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Missile																															
	1	FY 02	A	266	266	0																								0	
	1	FY 03	A	139	139	0																								0	
Total				405	405																										

MFR	NAME/LOCATION	MIN.	1-8-5	MAX.	REACHED D+	MFR Number	INITIAL	REORDER	ADMIN LEAD TIME Prior 1 Oct	ADMIN LEAD TIME After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
1	Raytheon Systems Company, Tucson, AZ	32.00	83.00	375.00	0	1	INITIAL		0	4	20	24	
							REORDER		0	0	0	0	
							INITIAL						
							REORDER						
							INITIAL						
							REORDER						
							INITIAL						
							REORDER						

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: P-1 Item Nomenclature
 Missile Procurement, Army /2/Other missiles AVENGER SYSTEM SUMMARY (C14900)

Program Elements for Code B Items: Code: Other Related Program Elements: C15200, C16000, CE8710, CA0260

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	896	6										902
Gross Cost	1065.6	27.9	11.5									1105.0
Less PY Adv Proc	122.9											122.9
Plus CY Adv Proc	122.9											122.9
Net Proc (P-1)	1065.6	27.9	11.5									1105.0
Initial Spares	60.9	2.8										63.7
Total Proc Cost	1126.5	30.8	11.5									1168.7
Flyaway U/C												
Wpn Sys Proc U/C		4.7										

Description:

AVENGER System is a highly mobile, Stinger-based, Short Range Air Defense system capable of day, night, adverse weather and shoot on-the-move for precision engagement operations. It provides Division and Corps units with low altitude air defense/information dominance against fixed and rotary wing threats, unmanned aerial vehicles and cruise missiles. Mounted on a High Mobility Multipurpose Wheeled Vehicle (HMMWV) and manned by a crew of two, the turreted system is equipped with 8 Stinger missiles and a very high rate of fire .50 cal machine gun. A Forward Looking Infrared (FLIR) sensor provides Avenger with a night fighting capability. Production fire units are now equipped with a Slew-to-Cue capability that permits the system to automatically slew to externally reported radar tracks. By placing targets directly into the gunner's sight, lengthy manual searching is eliminated and detections and engagements are increased. Avenger can be remotely controlled and operated from the safety of a nearby foxhole/building/position. Capability is provided via an eye-safe laser range finder and a Mark XII crypto-secure Identification Friend or Foe (IFF) device. Because of its FLIR, video recording capability, and machine gun, the system is routinely employed in Bosnia and Kosovo for nighttime roadblock security, crowd surveillance, and reconnaissance. This system supports the Legacy transition path of the Transformation Campaign Plan (TCP).

Justification:

FY02 funding supports the Total Package Fielding of the Active Avenger fleet.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: P-1 Item Nomenclature
 Missile Procurement, Army /2/Other missiles AVENGER (PED MT STINGER) (MYP) (C16000)

Program Elements for Code B Items: Code: Other Related Program Elements:
C15200, C14900, CE8710, CA0260

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	896	6										902
Gross Cost	1022.6	27.9	11.5									1062.0
Less PY Adv Proc	122.9											122.9
Plus CY Adv Proc	122.9											122.9
Net Proc (P-1)	1022.6	27.9	11.5									1062.0
Initial Spares	60.9	2.8										63.7
Total Proc Cost	1083.5	30.8	11.5									1125.8
Flyaway U/C												
Wpn Sys Proc U/C		4.7										

Description:

The AVENGER is a highly mobile, Stinger missile based, Short Range Air Defense system, capable of day, night, adverse weather and shoot on-the-move for precision engagement operations. The AVENGER system is mounted on a High Mobility, Multipurpose Wheeled Vehicle (HMMWV), and manned by a crew of two, the turreted system is equipped with 8 Stinger missiles and a very high rate of fire .50 cal machine gun. A Forward Looking Infrared (FLIR) sensor provides Avenger with a night fighting capability. Production fire units are now equipped with a Slew-to-Cue capability that permits the system to automatically slew to externally reported radar tracks. By placing targets directly into the gunner's sight, lengthy manual searching is eliminated and detections and engagements are increased. Avenger can be remotely controlled and operated from the safety of a nearby foxhole/building/position. Capability is provided via an eye-safe laser range finder and a Mark XII crypto-secure Identification Friend or Foe (IFF) device. This system supports the Legacy transition path of the Transformation Campaign Plan (TCP).

Justification:

FY02 funding supports the Total Package Fielding of the Active Avenger fleet.

Exhibit P-5, Weapon MSLS Cost Analysis		Appropriation/Budget Activity/Serial No. Missile Procurement, Army / 2 / Other missiles			P-1 Line Item Nomenclature: AVENGER (PED MT STINGER) (MYP) (C16000)			Weapon System Type:			Date: February 2003		
MSLS Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		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 Avenger Fire Unit Subtotal Hardware Production													
HMMWV STC/CFCC/AVT Govt Furnished Material (GFM) Driveaway Support Cost Government Engineering/SEPM Contractor Engineering Total Package Fielding Support Equipment Training Equipment Subtotal Support Cost													
Initial Spares													
Total		11486											

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No: Missile Procurement, Army / 2 / Other missiles		Weapon System Type:			P-1 Line Item Nomenclature: AVENGER (PED MT STINGER) (MYP) (C16000)					
WBS Cost Elements:	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
Avenger Fire Unit										
FY 2000	Boeing Huntsville, AL	SS/FP	AMCOM	Dec 99	Sep 01	15	1091	yes		
FY 2001	Boeing Huntsville, AL	SS/FP	AMCOM	Nov 00	Aug 02	6	1136	yes		

REMARKS:

FY 02 / 03 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature:
 AVENGER (PED MT STINGER) (MYP) (C16000)

Date: February 2003

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 02														Fiscal Year 03												LATER
							Calendar Year 02														Calendar Year 03												
							O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S			
							C	O	E	A	E	A	P	A	U	U	U	E	C	O	E	A	E	A	P	A	U	U	U	E	P		
Avenger Fire Unit																																	
	1	FY 99	A	15	15	0																						0					
	1	FY 00	A	15	4	11	5	5	1																			0					
	1	FY 01	A	6	0	6																					0						
Total				36	19	17	5	5	1																								

MFR	NAME/LOCATION	PRODUCTION RATES			REACHED D+	MFR Number	ADMINLEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS	
		MIN.	1-8-5	MAX.			Prior 1 Oct	After 1 Oct				
1	Boeing, Huntsville, AL	5.00	12.00	24.00	15	1	INITIAL	7	5	28	33	
							REORDER	0	1	21	22	
							INITIAL					
							REORDER					
							INITIAL					
							REORDER					
							INITIAL					
							REORDER					
							INITIAL					
							REORDER					

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: Missile Procurement, Army /2/Other missiles
 P-1 Item Nomenclature: Surface-Launched AMRAAM System Summary: (C81001)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost					7.5	22.0	47.1	24.4	13.7	4.9		119.5
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)					7.5	22.0	47.1	24.4	13.7	4.9		119.5
Initial Spares												
Total Proc Cost					7.5	22.0	47.1	24.4	13.7	4.9		119.5
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

Surface Launched Advanced Medium Range Air-To-Air Missile (SLAMRAAM) is the initial kinetic energy component of the Enhanced Area Air Defense System (EAADS), an Air and Missile Defense (AMD) Objective Force System. SLAMRAAM is a System of Systems, consisting of a launcher platform, AIM-120 Advanced Medium Range Air-to-Air Missiles (AMRAAMs), a common Army vehicle, launch rails, launcher electronics, on-board command, control, communications, and computer (C4) components, Sentinel (ETRAC) Sensor, other external Sensors, and BMC4I. SLAMRAAM is a lightweight, day or night, adverse weather, non-line-of-sight (NLOS) system for countering low altitude rotary wing (RW), fixed wing (FW), cruise missile (CM), unmanned aerial vehicle (UAV), and reconnaissance, surveillance, and target acquisition (RSTA) platforms. It supports clutter engagements in close combat areas where maneuvering forces and their supporting units operate. SLAMRAAM's force protection mission is to engage the low-altitude aerial threats out to 18km protecting maneuvering and stationary units, as well as protecting critical assets. This system supports the Objective transformation path of the Transformation Campaign Plan (TCP).

Justification:

FY04 will initiate production efforts to support the procurement in FY05 of 5 SLAMRAAM Systems, 39 missiles and modification of 4 Test Articles for operational use. These 9 SLAMRAAM Systems will provide an early capability needed to support the Army's Air and Missile Defense Strategy against emerging threats.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: Missile Procurement, Army /2/Other missiles
 P-1 Item Nomenclature: Surface-Launched AMRAAM Launcher (C81002)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty						5	8	9	4			26
Gross Cost					1.0	13.7	24.4	24.4	13.7	4.9		82.0
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)					1.0	13.7	24.4	24.4	13.7	4.9		82.0
Initial Spares												
Total Proc Cost					1.0	13.7	24.4	24.4	13.7	4.9		82.0
Flyaway U/C												
Wpn Sys Proc U/C						2.7	3.1	2.7	3.4			

Description:

Surface Launched Advanced Medium Range Air-To-Air Missile (SLAMRAAM) is the initial kinetic energy component of the Enhanced Area Air Defense System (EAADS), the Air and Missile Defense (AMD) Objective Force system. The SLAMRAAM is a System of Systems, consisting of a launcher platform, AIM-120 Advanced Medium Range Air-to-Air Missiles (AMRAAMs), a common Army vehicle, launch rails, launcher electronics, on-board command, control, communications, and computer (C4) components, Sentinel (ETRAC) Sensor, other external Sensors, and BMC4I. SLAMRAAM is a lightweight, day or night, adverse weather, non-line-of-sight (NLOS) fire unit for countering low altitude rotary wing (RW), fixed wing (FW), cruise missile (CM), unmanned aerial vehicle (UAV), and reconnaissance, surveillance, and target acquisition (RSTA) platforms. It supports clutter engagements in close combat areas where maneuvering forces and their supporting units operate. SLAMRAAM's force protection mission is to engage the low-altitude aerial threats out to 18km. This system supports the Objective transformation path of the Transformation Campaign Plan (TCP).

Justification:

FY04 will initiate production efforts to support the procurement in FY05 of 5 SLAMRAAM Systems, 39 missiles and modification of 4 Test Articles for operational use. These 9 SLAMRAAM Systems will provide an early capability needed to support the Army's Air and Missile Defense Strategy against emerging threats.

Exhibit P-5, Weapon MSLS Cost Analysis		Appropriation/Budget Activity/Serial No. Missile Procurement, Army / 2 / Other missiles			P-1 Line Item Nomenclature: Surface-Launched AMRAAM Launcher (C81002)			Weapon System Type:			Date: February 2003		
MSLS Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000
Non-Recurring Production													
Fire Unit Modification											1352	4	338
Total Non Recurring Production											1352		
Recurring Production Hardware													
Launcher Manufacturing											4226	5	845
Recurring Engineering											1251		
Sustaining Tooling											334		
Quality Control											609		
Engineering Change Proposals											428		
Total Hardware Cost											6848		
Weapons Support Cost													
System Test and Evaluation											194		
System Engineering/Program Management								655			3458		
Training Equipment											616		
Data								116			319		
Support Equipment								210			194		
Fielding											718		
Sub-Total Support Cost								981			5499		
Initial Spares													
Total								981			13699		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No: Missile Procurement, Army / 2 / Other missiles		Weapon System Type:			P-1 Line Item Nomenclature: Surface-Launched AMRAAM Launcher (C81002)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Units	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Launcher Manufacturing FY 2005	To Be Selected N/A	TBS	AMCOM	Feb-05	Jun-06	5	845			

REMARKS:

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: Missile Procurement, Army /2/Other missiles	P-1 Item Nomenclature Surface-Launched AMRAAM Missile (C81004)
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Program Elements for Code B Items:	Code:	Other Related Program Elements:
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	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty					17	22	64					103
Gross Cost					6.5	8.3	22.7					37.5
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)					6.5	8.3	22.7					37.5
Initial Spares												
Total Proc Cost					6.5	8.3	22.7					37.5
Flyaway U/C												
Wpn Sys Proc U/C					0.4	0.4	0.4					

Description:

The SLAMRAAM takes off-the-shelf USAF Advanced Medium Range Air-to-Air Missiles AIM -120 (AMRAAM) and mounts the missiles on a common Army vehicle to enable surface-to-air engagements. The AIM -120 is a mature all-weather, radar-guided tri-service (Air Force, Marines, and Navy) missile, and has a well-established production program, integrated logistics support structure, and P3I program. The AIM -120 is a supersonic, air-launched guided missile employing active target tracking, proportional navigation guidance, and active radio frequency (RF) target detection. It employs inertial navigational methods of guidance to provide an autonomous launch and leave capability against simultaneous multiple targets in all environments. This system supports the Objective transformation path of the Transformation Campaign Plan (TCP).

Justification:

FY04/05 procures 39 missiles for the 5 SLAMRAAM Systems.

Exhibit P-5, Weapon MSLS Cost Analysis		Appropriation/Budget Activity/Serial No. Missile Procurement, Army / 2 / Other missiles			P-1 Line Item Nomenclature: Surface-Launched AMRAAM Missile (C81004)			Weapon System Type:			Date: February 2003		
MSLS Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000
Missile Hardware Recurring													
Missile Round							6285	17	370	8012	22	364	
Warranty							49			94			
Containers							72			141			
Total Missile Hardware Cost							6406			8247			
Production Support													
System Engineering/Program Management							65			70			
Total Production Costs							65			70			
Total							6471			8317			

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No: Missile Procurement, Army / 2 / Other missiles		Weapon System Type:			P-1 Line Item Nomenclature: Surface-Launched AMRAAM Missile (C81004)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Units	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Missile Round										
FY 2004	Raytheon Tucson, AZ	TBD	AMCOM	Jan-04	Sep-05	17	370	Yes		
FY 2005	Raytheon Tucson, AZ	TBD	AMCOM	Jan-05	Sep-06	22	364	Yes		

REMARKS: The Army's acquisition strategy is to buy into an existing Air Force contract with the Raytheon Corporation.

FY 04 / 05 BUDGET PRODUCTION SCHEDULE						P-1 Item Nomenclature: Surface-Launched AMRAAM Missile (C81004)													Date: February 2003												
COST ELEMENTS	MFR	FY	SERV	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 04												Fiscal Year 05												LATER
							Calendar Year 04												Calendar Year 05												
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Missile Round																															
	1	FY 04	A	17	0	17																									
	1	FY 05	A	22	0	22																									
Total				39		39																									
							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			REACHED D+	MFR Number	ADMINLEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS																				
		MIN.	1-8-5	MAX.			Prior 1 Oct	After 1 Oct																							
1	Raytheon, Tucson, AZ	450.00	960.00	1200.00	0	1	INITIAL	0	4	20	24																				
							REORDER	0	0	0	0																				
							INITIAL																								
							REORDER																								
							INITIAL																								
							REORDER																								
							INITIAL																								
							REORDER																								

FY 06 / 07 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature:
Surface-Launched AMRAAM Missile (C81004)

Date:
February 2003

COST ELEMENTS	MFR	FY	SERV	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 06												Fiscal Year 07												LATE R
							Calendar Year 06												Calendar Year 07												
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Missile Round																															
	1	FY 04	A	17	17	0																					0				
	1	FY 05	A	22	0	22							22														0				
Total				39	17	22							22																		

MFR	NAME/LOCATION	PRODUCTION RATES			REACHED	MFR Number	ADMINLEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS	
		MIN.	1-8-5	MAX.			Prior 1 Oct	After 1 Oct				
1	Raytheon, Tucson, AZ	450.00	960.00	1200.00	0	1	INITIAL	0	4	20	24	
							REORDER	0	0	0	0	
							INITIAL					
							REORDER					
							INITIAL					
							REORDER					
							INITIAL					
							REORDER					
							INITIAL					
							REORDER					

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: P-1 Item Nomenclature
 Missile Procurement, Army /2/Other missiles HELLFIRE SYS SUMMARY (C70000)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	3403.1	294.4	249.9	190.7	33.1	28.5	26.9	11.2				4237.7
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)	3435.8	282.8	238.3	181.2	33.1	28.5	26.9	11.2				4237.7
Initial Spares	7.5											7.5
Total Proc Cost	3443.3	282.8	238.3	181.2	33.1	28.5	26.9	11.2				4245.2
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

The HELLFIRE family of Objective-Force, air-to-ground missiles provides precision-kill capability to the Apache (Legacy Force), Comanche (Objective Force), Blackhawk and Kiowa Warrior helicopters against heavy, advanced armor and individual hard point targets. Laser HELLFIRE (A, C, F, and K models) uses semi-active laser (SAL) terminal guidance. The K model (or HELLFIRE II) provides for point-target precision strike, defeats future advanced armor threat, is effective against countermeasures, and is shipboard compatible. Longbow HELLFIRE (L model) is a millimeter wave, radar-aided inertial guidance missile that provides a fire-and-forget capability to engage targets both day and night, in adverse weather, and with battlefield obscurants present. This capability will substantially increase the survivability of the AH-64D Longbow Apache helicopter. HELLFIRE II and Longbow HELLFIRE comprise the primary anti-tank armament of the AH-64 Apache, OH-58D Kiowa Warrior, and Special Operations helicopters and may 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. The FY 04-07 funding will provide Counter Active-Protection System (CAPS) and Home-on-Jam/Anti-Jam capability for the Longbow HELLFIRE. This system supports the Legacy to Objective transition path of the Transformation Campaign Plan (TCP).

Justification:

FY04/FY05 funding supports Longbow HELLFIRE deliveries, procures Counter Active Protection Systems (CAPS) and Home on Jam/Anti Jam capability for the Longbow Hellfire, and also supports the ongoing training, fielding and deployment of the complete AH 64-D Longbow Apache system.

In addition to the funding shown above, this budget line item received:

Non-add FY 2002 Defense Emergency Response Fund (DERF) Supplemental funding (\$5.0 million) for Laser Hellfire missile retrofit.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: Missile Procurement, Army /2/Other missiles	P-1 Item Nomenclature LASER HELLFIRE MSL (BASIC/IHW/HFII) (C70100)
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Program Elements for Code B Items:	Code:	Other Related Program Elements:
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	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	49140											49140
Gross Cost	2064.1		6.9									2070.9
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	2064.1		6.9									2070.9
Initial Spares	5.7											5.7
Total Proc Cost	2069.8		6.9									2076.6
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

The Laser HELLFIRE family consists of the A, C, F, and K model missiles. They are Objective Force missiles that provide air-to-ground precision strike and are designed to defeat individual hard point targets. The missiles have the capability for modular guidance section replacement. 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 operation helicopters. Laser HELLFIRE may be used by the RAH-66 Comanche, the Army's next-generation helicopter. In FY90, the F model missile (Interim HELLFIRE Warhead) was introduced with an improved warhead that improved lethality against near-term threat reactive armor. The K model (HELLFIRE II) includes hardening of the laser seeker against countermeasures, further warhead improvements for the long term, replacement of the mechanical fuze with an electrical fuze, and restoration of the original length and weight. Laser HELLFIRE supports the Legacy to Objective transition path of the Transformation Campaign Plan (TCP).

Justification:

The program is not funded in FY04.

Exhibit P-5, Weapon MSLS Cost Analysis		Appropriation/Budget Activity/Serial No. Missile Procurement, Army / 2 / Other missiles			P-1 Line Item Nomenclature: LASER HELLFIRE MSL (BASIC/IHW/HFII) (C70100)			Weapon System Type:			Date: February 2003		
MSLS Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		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													
Gov Furn Eq (GFE) Explosives													
Engineering Services													
Engineering Change Orders		6508											
Fielding													
Acceptance Testing													
SUBTOTAL		6508											
Engineering Support													
Project Mgt Admin													
Production Engineering Support		345											
SUBTOTAL		345											
Non-Recurring													
Disposal of Tool/test Equipment													
Initial Production Facilitization (IPF)													
Rate tooling/Test Equipment													
SUBTOTAL													
Peculiar Support Equipment													
Environmental Protections													
Subtotal													
Gross P-1 End Item		6853											
Less: Prior Year Adv Proc													
Net P-1 Full Funding Cost		6853											
Plus: P-1 Cy Adv Proc													
Other Non P-1 Costs													
Initial Spares													
Mods													
Total		6853											

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: P-1 Item Nomenclature
 Missile Procurement, Army /2/Other missiles LONGBOW HELLFIRE/LBHF+ (C70300)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	6708	2200	2200	1797								12905
Gross Cost	1309.9	294.4	243.1	190.7	33.1	28.5	26.9	11.2				2137.6
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)	1342.5	282.8	231.5	181.2	33.1	28.5	26.9	11.2				2137.6
Initial Spares												
Total Proc Cost	1342.5	282.8	231.5	181.2	33.1	28.5	26.9	11.2				2137.6
Flyaway U/C												
Wpn Sys Proc U/C		0.1	0.1	0.1								

Description:

Longbow HELLFIRE is an Objective Force missile system that provides fire-and-forget capability to the Apache (Legacy Force) and Comanche (Objective Force). Longbow HELLFIRE provides a versatile capability to engage targets both during the day and night, in adverse weather, and with battlefield obscurants present. Longbow HELLFIRE's fire-and-forget capability and flexibility of engagement options provide a dramatic increase in lethality and survivability for the Apache (Legacy Force) and Comanche (Objective Force) systems which complement the semi-active Laser HELLFIRE missile. The Longbow HELLFIRE missile contains a radio frequency guidance section, which provides a lock-on before launch (LOBL) or lock-on after launch (LOAL) capability, depending on target range and movement parameters. The Longbow HELLFIRE will not change the AH-64 mission or role, but will provide for increased aircraft survivability. All three Longbow program elements (Fire Control Radar, D Model Apache helicopter, and Longbow HELLFIRE missile) were deployed simultaneously and are fielded as a total system. Laser HELLFIRE and Longbow HELLFIRE are complementary; both are required on the modern battlefield. This system supports the Legacy to Objective transition path of the Transformation Campaign Plan (TCP).

Justification:

FY04/FY05 funding supports Longbow HELLFIRE deliveries, procures Counter Active Protection Systems (CAPS) and Home on Jam/Anti Jam capability for the Longbow Hellfire, and also supports the ongoing training, fielding and deployment of the complete AH 64-D Longbow Apached System.

Exhibit P-5, Weapon MSLS Cost Analysis		Appropriation/Budget Activity/Serial No. Missile Procurement, Army / 2 / Other missiles			P-1 Line Item Nomenclature: LONGBOW HELLFIRE/LBHF+ (C70300)			Weapon System Type:			Date: February 2003		
MSLS Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		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		220128	2200	101	168679	1797	94						
Gv Furn Eq (GFE) Explosives		687			573								
CAPS Kits								7919			7349		
Engineering Services		1295			1825			1825			1489		
Engineering Change Orders-Motor Retrofit		10194											
Engineering Change Orders-HOJ/AJ					2345			5631			4901		
Fielding		740			2335			2454			2611		
Acceptance Testing		2653			4762			3919			4001		
SUBTOTAL		235697			180519			21748			20351		
Engineering Support													
Project Mgt Admin		3756			3829			3945			4028		
Production Engineering Support		3632			3942			4062			4147		
SUBTOTAL		7388			7771			8007			8175		
Non-Recurring													
Disposal of Tooling/Test Equipment													
Initial Production Facilitization (IPF)													
Cost Reduction Program													
Rate Tooling/Test Equipment													
SUBTOTAL													
Peculiar Support Equipment													
Environmental Protection Covers					2372			3306					
SUBTOTAL					2372			3306					
Gross P-1 End Item		243085			190662			33061			28526		
Less: Prior Year Adv Proc		11599			9479								
Net P-1 Full Funding Cost		231486			181183			33061			28526		
Plus: P-1 CY Adv Proc													
Other Non P-1 Costs													
Initial Spares													
Mods													
Total		231486			181183			33061			28526		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No: Missile Procurement, Army / 2 / Other missiles		Weapon System Type:			P-1 Line Item Nomenclature: LONGBOW HELLFIRE/LBHF+ (C70300)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
All-Up-Rounds										
FY 2002	Longbow Limited Liability Co Orlando, Fl	FFP-M-5(4)	AMCOM	Dec-01	Nov-03	2200	101	Yes		*
FY 2003	Longbow Limited Liability Co Orlando, Fl	FFP-M-5(5)	AMCOM	Dec-02	Sep-04	1797	94	Yes		*

REMARKS: * Performance-based specifications are used in all production contracts.

FY 02 / 03 BUDGET PRODUCTION SCHEDULE

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

Date:
 February 2003

COST ELEMENTS	M F R	FY	S E R V	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 02												Fiscal Year 03												L A T E R
							Calendar Year 02												Calendar Year 03												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
All-Up-Rounds																															
	1	FY 00	A	2200	0	2200																						0			
	1	FY 01	A	2200	0	2200																						355			
	1	FY 02	A	2200	0	2200																						2200			
	1	FY 03	A	1797	0	1797			A																			1797			
Total						8397																						4352			

M F R	NAME/LOCATION	PRODUCTION RATES			REACHED D+	MFR Number	ADMINLEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
		MIN.	1-8-5	MAX.			Prior 1 Oct	After 1 Oct			
1	Longbow Limited Liability Co, Orlando, Fl	100.00	.00	235.00	18	1	INITIAL REORDER	0 2	0 25	0 27	As a result of FFP MYP, MFR lead time continuously improves.
						INITIAL REORDER					
						INITIAL REORDER					
						INITIAL REORDER					
						INITIAL REORDER					
						INITIAL REORDER					

FY 04 / 05 BUDGET PRODUCTION SCHEDULE P-1 Item Nomenclature: **Longbow Hellfire/LBHF+ (C70300)** Date: **February 2003**

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 04												Fiscal Year 05												L A T E R
							Calendar Year 04												Calendar Year 05												
							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-Rounds																											0				
	1	FY 00	A	2200	2200	0																					0				
	1	FY 01	A	2200	1845	355	225	130																			0				
	1	FY 02	A	2200	0	2200	100	230	230	230	235	235	235	235	235												0				
	1	FY 03	A	1797	0	1797										149	149	149	150	150	150	150	150	150	150	150	0				
Total				8397	4045	4352	225	230	230	230	235	235	235	235	235	149	149	149	150	150	150	150	150	150	150	150					

MFR	NAME/LOCATION	MIN.	1-8-5	MAX.	REACHED D+	MFR Number	ADMINLEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
							Prior 1 Oct	After 1 Oct			
1	Longbow Limited Liability Co, Orlando, Fl	100.00	.00	235.00	18	1	INITIAL	0	0	0	0
							REORDER	0	2	25	27
							INITIAL				
							REORDER				
							INITIAL				
							REORDER				
							INITIAL				
							REORDER				

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: P-1 Item Nomenclature
 Missile Procurement, Army /2/Other missiles APKWS (Advanced Precision Kill Weapon System) (C70301)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty							1020	2075	6075	8475	71775	89420
Gross Cost						14.4	56.6	65.3	125.9	160.5	1435.9	1858.6
Less PY Adv Proc							6.1					6.1
Plus CY Adv Proc						6.1						6.1
Net Proc (P-1)						20.6	50.5	65.3	125.9	160.5	1435.9	1858.6
Initial Spares												
Total Proc Cost						20.6	50.5	65.3	125.9	160.5	1435.9	1858.6
Flyaway U/C												
Wpn Sys Proc U/C							0.0	0.0	0.0	0.0	0.0	

Description:

The Advanced Precision Kill Weapon System (APKWS) is a highly accurate weapon that will complement the HELLFIRE missile in precision strikes against soft point targets and provide improved accuracy over the current 2.75-inch munition used in the AH-64 Apache, OH-58 Kiowa Warrior, and the future RAH-66 Comanche helicopters. Under the APKWS program, a laser guidance section for the 2.75 inch munition will be developed, tested, qualified and procured as a total system. The APKWS is expected to provide at least ten times the number of kills, thereby substantially reducing collateral damage, and significantly reducing cost because fewer rockets are required. The APKWS supports the Legacy to Objective Force transition path of the Transformation Campaign Plan (TCP).

Justification:

FY05 funds will procure initial production facilitization and advance procurement for long lead items.

Exhibit P-5, Weapon MSLS Cost Analysis		Appropriation/Budget Activity/Serial No. Missile Procurement, Army / 2 / Other missiles			P-1 Line Item Nomenclature: APKWS (Advanced Precision Kill Weapon System) (C70301)			Weapon System Type:			Date: February 2003		
MSLS Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000
Flyaway Costs													
Hardware Costs - Recurring													
All-up Rounds													
Gov Furn Eq (GFE)													
Engineering Services													
Engineering Change Orders													
Fielding													
Acceptance Testing													
SUBTOTAL													
Engineering Support													
Project Mgt Admin													
Production Engineering Support													
SUBTOTAL													
Non-Recurring													
Disposal of Tool/Test Equipment													
Initial Production Facilitization											14442		
Rate Tooling/Test Equipment													
SUBTOTAL											14442		
Peculiar Support Equipment													
Environmental Protections													
SUBTOTAL													
Gross P-1 End Item											14442		
Less: Prior Year Adv Proc													
Net P-1 Full Funding Cost											14442		
Plus: P-1 CY Adv Proc											6124		
Other Non P-1 Costs													
Initial Spares													
Mods													
Total											20566		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: P-1 Item Nomenclature
 Missile Procurement, Army /2/Other missiles APKWS (Advanced Precision Kill Weapon System)(Adv Proc) (C70301)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost												
Less PY Adv Proc												
Plus CY Adv Proc	0.0	0.0	0.0	0.0	0.0	6.1	0.0	0.0	0.0	0.0		6.1
Net Proc (P-1)						6.1						6.1
Initial Spares												
Total Proc Cost						6.1						6.1
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

The Advanced Precision Kill Weapon System (APKWS) is a highly accurate weapon that will complement the HELLFIRE missile in precision strikes against soft point targets and provide improved accuracy over the current 2.75-inch munition used in the AH-64 Apache, OH-58 Kiowa Warrior, and the future RAH-66 Comanche helicopters. Under the APKWS program, a laser guidance section for the 2.75 inch munition will be developed, tested, qualified and procured as a total system. The APKWS is expected to provide at least ten times the number of kills, thereby substantially reducing collateral damage, and significantly reducing cost because fewer rockets are required. The APKWS supports the Legacy to Objective Force transition path of the Transformation Campaign Plan (TCP).

Justification:

FY05 funds are required for advance procurement of Long Lead Items to support APKWS production in FY06.

Advance Procurement Requirements Analysis-Funding (P10A)

First System Award Date:
10 MAY 05

First System Completion Date:
10 OCT 05

Date:
February 2003

Appropriation/Budget Activity/Serial No:
Missile Procurement, Army /2/Other missiles

P-1 Line Item Nomenclature / Weapon System
APKWS (Advanced Precision Kill Weapon System)

(\$ in Millions)

	PTL (mos)	When Rqd (mos)	Pr Yrs	FY 01	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	To Comp	Total
All-up Rounds: Printed circuit boards Resistors/capacitors/diodes Microcircuits Optics Detectors M151 HE warhead M243 fuze Mark 66 Mod 4 rocket motors Marerials and components	14	18						6.1						6.1
Total Advance Procurement			0.0	0.0	0.0	0.0	0.0	6.1	0.0	0.0	0.0	0.0	0.0	6.1

The advanced procurement required are the Long Lead Items necessary for manufacture of the APKWS to begin in FY 06.

Advance Procurement Requirements Analysis-Funding (P10B)

Date:

February 2003

Appropriation/Budget Activity/Serial No:
Missile Procurement, Army /2/Other missiles

P-1 Line Item Nomenclature / Weapon System
APKWS (Advanced Precision Kill Weapon System)

(\$ in Millions)

	PLT (mos)	Quantity Per Assembly	Unit Cost	2004		2005			
				Qty	Contract Forecast Date	Total Cost Request	Qty	Contract Forecast Date	Total Cost Request
End Item Quantity:									
All-up Rounds: Printed circuit boards Resistors/capacitors/diodes Microcircuits Optics Detectors M151 HE warhead M243 fuze Mark 66 Mod 4 rocket motors Marerials and components	14		6.124				1	FY05	6.124
Total Advance Procurement						0.000			6.124

The Long Lead Item request is for those materials/components that require more than a 12 month lead time for all-up round manufacture. No major end item is procured in advance of the all-up round. These items are required for the manufacture of the FY 06 all-up rounds.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: P-1 Item Nomenclature
 Missile Procurement, Army /2/Other missiles JAVELIN (AAWS-M) SYSTEM SUMMARY (CC0007)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	10460	2776	4139	1478	901	1062						20816
Gross Cost	1612.4	337.0	425.8	228.1	133.1	123.3	16.7	19.6	11.6			2907.5
Less PY Adv Proc	53.0	13.9	17.2	9.0	0.0	7.6						100.6
Plus CY Adv Proc	93.0				7.6							100.6
Net Proc (P-1)	1652.4	323.1	408.7	219.2	140.7	115.7	16.7	19.6	11.6			2907.5
Initial Spares	7.5	4.9	2.3	2.8	3.1	3.0	0.8					24.5
Total Proc Cost	1659.9	328.0	411.0	222.0	143.8	118.7	17.5	19.6	11.6			2932.1
Flyaway U/C												
Wpn Sys Proc U/C		0.1	0.1	0.1	0.2	0.1						

Description:

Javelin, a fire-and-forget system, is critical to the operational design of the Army's Objective Force because of its precision strike, manportability, high reliability, and capability to engage multiple types of targets (tanks, APCs, bunkers, helicopter, walls, etc). This project provides procurement funds for Javelin, the medium antitank system for infantry, scouts, combat engineers interim and objective forces. These forces must have the capability to defeat numerically superior armored forces. The above characteristics are key elements of the Army's transformation to a more versatile, deployable, lethal, survivable, and sustainable force. The Javelin, a replacement for the DRAGON, 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 multiple counter-measure conditions. The system's soft launch permits firing from a fighting position or an enclosure. Javelin uses a modular design to allow the system to evolve to meet changing threats and requirements via both software and hardware upgrades. The system consists of a reusable Command Launch Unit (CLU) with a built-in-test (BIT), and a modular missile encased in a launch tube assembly. The system also includes training devices for tactical training, classroom training, and handling exercises. The Javelin system supports the Legacy-to-Objective transition path of the Transformation Campaign Plan (TCP).

Justification:

FY04 funds the first year of a two year multiyear contract to continue the production of Javelin missiles and CLUs. 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 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 has a secondary mission of destroying bunkers and provides defensive capability against attacking/hovering helicopters. The CLU also has been used in a stand-alone mode for battlefield surveillance and target selection in recent conflicts.

Exhibit P-5, Weapon MSLS Cost Analysis		Appropriation/Budget Activity/Serial No. Missile Procurement, Army / 2 / Other missiles			P-1 Line Item Nomenclature: JAVELIN (AAWS-M) SYSTEM SUMMARY (CC0007)			Weapon System Type:			Date: February 2003		
MSLS Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Missile Hardware - Recurring													
All Up Round		283625	4139	69	101280	1478	69	68100	901	76	81700	1062	77
Engineering Services		5622			5568			4801			4537		
Engineering Change Orders		243			204			98			93		
Acceptance Testing		5551			5621			5002			4815		
Fielding		2898			3548			2927			2387		
Subtotal Missile Hardware		297939			116221			80928			93532		
Procurement Support													
Government Project Management		8415			8027			7728			7802		
Government Production Engineering		4752			4551			4181			4064		
Publications/Technical Data		563			622			617			602		
Subtotal Procurement Support		13730			13200			12526			12468		
Command & Launch Hardware													
Command Launch Unit		87311	840	104	73487	707	104	13200	120	110	11648	104	112
Engineering Services		2134			1622			1571			1928		
Engineering Change Orders		77			75			17			11		
Fielding		3615			4217			3926			3677		
SubTotal C&L Hardware		93137			79401			18714			17264		
Training Devices													
Field Tactical Trainer-Student Station		15440	236	65	14262	218	65	16500	256	64			
Field Tactical Trainer-Instrtr Station													
Basic Skills Trainer		4466	70	64	3956	62	64	4099	59	69			
Missile Simulation Round		1135	454	3	1077	461	2	348	196	2			
SubTotal Training Devices		21041			19295			20947					
Gross P-1 End Cost		425847			228117			133115			123264		
Less: Prior Year Adv Proc		-17171			-8950						-7600		
Net P-1 Full Funding Cost		408676			219167			133115			115664		
PLUS P-1 CY Adv. Proc.								7600					
Other Non P-1 Costs													
Initial Spares		2328			2845			3117			3027		
Total		411004			222012			143832			118691		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No: Missile Procurement, Army / 2 / Other missiles		Weapon System Type:			P-1 Line Item Nomenclature: JAVELIN (AAWS-M) SYSTEM SUMMARY (CC0007)					
WBS Cost Elements:	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
All Up Round										
FY 2002	JV/All Up Round Multiyear 2 Tucson, AZ/Orlando, FL	SS/FP/M4-3	AMCOM	Dec 01	Feb 04	4139	69	Yes		
FY 2003	JV/All Up Round Multiyear 2 Tucson, AZ/Orlando, FL	SS/FP/M4-4	AMCOM	Dec 02	Dec04	1478	69	Yes		
FY 2004	JV/All Up Round - Multiyear 3 Tucson,AZ/Orlando,FL	SS/FP/M2-1	AMCOM	Dec 03	Nov 05	901	76	Yes		
FY 2005	JV/All Up Round - Multiyear 3 Tucson,AZ/Orlando,FL	SS/FP/M2-2	AMCOM	Dec 04	Oct 06	1062	77	Yes		
Command Launch Unit										
FY 2002	JV/All Up Round Multiyear 2 Tucson, AZ/Orlando, FL	SS/FP/M4-3	AMCOM	Dec 01	Oct 03	840	104	Yes		
FY 2003	JV/All Up Round Multiyear 2 Tucson, AZ/Orlando, FL	SS/FP/M4-4	AMCOM	Dec 02	Oct 04	707	104	Yes		
FY 2004	JV/CLU - Multiyear 3 Tucson,AZ/Orlando,FL	SS/FP/M2-1	AMCOM	Dec 03	Oct 05	120	110	Yes		
FY 2005	JV/CLU - Multiyear 3 Tucson,AZ/Orlando,FL	SS/FP/M2-2	AMCOM	Dec 04	Oct 06	104	112	Yes		

REMARKS: The Javelin Joint Venture (Raytheon/Lockheed Martin) is currently the proponent industry source.

FY04-FY05 is a multiyear contract.

FY 02 / 03 BUDGET PRODUCTION SCHEDULE

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

Date: February 2003

COST ELEMENTS	M F R	FY	S E R V	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 02																Fiscal Year 03												L A T E R
							Calendar Year 02												Calendar Year 03																
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P					
Command Launch Unit																																			
	3	FY 99	MC	153	153	0																													
	3	FY 00	A	610	84	526	32	97	36	55	39	0	11	78	30	20	51	77																	
	3	FY 00	MC	77	0	77	12	6	12	6	41																								
	3	FY 01	A	808	0	808												36	117	106	20	78	80	80	80										
	3	FY 02	A	840	0	840																			39	68	0								
	3	FY 02	FMS	52	0	52		4										18																	
	3	FY 03	A	707	0	707																													
	3	FY 03	FMS	40	0	40																													
	5	FY 04	A	120	0	120																													
Total				24811	2672	22139	44	107	48	61	190	416	447	502	466	512	543	620	363	352	580	638	640	642	642	662	640	183	563	495	11783				
M F R	NAME/LOCATION						PRODUCTION RATES	REACHED	MFR Number	ADMINLEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS																					
				MIN.	1-8-5	MAX.	D+		Prior 1 Oct	After 1 Oct																									
1	JV/All Up Round	Multiyear 1,	Tucson, AZ/Orlando, FL	110.00	440.00	560.00	0	1	INITIAL	11	3	22	25																						
								1	REORDER	1	1	22	23																						
2	JV/All Up Round	Multiyear 2,	Tucson, AZ/Orlando, FL	110.00	440.00	560.00	0	2	INITIAL	11	3	22	25																						
								2	REORDER	1	1	22	23																						
3	JV/CLU	Multiyear 2,	Tucson, AZ/Orlando, FL	10.00	70.00	80.00	0	3	INITIAL	11	3	22	25																						
								3	REORDER	1	1	22	23																						
4	JV/All Up Round - Multiyear 3,	Tucson,AZ/Orlando,FL	110.00	440.00	560.00	0	4	INITIAL	11	3	22	25																							
								4	REORDER	1	1	22	23																						
5	JV/CLU - Multiyear 3,	Tucson,AZ/Orlando,FL	10.00	70.00	80.00	0	5	INITIAL	11	3	22	25																							
								5	REORDER	1	1	22	23																						

FY 04 / 05 BUDGET PRODUCTION SCHEDULE

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

Date: February 2003

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 04												Fiscal Year 05												LATER	
							Calendar Year 04												Calendar Year 05													
							O	N	D	J	F	M	A	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A		S
							C	O	E	A	E	A	P	P	A	U	U	U	E	C	O	V	E	A	E	A	P	A	U	U		A
All Up Round																																
	1	FY 97	A	1020	1020	0																										
	1	FY 97	MC	141	141	0																										
	1	FY 98	A	894	894	0																										
	1	FY 98	MC	380	380	0																										
	1	FY 99	A	3569	3569	0																										
	1	FY 99	MC	741	741	0																										
	1	FY 00	A	2392	2392	0																										
	2	FY 00	MC	1011	1011	0																										
	2	FY 01	A	2776	874	1902	419	495	494	494																						
	2	FY 01	MC	305	229	76	76																									
	2	FY 02	A	4139	0	4139					414	414	414	414	414	414	414	413														
	2	FY 02	FMS	231	0	231							116								115											
	2	FY 03	A	1478	0	1478											136	136	134	134	134	134	134	134	134							
	2	FY 03	FMS	364	0	364												364														
	4	FY 04	A	901	0	901																			901							
	4	FY 05	A	1062	0	1062																			1062							
	4	FY 06	A	0	0	0																			0							
	4	FY 07	A	0	0	0																			0							

MFR	NAME/LOCATION	PRODUCTION RATES			REACHED D+	MFR Number	ADMINLEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS	
		MIN.	1-8-5	MAX.			Prior 1 Oct	After 1 Oct				
1	JV/All Up Round Multiyear 1, Tucson, AZ/Orlando, FL	110.00	440.00	560.00	0	1	INITIAL	11	3	22	25	
							REORDER	1	1	22	23	
2	JV/All Up Round Multiyear 2, Tucson, AZ/Orlando, FL	110.00	440.00	560.00	0	2	INITIAL	11	3	22	25	
							REORDER	1	1	22	23	
3	JV/CLU Multiyear 2, Tucson, AZ/Orlando, FL	10.00	70.00	80.00	0	3	INITIAL	11	3	22	25	
							REORDER	1	1	22	23	
4	JV/All Up Round - Multiyear 3, Tucson,AZ/Orlando,FL	110.00	440.00	560.00	0	4	INITIAL	11	3	22	25	
							REORDER	1	1	22	23	
5	JV/CLU - Multiyear 3, Tucson,AZ/Orlando,FL	10.00	70.00	80.00	0	5	INITIAL	11	3	22	25	
							REORDER	1	1	22	23	

FY 04 / 05 BUDGET PRODUCTION SCHEDULE P-1 Item Nomenclature: JAVELIN (AAWS-M) SYSTEM SUMMARY (CC0007) Date: February 2003

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 04												Fiscal Year 05												L A T E R	
							Calendar Year 04												Calendar Year 05													
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
Command Launch Unit																																
	3	FY 99	MC	153	153	0																										0
	3	FY 00	A	610	610	0																									0	
	3	FY 00	MC	77	77	0																									0	
	3	FY 01	A	808	808	0																									0	
	3	FY 02	A	840	107	733	58	67	70	70	70	70	70	70	70	48															0	
	3	FY 02	FMS	52	22	30							30																		0	
	3	FY 03	A	707	0	707													59	59	59	59	59	59	59	59	59	59	59	58	0	
	3	FY 03	FMS	40	0	40																									40	
	5	FY 04	A	120	0	120																									120	
Total				24811	13028	11783	553	562	564	564	484	484	630	484	484	484	462	414	473	472	195	559	193	193	193	308	193	193	193	192	2257	
							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			REACHED D+	MFR Number	ADMINLEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
		MIN.	1-8-5	MAX.			Prior 1 Oct	After 1 Oct			
1	JV/All Up Round Multiyear 1, Tucson, AZ/Orlando, FL	110.00	440.00	560.00	0	INITIAL	11	3	22	25	
						REORDER	1	1	22	23	
2	JV/All Up Round Multiyear 2, Tucson, AZ/Orlando, FL	110.00	440.00	560.00	0	INITIAL	11	3	22	25	
						REORDER	1	1	22	23	
3	JV/CLU Multiyear 2, Tucson, AZ/Orlando, FL	10.00	70.00	80.00	0						
4	JV/All Up Round - Multiyear 3, Tucson,AZ/Orlando,FL	110.00	440.00	560.00	0	INITIAL	11	3	22	25	
						REORDER	1	1	22	23	
5	JV/CLU - Multiyear 3, Tucson,AZ/Orlando,FL	10.00	70.00	80.00	0	INITIAL	11	3	22	25	
						REORDER	1	1	22	23	

FY 06 / 07 BUDGET PRODUCTION SCHEDULE							P-1 Item Nomenclature: JAVELIN (AAWS-M) SYSTEM SUMMARY (CC0007)													Date: February 2003										
COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 06										Fiscal Year 07										LATER			
							Calendar Year 06										Calendar Year 07													
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY		JUN	JUL	AUG
Command Launch Unit																														
	3	FY 99	MC	153	153	0																								
	3	FY 00	A	610	610	0																								
	3	FY 00	MC	77	77	0																								
	3	FY 01	A	808	808	0																								
	3	FY 02	A	840	840	0																								
	3	FY 02	FMS	52	52	0																								
	3	FY 03	A	707	707	0																								
	3	FY 03	FMS	40	0	40																								
	5	FY 04	A	120	0	120	10	10	10	10	10	10	10	10	10	10														
Total				24811	22554	2257	144	92	92	92	92	92	92	92	92	91	89	89	89	89	89	89	88	88	88	88	88	88	40	
							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	PRODUCTION RATES					REACHED D+	MFR Number	ADMINLEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS																		
NAME/LOCATION	MIN.	1-8-5	MAX.		Prior 1 Oct			After 1 Oct																						
1 JV/All Up Round Multiyear 1, Tucson, AZ/Orlando, FL	110.00	440.00	560.00	0	1	INITIAL	11	3	22	25																				
						REORDER	1	1	22	23																				
2 JV/All Up Round Multiyear 2, Tucson, AZ/Orlando, FL	110.00	440.00	560.00	0	2	INITIAL	11	3	22	25																				
						REORDER	1	1	22	23																				
3 JV/CLU Multiyear 2, Tucson, AZ/Orlando, FL	10.00	70.00	80.00	0	3	INITIAL	11	3	22	25																				
						REORDER	1	1	22	23																				
4 JV/All Up Round - Multiyear 3, Tucson,AZ/Orlando,FL	110.00	440.00	560.00	0	4	INITIAL	11	3	22	25																				
						REORDER	1	1	22	23																				
5 JV/CLU - Multiyear 3, Tucson,AZ/Orlando,FL	10.00	70.00	80.00	0	5	INITIAL	11	3	22	25																				
						REORDER	1	1	22	23																				

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: P-1 Item Nomenclature
 Missile Procurement, Army /2/Other missiles JAVELIN (AAWS-M) SYSTEM SUMMARY(Adv Proc) (CC0007)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	53.0	13.9	17.2	9.0		7.6						100.6
Less PY Adv Proc	53.0	13.9	17.2	9.0		7.6						100.6
Plus CY Adv Proc	93.0				7.6							100.6
Net Proc (P-1)	93.0				7.6							100.6
Initial Spares												
Total Proc Cost	93.0				7.6							100.6
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

Javelin, a fire-and-forget system, is critical to the operational design of the Army's Objective Force because of its man-portability, high reliability, and capability to engage multiple targets. This project provides procurement funds for Javelin, the medium antitank system for infantry, scouts, combat engineers and interim forces. These forces must have the capability to defeat numerically superior armored forces. The Javelin, a replacement for the DRAGON, provides the individual soldier the capability of defeating multiple types of targets (tanks, APCs, bunkers, helicopter, walls, etc). These characteristics (manportability, reliability, fire-and-forget, and multi-target capability) are key elements of the Army's transformation to a more versatile, deployable, lethal, survivable, and sustainable force. Javelin 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 multiple counter-measure conditions. The system's soft launch permits firing from a fighting position or an enclosure. Javelin uses a modular design to allow the system to evolve to meet changing threats and requirements via both software and hardware upgrades. The system consists of a reusable Command Launch Unit (CLU) with a built-in-test (BIT), and a modular missile encased in a launch tube assembly. The system also includes training devices for tactical training, classroom training, and handling exercises. The Javelin system supports the Legacy to Objective transition path of the Transformation Campaign Plan (TCP).

Justification:

FY04/FY05 funds advance procurement for economic order quantity (EOQ) to support a two-year multiyear production contract for Javelin. 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 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.

Advance Procurement Requirements Analysis-Funding (P10A)

First System Award Date:

First System Completion Date:

Date:

February 2003

Appropriation/Budget Activity/Serial No:
Missile Procurement, Army /2/Other missiles

P-1 Line Item Nomenclature / Weapon System
JAVELIN (AAWS-M) SYSTEM SUMMARY

(\$ in Millions)

	PTL (mos)	When Rqd (mos)	Pr Yrs	FY 01	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	To Comp	Total
End Item Quantity							1062							1062
EOQ ITEMS														
Launch Tube Assembly Componen							0.5							0.5
Propulsion Components							1.6							1.6
Missile/BCU Battery Components							0.3							0.3
Focal Plane Array Components							3.4							3.4
Control Acurator Sys. Components							1.3							1.3
Guidan. Electronics Unit Components							0.4							0.4
Receptacle Cover Components							0.1							0.1
Total Advance Procurement			0.0	0.0	0.0	0.0	7.6	0.0	0.0	0.0	0.0	0.0	0.0	7.6

Economic Order Quantity (EOQ) supports two-year multiyear (FY04-05) to procure total of 1,963 Javelin missiles. EOQ funding will be used to procure total components needed from smaller vendors to fulfill multiyear requirements.

Advance Procurement Requirements Analysis-Funding (P10B)

Date:

February 2003

Appropriation/Budget Activity/Serial No:
Missile Procurement, Army /2/Other missiles

P-1 Line Item Nomenclature / Weapon System
JAVELIN (AAWS-M) SYSTEM SUMMARY

(\$ in Millions)

	PLT (mos)	Quantity Per Assembly	Unit Cost	2004			2005		
				Qty	Contract Forecast Date	Total Cost Request	Qty	Contract Forecast Date	Total Cost Request
End Item Quantity:				1062	Dec-03				
EOQ ITEMS									
Launch Tube Assembly Componen				500					0.500
Propulsion Components				1600					1.600
Missile/BCU Battery Components				300					0.300
Focal Plane Array Components				3500					3.400
Control Acurator Sys. Components				1300					1.300
Guidan. Electronics Unit Components				400					0.400
Receptacle Cover Components				100					0.100
Total Advance Procurement						0.000			7.600

EOQ supports two-year multiyear (FY04-05) to procure a total of 1,963 Javelin missiles. EOQ funding will be used to procure total components needed from smaller vendors to fulfill multiyear requirements.

Exhibit P-40, Budget Item Justification Sheet

Date:

February 2003

Appropriation/Budget Activity/Serial No:

Missile Procurement, Army /2/Other missiles

P-1 Item Nomenclature

LINE OF SIGHT ANTI-TANK (LOSAT) SYSTEM SUM (H09000)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

0604819A, 0603654A

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty					76	165	200	192	344	144	547	1668
Gross Cost				0.1	43.2	86.6	111.5	108.6	138.8	104.0	284.5	877.3
Less PY Adv Proc				0.1								0.1
Plus CY Adv Proc			0.1									0.1
Net Proc (P-1)			0.1		43.2	86.6	111.5	108.6	138.8	104.0	284.5	877.3
Initial Spares												
Total Proc Cost			0.1		43.2	86.6	111.5	108.6	138.8	104.0	284.5	877.3
Flyaway U/C												
Wpn Sys Proc U/C					0.6	0.5	0.6	0.6	0.4	0.7	0.5	

Description:

Line-of-Sight Anti-Tank (LOSAT) and Kinetic Energy Missile (KEM) technology provide the foundation for the Objective Force. This program focuses on the integration of the LOSAT weapon system into a light, early deployable configuration in order to help remedy the urgent need for the early entry force lethality shortfall against heavy armor in support of the Army Transformation. The LOSAT weapon system consists of a kinetic energy (KE) missile launcher mounted on a heavy High Mobility Multipurpose Wheeled Vehicle (HMMWV) chassis. LOSAT offers a near-term advanced capability for overwhelming armor destruction with a high rate of fire, increased range, and increased force survivability. LOSAT, deployed in the early entry force, will provide the decisive edge to win swiftly with minimum casualties and provides an assault support weapon capability. LOSAT is strategically and tactically deployable, giving commanders and decision makers greater flexibility. Once in theater, LOSAT is extremely mobile, to include air droppable and sling loading under CH-47 and UH-60L aircraft. The performance of this hypervelocity kinetic energy missile (velocity of a mile per second) is not affected by the proliferation of emerging threat active protection systems and enhanced reactive armors. This system supports the Legacy to Objective Force transition path of the Transformation Campaign Plan (TCP).

Justification:

The FY 04/05 funds procure 241 LOSAT missiles and 20 Fire Units. LOSAT mitigates the Light Force survivability/lethality shortcoming identified in the Light Antitank Study (FEB99).

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: P-1 Item Nomenclature
 Missile Procurement, Army /2/Other missiles LOSAT MISSILE (H09100)

Program Elements for Code B Items: Code: Other Related Program Elements: PE0603654A AND PE0604819A

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty					76	165	200	192	344	144	547	1668
Gross Cost				0.1	43.2	86.6	111.5	108.6	138.8	104.0	284.5	877.3
Less PY Adv Proc	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0		0.1
Plus CY Adv Proc	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.1
Net Proc (P-1)			0.1		43.2	86.6	111.5	108.6	138.8	104.0	284.5	877.3
Initial Spares												
Total Proc Cost			0.1		43.2	86.6	111.5	108.6	138.8	104.0	284.5	877.3
Flyaway U/C												
Wpn Sys Proc U/C					0.6	0.5	0.6	0.6	0.4	0.7	0.5	

Description:

Line-of-Sight Anti-Tank (LOSAT) and Kinetic Energy Missile (KEM) technology provides the foundation for the Objective Force. This program focuses on the integration of the LOSAT weapon system into a light, early deployable configuration in order to help remedy the urgent need for the early entry force lethality shortfall against heavy armor in support of the Army Transformation. The LOSAT weapon system consists of a kinetic energy (KE) missile launcher mounted on a heavy High Mobility Multipurpose Wheeled Vehicle (HMMWV) chassis. LOSAT offers a near-term advanced capability for overwhelming armor destruction with a high rate of fire, increased range, and increased force survivability. LOSAT, deployed in the early entry force, will provide the decisive edge to win swiftly with minimum casualties and will provide an assault support weapon capability. LOSAT is strategically and tactically deployable, giving commanders and decision makers greater flexibility. Once in theater, LOSAT is extremely mobile, to include air droppable and sling loading under CH-47 and UH-60L aircraft. The performance of this hypervelocity kinetic energy missile (velocity of a mile per second) is not affected by the proliferation of emerging threat active protective systems and enhanced reactive armors. LOSAT was initiated as a DoD-approved Advanced Concept Technology Demonstration (ACTD) program (PE0603654) in FY 1998 to position the technology for future acquisition decisions, demonstrate subsystem capabilities in flight tests and dirty battlefield environments; evaluate the utility of the LOSAT technology for the early entry forces; demonstrate an integrated HMMWV-based LOSAT system in flight tests and advanced warfighting experiments, and evaluate affordability issues. In December 1999, the Army and DOD funded the LOSAT accelerated advanced development and procurement as part of the Army Transformation, adding additional design activities, test hardware, and qualification and operational tests concurrent with the ACTD, which will assure design maturity support for entry into Low Rate Initial Production (LRIP) in FY 04. This ACTD Plus System Development Demonstration (SDD) effort is funded in PE 0604819A. This system supports the Legacy to Objective Force transition path of the Transformation Campaign Plan (TCP).

Justification:

The FY 04/05 funds procure 241 LOSAT missiles and 20 Fire Units. LOSAT mitigates the Light Force survivability/lethality shortcoming identified in the Light Antitank Study (FEB99).

Exhibit P-5, Weapon MSLS Cost Analysis		Appropriation/Budget Activity/Serial No. Missile Procurement, Army / 2 / Other missile s			P-1 Line Item Nomenclature: LOSAT MISSILE (H09100)			Weapon System Type:			Date: February 2003		
MSLS Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Missile (MSL) Hardware													
Missiles (Complete Round)							21268	76	280	37365	165	226	
Engineering Change Orders							784			1275			
Subtotal Missile Hardware							22052			38640			
MSL Flyaway Cost							22052			38640			
Fire Unit (FU) Hardware													
Launch Unit							14258	6	2376	31263	14	2234	
Gov't Furnished Equipment							552			2319			
Engineering Change Orders							576			1627			
Engineering Services													
Fielding							1538			4355			
Subtotal FU Hardware							16924			39564			
Fire Unit Rollaway Cost							16924			39564			
Procurement Support													
Project Management							972			1746			
Production Engineering							2583			3366			
Test and Evaluation							283			998			
Interim Contractor Logistics Support										922			
Pubs/Tech Data							148			273			
Sub Total							3986			7305			
Training Devices													
Training Devices							270			1076			
Sub Total							270			1076			
Other Cost													
Less Prior Year Adv Proc			-111										
Plus: P-1 CY Adv Proc		111											
Other Non P-1 Costs													
Total Other Cost		111											
Total		111					43232			86585			

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No: Missile Procurement, Army / 2 / Other missiles		Weapon System Type:			P-1 Line Item Nomenclature: LOSAT MISSILE (H09100)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Missiles (Complete Round)										
FY 2004	LMMFC-MISSILE DALLAS, TX	FPIF	AMCOM	Apr 04	Jul 05	76	280	No		
FY 2005	LMMFC-MISSILE DALLAS, TX	FPIF	AMCOM	Dec 05	Mar 06	165	226	No		

REMARKS: Low rate initial production (LRIP) is scheduled to begin in FY 04.

FY 03 / 04 BUDGET PRODUCTION SCHEDULE							P-1 Item Nomenclature: LOSAT MISSILE (H09100)										Date: February 2003													
COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 03										Fiscal Year 04										L A T E R			
							Calendar Year 03										Calendar Year 04													
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY		JUN	JUL	AUG
LOSAT MISSILE																														
	1	FY 04	A	76	0	76																								
	1	FY 05	A	165	0	165																								
	1	FY 06	A	200	0	200																								
	1	FY 07	A	192	0	192																								
	1	FY 08	A	344	0	344																								
	1	FY 09	A	144	0	144																								
LOSAT FIRE UNIT																														
	2	FY 04	A	6	0	6																								
	2	FY 05	A	14	0	14																								
	2	FY 06	A	21	0	21																								
	2	FY 07	A	22	0	22																								
	2	FY 08	A	26	0	26																								
	2	FY 09	A	27	0	27																								
Total				1237		1237																								
							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			REACHED D+	MFR Number	ADMINLEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS																			
		MIN.	1-8-5	MAX.			Prior 1 Oct	After 1 Oct																						
1	LMMFC-MISSILE, DALLAS, TX	96.00	218.00	370.00	0	1	INITIAL	5	7	15	22																			
							REORDER	0	3	15	18																			
2	LMMFC-FIRE UNIT, DALLAS, TX	6.00	24.00	48.00	0	2	INITIAL	5	7	15	22																			
							REORDER	0	3	15	18																			
							INITIAL																							
							REORDER																							
							INITIAL																							
							REORDER																							

FY 07 / 08 BUDGET PRODUCTION SCHEDULE	P-1 Item Nomenclature: LOSAT MISSILE (H09100)	Date: February 2003
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COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 07												Fiscal Year 08												LATER									
							Calendar Year 07												Calendar Year 08																					
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP										
LOSAT MISSILE																																								
	1	FY 04	A	76	76	0																																		0
	1	FY 05	A	165	90	75	15	15	15	15	15																												0	
	1	FY 06	A	200	0	200						16	16	17	17	17	17	17	17	17	17	16	16															0		
	1	FY 07	A	192	0	192			A																													90		
	1	FY 08	A	344	0	344													A																			344		
	1	FY 09	A	144	0	144																																144		
LOSAT FIRE UNIT																																								
	2	FY 04	A	6	6	0																																0		
	2	FY 05	A	14	7	7	1	1	1	2	2																											0		
	2	FY 06	A	21	0	21					2	2	2	2	2	2	2	2	1	1	1	2															0			
	2	FY 07	A	22	0	22			A																													8		
	2	FY 08	A	26	0	26													A																		26			
	2	FY 09	A	27	0	27																																27		
Total				1237	179	1058	16	16	16	17	17	18	18	19	19	19	19	19	18	18	17	18	18	18	16	16	16	16	16	16	16	16	16	16	16	16	639			
							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			REACHED	MFR Number	ADMINLEAD TIME		MFR	TOTAL	REMARKS	
		MIN.	1-8-5	MAX.			D+	Prior 1 Oct				After 1 Oct
1	LMMFC-MISSILE, DALLAS, TX	96.00	218.00	370.00	0	1	INITIAL	5	7	15	22	Missile and fire unit production rates shown are per year.
					0		3	15	18			
2	LMMFC-FIRE UNIT, DALLAS, TX	6.00	24.00	48.00	0	2	INITIAL	5	7	15	22	
					0		3	15	18			
							INITIAL					
							REORDER					
							INITIAL					
							REORDER					
							INITIAL					
							REORDER					

FY 09 / 10 BUDGET PRODUCTION SCHEDULE							P-1 Item Nomenclature: LOSAT MISSILE (H09100)										Date: February 2003																
COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 09												Fiscal Year 10												LATER		
							Calendar Year 09												Calendar Year 10														
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
LOSAT MISSILE																																	
	1	FY 04	A	76	76	0																								0			
	1	FY 05	A	165	165	0																								0			
	1	FY 06	A	200	200	0																								0			
	1	FY 07	A	192	102	90	14	16	18	20	22																			0			
	1	FY 08	A	344	0	344						24	26	29	32	32	32	32	32	32	32	28	24	21						0			
	1	FY 09	A	144	0	144			A																	18	16	14	12	11	11	11	51
LOSAT FIRE UNIT																																	
	2	FY 04	A	6	6	0																									0		
	2	FY 05	A	14	14	0																									0		
	2	FY 06	A	21	21	0																									0		
	2	FY 07	A	22	14	8	2	1	1	2	2																				0		
	2	FY 08	A	26	0	26						3	3	2	2	2	2	2	2	2	2	2	2	2	2						0		
	2	FY 09	A	27	0	27			A																	3	3	3	2	2	2	2	10
Total				1237	598	639	16	17	19	22	24	27	29	31	34	34	34	34	34	34	34	30	26	23	21	19	17	14	13	13	13	61	
							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			REACHED D+	MFR Number	ADMINLEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS																						
		MIN.	1-8-5	MAX.			Prior 1 Oct	After 1 Oct																									
1	LMMFC-MISSILE, DALLAS, TX	96.00	218.00	370.00	0	1	INITIAL	5	7	15	22	Missile and fire unit production rates shown are per year.																					
						1	REORDER	0	3	15	18																						
2	LMMFC-FIRE UNIT, DALLAS, TX	6.00	24.00	48.00	0	2	INITIAL	5	7	15	22																						
						2	REORDER	0	3	15	18																						
							INITIAL																										
							REORDER																										
							INITIAL																										
							REORDER																										

FY 11 / 12 BUDGET PRODUCTION SCHEDULE							P-1 Item Nomenclature: LOSAT MISSILE (H09100)													Date: February 2003											
COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 11												Fiscal Year 12												LATER
							Calendar Year 11												Calendar Year 12												
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOSAT MISSILE																															
	1	FY 04	A	76	76	0																									0
	1	FY 05	A	165	165	0																									0
	1	FY 06	A	200	200	0																									0
	1	FY 07	A	192	192	0																									0
	1	FY 08	A	344	344	0																									0
	1	FY 09	A	144	93	51	11	10	10	10	10																				0
LOSAT FIRE UNIT																															
	2	FY 04	A	6	6	0																									0
	2	FY 05	A	14	14	0																									0
	2	FY 06	A	21	21	0																									0
	2	FY 07	A	22	22	0																									0
	2	FY 08	A	26	26	0																									0
	2	FY 09	A	27	17	10	2	2	2	2	2																				0
Total				1237	1176	61	13	12	12	12	12																				
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
MFR		PRODUCTION RATES				REACHED D+	MFR Number	ADMINLEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS																			
R	NAME/LOCATION	MIN.	1-8-5	MAX.	Prior 1 Oct			After 1 Oct																							
1	LMMFC-MISSILE, DALLAS, TX	96.00	218.00	370.00	0	1	INITIAL	5	7	15	22	Missile and fire unit production rates shown are per year.																			
							REORDER	0	3	15	18																				
2	LMMFC-FIRE UNIT, DALLAS, TX	6.00	24.00	48.00	0	2	INITIAL	5	7	15	22																				
							REORDER	0	3	15	18																				
							INITIAL																								
							REORDER																								
							INITIAL																								
							REORDER																								

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: P-1 Item Nomenclature
 Missile Procurement, Army /2/Other missiles TOW 2 SYSTEM SUMMARY (C59300)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	144783				200	500	800	462	454	445		147644
Gross Cost	2287.8				10.0	39.3	29.7	26.3	26.2	26.2		2445.4
Less PY Adv Proc	16.1					12.9	3.4					32.5
Plus CY Adv Proc	16.1				16.4							32.5
Net Proc (P-1)	2287.8				26.4	26.3	26.3	26.3	26.2	26.2		2445.4
Initial Spares	20.2											20.2
Total Proc Cost	2308.0				26.4	26.3	26.3	26.3	26.2	26.2		2465.6
Flyaway U/C												
Wpn Sys Proc U/C					0.1	0.1	0.0	0.1	0.1	0.1		

Description:

This latest version of the TOW 2B missile (TOW: Tube-launched, Optically-tracked, Wire command-link guided) provides the heavy anti-armor capability for the Army's Light Early-Entry Contingency Forces, the Brigade Combat Teams (BCT), and the Mechanized Infantry in the Counter-Attack Corps and the Containment Force. TOW 2B is also the primary heavy anti-armor missile for the U.S. Marine Corps and 39 Allied nations. This TOW 2B missile defeats all known and projected threat armor systems including those equipped with advanced armor, explosive reactive armor (ERA), and active protection systems (APS). TOW 2B utilizes dual warheads configured for top-attack to defeat threat armor systems at their most vulnerable point. This TOW 2B missile incorporates the GEN IIIA Counter Active Protection Systems(CAPS) enabling it to counter all current and projected threat APS. Incorporation of a new aerodynamic nose and additional wire extends the range of this TOW 2B and allows the soldier to engage and defeat threat armor systems out to 4,500 meters. Soldiers also employ TOW 2B in a secondary role against buildings and field fortifications taking advantage of the missile's inherent capability against such targets. The TOW 2B missile is launched from a variety of combat systems in the active Army and Army National Guard including the Improved Target Acquisition System (ITAS), all infantry and cavalry variants of Bradley Fighting Vehicle Systems (BFVS), the Stryker ATGM Light Armored Vehicle (LAV), the M220A2 TOW 2 launcher, and the M901A1 Improved TOW Vehicles. The USMC employs the TOW 2B missile from its M220A2 launchers, ATGM - LAV, and AH-1 Cobra helicopters. The TOW 2B missile provides the warfighter with a highly lethal, cost effective, inter-operable, multi-purpose weapon capable of defeating all known and projected threat armor systems well into this century. This system supports the Legacy transition path of the Transformation Campaign Plan (TCP).

FY04-06 is a multiyear contract with options.

Justification:

FY04/FY05 funds the first two years of a three-year multiyear contract to procure new missiles to maintain an effective heavy anti-armor capability for the Army's Early-Entry, Counter-Attack, and Containment Forces.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: P-1 Item Nomenclature
 Missile Procurement, Army /2/Other missiles TOW 2 MISSLE (BGM-71D)(6") (C59403)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	144783				200	500	800	462	454	445		147644
Gross Cost	1859.9				10.0	39.3	29.7	26.3	26.2	26.2		2017.5
Less PY Adv Proc	16.1					12.9	3.4					32.5
Plus CY Adv Proc	16.1				16.4							32.5
Net Proc (P-1)	1859.9				26.4	26.3	26.3	26.3	26.2	26.2		2017.5
Initial Spares												
Total Proc Cost	1859.9				26.4	26.3	26.3	26.3	26.2	26.2		2017.5
Flyaway U/C												
Wpn Sys Proc U/C					0.1	0.1	0.0	0.1	0.1	0.1		

Description:

This latest version of the TOW 2B missile (TOW: Tube-launched, Optically-tracked, Wire command-link guided) provides the heavy anti-armor capability for the Army's Light Early-Entry Contingency Forces, the Brigade Combat Teams (BCT), and the Mechanized Infantry in the Counter-Attack Corps and the Containment Force. TOW 2B is also the primary heavy anti-armor missile for the U.S. Marine Corps and 39 Allied nations. This TOW 2B missile defeats all known and projected threat armor systems including those equipped with advanced armor, explosive reactive armor (ERA), and active protection systems (APS). TOW 2B utilizes dual warheads configured for top-attack to defeat threat armor systems at their most vulnerable point. This TOW 2B missile incorporates the GEN IIIA Counter Active Protection Systems (CAPS) enabling it to counter all current and projected threat APS. Incorporation of a new aerodynamic nose and additional wire extends the range of this TOW 2B and allows the soldier to engage and defeat threat armor systems out to 4,500 meters. Soldiers also employ TOW 2B in a secondary role against buildings and field fortifications taking advantage of the missile's inherent capability against such targets. The TOW 2B missile is launched from a variety of combat systems in the active Army and Army National Guard including the Improved Target Acquisition System (ITAS), all infantry and cavalry variants of Bradley Fighting Vehicle Systems (BFVS), the Stryker ATGM Light Armored Vehicle (LAV), the M220A2 TOW 2 launcher, and the M901A1 Improved TOW Vehicles. The USMC employs the TOW 2B missile from its M220A2 launchers, ATGM - LAV, and AH-1 Cobra helicopters. The TOW 2B missile provides the warfighter with a highly lethal, cost effective, inter-operable, multi-purpose weapon capable of defeating all known and projected threat armor systems well into this century. This system supports the Legacy transition path of the Transformation Campaign Plan (TCP).

Justification:

FY04/FY05 funds the first two years of a three-year multiyear contract to procure new TOW missiles to maintain an effective heavy anti-armor capability for the Army's Early-Entry, Counter-Attack, and Containment Forces.

Exhibit P-5, Weapon MSLS Cost Analysis		Appropriation/Budget Activity/Serial No. Missile Procurement, Army / 2 / Other missiles			P-1 Line Item Nomenclature: TOW 2 MISSLE (BGM-71D)(6") (C59403)			Weapon System Type:			Date: February 2003		
MSLS Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000
Missile Hardware - Recurring													
Missile Contract							9600	200	48		24000	500	48
Engineering Change Orders							210				1230		
Engineering Services							100				392		
Fielding													
Acceptance Testing													
SubTotal Missile Hardware							9910				25622		
Engineering Support													
Project Mgt Admin							100				270		
Production Engineering Support													
SubTotal Engineering Support							100				270		
Non-Recurring Costs													
Economic Order Quantity											13375		
IPF													
SubTotal Non-Recurring Costs											13375		
Total Flyaway							10010				39267		
Support Costs													
Peculiar Support Equipment													
Training Device (B/S)													
SubTotal Support Costs													
Gross P-1 End Cost													
Less: Prior Year Adv Proc											12946		
Net P -1Full Funding Cost													
PLUS P-1 CY Adv. Proc.							16366						
Other Non P -1 Costs													
Initial Spares													
MODS													
Total							26376				26321		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No: Missile Procurement, Army / 2 / Other missiles		Weapon System Type:			P-1 Line Item Nomenclature: TOW 2 MISSLE (BGM71D)(6") (C59403)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Units	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Missile Contract										
FY 2004	Raytheon Tucson, AZ	MY/FFP	AMCOM, RSA, AL	Jan 04	Jul 05	200	48	Yes		
FY 2005	Raytheon Tucson, AZ	MY/FFP	AMCOM, RSA, AL	Dec 04	Jun 06	500	48	Yes		

REMARKS: Raytheon is currently the only industry source that is both facilitized and qualified to produce the TOW 2A and TOW 2B tactical missiles and the TOW 2A practice missile.

FY04-06 is a multiyear contract with options.

FY 02 / 03 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature:
TOW 2 MISSLE (BGM-71D)(6") (C59403)

Date:
February 2003

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 02												Fiscal Year 03												LATE R
							Calendar Year 02												Calendar Year 03												
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Missile Contract																															
	1	FY 02	FMS	2626	0	2626						350	375	428	411	354	341	367								0					
	1	FY 03	FMS	1689	0	1689																				1689					
	1	FY 04	A	200	0	200																				200					
	1	FY 05	A	500	0	500																				500					
	1	FY 06	A	800	0	800																				800					
	1	FY 07	A	462	0	462																				462					
	1	FY 08	A	454	0	454																				454					
	1	FY 09	A	445	0	445																				445					
Total				7176		7176						350	375	428	411	354	341	367								4550					
								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			REACHED	MFR Number	ADMINLEAD TIME		MFR	TOTAL	REMARKS																			
			MIN.	1-8-5	MAX.	D+		Prior 1 Oct	After 1 Oct	After 1 Oct	After 1 Oct																				
1	Raytheon, Tucson, AZ		100.00	350.00	700.00	1	1	INITIAL	2	3	18	21	The majority of FMS purchases are TOW 2A, not TOW2B.																		
								REORDER	3	2	18	20																			
								INITIAL																							
								REORDER																							
								INITIAL																							
								REORDER																							
								INITIAL																							
								REORDER																							

FY 04 / 05 BUDGET PRODUCTION SCHEDULE						P-1 Item Nomenclature: TOW 2 MISSLE (BGM-71D)(6") (C59403)													Date: February 2003												
COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 04												Fiscal Year 05												L A T E R
							Calendar Year 04						Calendar Year 05																		
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Missile Contract																															
	1	FY 02	FMS	2626	2626	0																								0	
	1	FY 03	FMS	1689	0	1689					330	330	343	343	343																0
	1	FY 04	A	200	0	200					A																			0	
	1	FY 05	A	500	0	500																						200		500	
	1	FY 06	A	800	0	800																								800	
	1	FY 07	A	462	0	462																								462	
	1	FY 08	A	454	0	454																								454	
	1	FY 09	A	445	0	445																								445	
Total				7176	2626	4550					330	330	343	343	343														200		2661
							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			REACHED D+	MFR Number	ADMINLEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS																				
		MIN.	1-8-5	MAX.			Prior 1 Oct	After 1 Oct																							
1	Raytheon, Tucson, AZ	100.00	350.00	700.00	1	1	INITIAL		2	3	18	21	The majority of FMS purchases are TOW 2A, not TOW2B.																		
							REORDER		3	2	18	20																			
							INITIAL																								
							REORDER																								
							INITIAL																								
							REORDER																								
							INITIAL																								
							REORDER																								

FY 06 / 07 BUDGET PRODUCTION SCHEDULE	P-1 Item Nomenclature: TOW 2 MISSLE (BGM-71D)(6") (C59403)	Date: February 2003
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COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 06												Fiscal Year 07												LAT E R
							Calendar Year 06						Calendar Year 07																		
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Missile Contract																															
	1	FY 02	FMS	2626	2626	0																					0				
	1	FY 03	FMS	1689	1689	0																					0				
	1	FY 04	A	200	200	0																					0				
	1	FY 05	A	500	0	500							250	250													0				
	1	FY 06	A	800	0	800		A																	200	300	300	0			
	1	FY 07	A	462	0	462												A									462				
	1	FY 08	A	454	0	454																					454				
	1	FY 09	A	445	0	445																					445				
Total				7176	4515	2661								250	250											200	300	300	1361		

MFR	NAME/LOCATION	PRODUCTION RATES			REACHED D+	MFR Number	ADMIN	LEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
		MIN.	1-8-5	MAX.				Prior 1 Oct	After 1 Oct			
1	Raytheon, Tucson, AZ	100.00	350.00	700.00	1	1	INITIAL	2	3	18	21	The majority of FMS purchases are TOW 2A, not TOW2B.
							REORDER	3	2	18	20	
							INITIAL					
							REORDER					
							INITIAL					
							REORDER					

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: Missile Procurement, Army /2/Other missiles
 P-1 Item Nomenclature: TOW 2 SYSTEM SUMMARY(Adv Proc) (C59300)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost												
Less PY Adv Proc	0.0											
Plus CY Adv Proc	16.1				16.4							32.5
Net Proc (P-1)	16.1				16.4							32.5
Initial Spares												
Total Proc Cost	16.1				16.4							32.5
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

This latest version of the TOW 2B missile (TOW: Tube-launched, Optically-tracked, Wire command-link guided) provides the heavy anti-armor capability for the Army's Light Early-Entry Contingency Forces, the Brigade Combat Teams (BCT), and the Mechanized Infantry in the Counter-Attack Corps and the Containment Force. TOW 2B is also the primary heavy anti-armor missile for the U.S. Marine Corps and 39 Allied nations. This TOW 2B missile defeats all known and projected threat armor systems including those equipped with advanced armor, explosive reactive armor (ERA), and active protection systems (APS). TOW 2B utilizes dual warheads configured for top-attack to defeat threat armor systems at their most vulnerable point. This TOW 2B missile incorporates the GEN IIIA Counter Active Protection Systems (CAPS) enabling it to counter all current and projected threat APS. Incorporation of a new aerodynamic nose and additional wire extends the range of this TOW 2B and allows the soldier to engage and defeat threat armor systems out to 4,500 meters. Soldiers also employ TOW 2B in a secondary role against buildings and field fortifications taking advantage of the missile's inherent capability against such targets. The TOW 2B missile is launched from a variety of combat systems in the active Army and Army National Guard including the Improved Target Acquisition System (ITAS), all infantry and cavalry variants of Bradley Fighting Vehicle Systems (BFVS), the Stryker ATGM Light Armored Vehicle (LAV), the M220A2 TOW 2 launcher, and the M901A1 Improved TOW Vehicles. The USMC employs the TOW 2B missile from its M220A2 launchers, ATGM - LAV, and AH-1 Cobra helicopters. The TOW 2B missile provides the warfighter with a highly lethal, cost effective, inter-operable, multi-purpose weapon capable of defeating all known and projected threat armor systems well into this century. This system supports the Legacy to Interim transition path of the Transformation Campaign Plan (TCP).

FY04-06 is a multiyear contract with options.

Justification:

FY04/FY05 funding procures new TOW missiles to maintain an effective heavy anti-armor capability for the Army's Early-Entry, Counter-Attack, and Containment Forces.

Advance Procurement Requirements Analysis-Funding (P10A)

First System Award Date:
Dec 03

First System Completion Date:
Apr 05

Date:
February 2003

Appropriation/Budget Activity/Serial No:
Missile Procurement, Army /2/Other missiles

P-1 Line Item Nomenclature / Weapon System
TOW 2 SYSTEM SUMMARY

(\$ in Millions)

	PTL (mos)	When Rqd (mos)	Pr Yrs	FY 01	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	To Comp	Total
End Item Quantity														
Modulator	10						0.2							0.2
Launch Motor	15						0.8							0.8
TOW 2 Sensor Assy	15						6.1							6.1
Pyro Switch	15						0.1							0.1
Micro Circuit	14						0.0							0.0
M114 S&A Device	14						0.3							0.3
Shutter Preform	14						0.0							0.0
DEU Assy	13						0.6							0.6
Actuator	13						1.3							1.3
Bulkhead Forging	13						0.0							0.0
Beacon Shutter Actuator	13						0.2							0.2
TOW 2B Warhead	12						5.1							5.1
Igniter Grain	12						0.0							0.0
Fwd Case Preform	11						0.0							0.0
Aft Case Preform	11						0.0							0.0
Wing Lug Casting	11						0.0							0.0
Battery	11						0.3							0.3
Retainer	10						0.0							0.0
Gyro	11						1.3							1.3
Total Advance Procurement			0.0	0.0	0.0	0.0	16.4	0.0	0.0	0.0	0.0	0.0	0.0	16.4

Advanced Procurement will support multiyear procurement.

Advance Procurement Requirements Analysis-Funding (P10B)

Date:

February 2003

Appropriation/Budget Activity/Serial No:
Missile Procurement, Army /2/Other missiles

P-1 Line Item Nomenclature / Weapon System
TOW 2 SYSTEM SUMMARY

(\$ in Millions)

	PLT (mos)	Quantity Per Assembly	Unit Cost	2004		2005		
				Qty	Contract Forecast Date	Total Cost Request	Qty	Contract Forecast Date
End Item Quantity:								
Modulator	10	1		632		0.170		
Launch Motor	15	1		632		0.842		
TOW 2 Sensor Assy	15	1		632		6.141		
Pyro Switch	15	1		632		0.092		
Micro Circuit	14	1		632		0.007		
M114 S&A Device	14	1		632		0.312		
Shutter Preform	14	1		632		0.003		
DEU Assy	13	1		632		0.552		
Actuator	13	1		632		1.279		
Bulkhead Forging	13	1		632		0.021		
Beacon Shutter Actuator	13	1		632		0.224		
TOW 2B Warhead	12	1		632		5.105		
Igniter Grain	12	1		632		0.014		
Fwd Case Preform	11	1		632		0.038		
Aft Case Preform	11	1		632		0.038		
Wing Lug Casting	11	1		632		0.007		
Battery	11	1		632		0.256		
Retainer	10	1		632		0.006		
Gyro	11	1		632		1.259		
Total Advance Procurement						16.366		0.000

Advanced Procurement will support multiyear procurement.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: Missile Procurement, Army /2/Other missiles
 P-1 Item Nomenclature: GUIDED MLRS ROCKET (GMLRS) (C65404)

Program Elements for Code B Items: Code: Other Related Program Elements: C65400, C65402, C65405

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty				108	786	1026	1218	2688	5814	6942	121422	140004
Gross Cost				36.6	107.8	112.6	129.8	249.8	487.7	570.9	9980.2	11675.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)				36.6	107.8	112.6	129.8	249.8	487.7	570.9	9980.2	11675.3
Initial Spares												
Total Proc Cost				36.6	107.8	112.6	129.8	249.8	487.7	570.9	9980.2	11675.3
Flyaway U/C												
Wpn Sys Proc U/C				0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	

Description:

The Guided Multiple Launch Rocket System (GMLRS) is a precision strike, artillery rocket system. Coupled with the High Mobility Artillery Rocket System (HIMARS) launcher platform, the GMLRS provides the warfighter with a highly mobile, rapidly deployable, precision guided munition with a reduced logistics burden effective against counterfire, air defense, light materiel, and personnel targets. The GMLRS is a major upgrade to the M26 series rocket and replaces the aging M26 inventory. GMLRS will integrate a guidance and control package and a new rocket motor to achieve greater range and precision accuracy requiring fewer rockets to defeat targets than current artillery rockets, thereby reducing the logistics burden. The GMLRS will also become the primary munition for the artillery units fielded with the M270A1 launcher. The GMLRS is a five nation cooperative program among France, Germany, Italy, United Kingdom and the United States. FY03 initiated efforts to develop a new high explosive warhead and fuzing system for the GMLRS known as the GMLRS-Unitary. The GMLRS-Unitary is an all weather, low collateral damage precision rocket which addresses an expanded MLRS target set to include point targets within urban and complex environments. It is a pre-planned product improvement that will integrate a multi-mode fuze and high explosive insensitive munition into a warhead of the same GMLRS dimensions. GMLRS-Unitary satisfies a validated user requirement and will be fielded to support early entry forces, Stryker brigades and the unit of action in the objective force. FY05 initiates efforts to meet the DOD mandate on insensitive munitions effort. Additionally, seeker technologies will be assessed for spiral development and potential insertion into GMLRS Unitary to provide operational flexibility against an expanded target set including moving targets. The GMLRS and GMLRS-Unitary support the Legacy to Objective transition path of the Transformation Campaign Plan (TCP).

Justification:

FY04/05 procures 786 and 1026 GMLRS rockets, respectively, for LRIPs II and III. This rocket is the baseline for all future Objective Force MLRS/HIMARS Rocket Munitions.

Exhibit P-5, Weapon MSLS Cost Analysis		Appropriation/Budget Activity/Serial No. Missile Procurement, Army / 2 / Other missiles			P-1 Line Item Nomenclature: GUIDED MLRS ROCKET (GMLRS) (C65404)			Weapon System Type:			Date: February 2003		
MSLS Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Missile Hardware Recurring													
Tactical GMLRS				16845	108	156	89548	786	114	88892	1026	87	
Engineering Services				418			1588			1066			
Ind Maint/Init Prod Fac				7500			3938						
Fielding							19			134			
Subtotal Hardware				24763			95093			90092			
Procurement Support													
Project Management Admin				2177			7275			8370			
Production Engineering Support				3830			5391			5846			
Government Test										8338			
Subtotal Procurement Support				6007			12666			22554			
Total Missile Flyaway				30770			107759			112646			
Support Costs													
Msl Test Device and Trainer				5780									
Subtotal Support Costs				5780									
Total				36550			107759			112646			

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No: Missile Procurement, Army / 2 / Other missiles		Weapon System Type:			P-1 Line Item Nomenclature: GUIDED MLRS ROCKET (GMLRS) (C65404)					
WBS Cost Elements:	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 GMLRS										
FY 2003	Lockheed Martin M.&F.C Sys. Dallas, TX	SS/FFP	AMCOM	Mar-03	Jun-04	108	156	No		
FY 2004	Lockheed Martin M.&F.C Sys. Dallas, TX	SS/FFP	AMCOM	Apr-04	Jan-05	786	114	No		
FY 2005	Lockheed Martin M.&F.C Sys. Dallas, TX	SS/FFP	AMCOM	Apr-05	Jan-06	1026	87	No		

REMARKS: Lockheed Martin is currently the industry source that is both facilitized and qualified to produce the GMLRS rocket. FY07 starts production of the GMLRS-Unitary Rocket for delivery in FY08.

FY 05 / 06 BUDGET PRODUCTION SCHEDULE							P-1 Item Nomenclature: GUIDED MLRS ROCKET (GMLRS) (C65404)															Date: February 2003																		
COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 05												Fiscal Year 06												L A T E R									
							Calendar Year 05												Calendar Year 06																					
							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 GMLRS																																								
	1	FY 03	A	108	30	78	18	24	36																												0			
	1	FY 04	A	786	0	786				36	48	48	48	66	66	72	78	78	78	84	84																0			
	1	FY 05	A	1026	0	1026							A																								270			
	1	FY 06	A	1218	0	1218																															1218			
	1	FY 07	A	2688	0	2688																															2688			
	1	FY 08	A	5814	0	5814																															5814			
	1	FY 09	A	6942	0	6942																															6942			
Total							18582	30	18552	18	24	36	36	48	48	48	66	66	72	78	78	78	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	16932		
										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			REACHED D+	MFR Number	ADMINLEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
		MIN.	1-8-5	MAX.			Prior 1 Oct	After 1 Oct			
1	Lockheed Martin M.&F.C Sys., Dallas, TX	42.00	250.00	500.00	12	1	INITIAL	8	2	15	17
							REORDER	0	2	9	11
							INITIAL				
							REORDER				
							INITIAL				
							REORDER				
							INITIAL				
							REORDER				

FY 11 / 12 BUDGET PRODUCTION SCHEDULE							P-1 Item Nomenclature: GUIDED MLRS ROCKET (GMLRS) (C65404)											Date: February 2003																		
COST ELEMENTS		M F R	FY	S E R V	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 11												Fiscal Year 12												L A T E R				
								Calendar Year 11												Calendar Year 12																
								O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S					
C	O	E	A	E	A	P	A	U	U	U	E	C	O	V	E	A	E	A	P	A	U	U	A	S												
T	V	C	N	B	R	R	Y	N	L	G	P	T	V	C	N	B	R	Y	N	L	G	P														
Tactical GMLRS																																				
	1		FY 03	A	108	108	0																													
	1		FY 04	A	786	786	0																													
	1		FY 05	A	1026	1026	0																													
	1		FY 06	A	1218	1218	0																													
	1		FY 07	A	2688	2688	0																													
	1		FY 08	A	5814	5814	0																													
	1		FY 09	A	6942	5196	1746	582	582	582																										
Total																																				

M F R	NAME/LOCATION	PRODUCTION RATES			REACHED D+	MFR Number	ADMINLEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS	
		MIN.	1-8-5	MAX.			Prior 1 Oct	After 1 Oct				
1	Lockheed Martin M.&F.C Sys., Dallas, TX	42.00	250.00	500.00	12	1	INITIAL	8	2	15	17	
							REORDER	0	2	9	11	
							INITIAL					
							REORDER					
							INITIAL					
							REORDER					
							INITIAL					
							REORDER					

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: P-1 Item Nomenclature
Missile Procurement, Army /2/Other missiles MLRS REDUCED RANGE PRACTICE ROCKETS (RRPR) (C65405)

Program Elements for Code B Items: Code: Other Related Program Elements: C65400, C65402, C65404

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty				3366	2934	3054	3150	3252	3270	3240	29484	51750
Gross Cost				15.6	14.6	15.5	16.4	17.4	18.0	18.4	197.9	314.1
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)				15.6	14.6	15.5	16.4	17.4	18.0	18.4	197.9	314.1
Initial Spares												
Total Proc Cost				15.6	14.6	15.5	16.4	17.4	18.0	18.4	197.9	314.1
Flyaway U/C												
Wpn Sys Proc U/C				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Description:

The Multiple Launch Rocket System (MLRS) Reduced Range Practice Rocket (RRPR) is a training rocket which is allocated to Active Duty and Reserve Component units. The rocket has an inert payload section with a blunt nose for inducing reduced range for use at multiple ranges CONUS and OCONUS. The MLRS RRPR has been in inventory since 1993 with the last United States procurement in FY95. The current stockpile of MLRS RRPRs for training use by the MLRS units is being reduced due to training consumption and requires replenishment to preclude stockpile depletion and to sustain adequate stockpile margins. This system supports the Legacy to Objective transition path of the Transformation Campaign Plan (TCP).

Justification:

FY04/05 funding procures 2934 and 3054 RRPRs respectively, which are required to replenish Standards in Training Commission (STRAC) requirements for practice rocket inventory.

Exhibit P-5, Weapon MSLS Cost Analysis		Appropriation/Budget Activity/Serial No. Missile Procurement, Army / 2 / Other missiles			P-1 Line Item Nomenclature: MLRS REDUCED RANGE PRACTICE ROCKETS (RRPR) (C65405)			Weapon System Type:			Date: February 2003		
MSLS Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		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													
Reduced Range Practice Rocket (RRPR) Fielding					14645	3366	4	12907 175	2934	4	13384 175	3054	4
SUBTOTAL					14645			13082			13559		
PROCUREMENT SUPPORT													
Project Management Admin					437			484			643		
Production Engineering Support					565			587			831		
Test and Evaluation								493			497		
SUBTOTAL					1002			1564			1971		
Total					1002			1564			1971		
Total					15647			14646			15530		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No: Missile Procurement, Army / 2 / Other missiles		Weapon System Type:			P-1 Line Item Nomenclature: MLRS REDUCED RANGE PRACTICE ROCKETS (RRPR)(C65405)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Reduced Range Practice Rocket (RRPR)										
FY 2003	Lockheed Martin M.&F.C. Sys. Dallax, TX	SS/FFP	AMCOM	Mar-03	Nov-03	3366	4	No		Nov-02
FY 2004	Lockheed Martin M.&F.C. Sys. Dallax, TX	SS/FFP	AMCOM	Mar-04	Nov-04	2934	4	No		
FY 2005	Lockheed Martin M.&F.C. Sys. Dallax, TX	SS/FFP	AMCOM	Mar-05	Nov-05	3054	4	No		

REMARKS: Lcokheed Martin is currently the industry source that is both facilitized and qualified to produce the Reduced Range Practice Rocket.

FY 05 / 06 BUDGET PRODUCTION SCHEDULE	P-1 Item Nomenclature: MLRS REDUCED RANGE PRACTICE ROCKETS (RRPR) (C65405)	Date: February 2003
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COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 05												Fiscal Year 06												L A T E R	
							Calendar Year 05												Calendar Year 06													
							O	N	D	J	F	M	A	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A		S
							C	O	E	A	E	A	P	A	U	U	U	U	E	C	O	E	A	E	A	P	A	U	U	U		E
Reduced Range Practice Rocket (RRPR)	1	FY 03	A	3366	3078	288																							0			
	1	FY 04	A	2934	0	2934	240	240	240	240	240	240	246	246	246	252	252	252											0			
	1	FY 05	A	3054	0	3054					A						252	252	252	252	252	252	252	252	258	258	258	258	258			
USMC	1	FY 04	MC	618	0	618	48	48	48	48	48	54	54	54	54	54	54											0				
	1	FY 05	MC	552	0	552					A						54	54	48	48	48	48	42	42	42	42	42	42				
Total				10524	3078	7446	288	288	288	288	288	294	300	300	300	306	306	306	306	306	300	300	300	300	294	300	300	300	300			

MFR	NAME/LOCATION	PRODUCTION RATES			REACHED	MFR Number	ADMINLEAD TIME		MFR	TOTAL	REMARKS
		MIN.	1-8-5	MAX.	D+		Prior 1 Oct	After 1 Oct	After 1 Oct	After 1 Oct	
1	Lockheed Martin M.&F.C. Sys., Dallax, TX	42.00	480.00	960.00	12	1	INITIAL	8	2	8	10
							REORDER	0	2	8	10
							INITIAL				
							REORDER				
							INITIAL				
							REORDER				
							INITIAL				
							REORDER				

FY 07 / 08 BUDGET PRODUCTION SCHEDULE							P-1 Item Nomenclature: MLRS REDUCED RANGE PRACTICE ROCKETS (RRPR) (C65405)										Date: February 2003														
COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 07												Fiscal Year 08												L A T E R
							Calendar Year 07												Calendar Year 08												
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Reduced Range Practice Rocket (RRPR)																															
	1	FY 03	A	3366	3366	0																									
	1	FY 04	A	2934	2934	0																									
	1	FY 05	A	3054	2796	258	258																								
USMC																															
	1	FY 04	MC	618	618	0																									
	1	FY 05	MC	552	510	42	42																								
Total				10524	10224	300	300																								

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: P-1 Item Nomenclature
 Missile Procurement, Army /2/Other missiles MLRS LAUNCHER SYSTEMS (C66400)

Program Elements for Code B Items: Code: Other Related Program Elements: C65900

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	838	66	41	34								979
Gross Cost	2473.7	196.9	130.6	134.7	40.2	41.3	24.5					3041.9
Less PY Adv Proc	56.9											56.9
Plus CY Adv Proc	56.9											56.9
Net Proc (P-1)	2473.7	196.9	130.6	134.7	40.2	41.3	24.5					3041.9
Initial Spares	166.6	6.4	9.9	6.6	6.5	6.4						202.4
Total Proc Cost	2640.2	203.3	140.5	141.4	46.7	47.7	24.5					3244.3
Flyaway U/C												
Wpn Sys Proc U/C		3.0	3.2	4.0								

Description:

The M270A1 improves survivability by decreasing the time to aimpoint by 83%, decreasing the maintenance requirement by improving the system reliability, and decreasing operation and support costs by 31%. It also extends the range to engage targets to 300+ kilometers. The objectives of the MLRS are counterfire, suppression of enemy air defenses, light materiel and personnel targets. Operationally, the system is designed for mobility, flexibility, and range requirements necessary on the modern battlefield. Mounted on a derivative of the Bradley Fighting Vehicle (BFV), the launcher/loader requires a crew of three soldiers to conduct rocket and missile launches. The M270A1 is capable of firing either 12 rockets or 2 missiles from a single launcher. Utilizing the MLRS Family of Munitions, the system is now capable of engaging targets from ranges extending from 15 to 300+ kilometers. The M270A1 is one of the Army's recapitalization systems in which the launcher is completely remanufactured. The remanufactured launcher then adds the Improved Fire Control System (IFCS) and the Improved Launcher Mechanical System (ILMS) to complete the M270A1 upgrade. Procurement of the IFCS and ILMS upgrades began in FY98. The M270A1 upgrades are needed to fire the Army Tactical Missile System (ATACMS) Block IA missile, Block II missile, ATACMS Unitary and Guided MLRS. The IFCS is a modification to the current Fire Control System that upgrades the system's electronics, providing increased processing capability, an embedded global positioning system for accurate position location for the launcher and munitions, and improved fault isolation for ease of launcher maintenance. The ILMS allows for faster target engagement on time-sensitive, short-dwell-time targets, greatly improves the survivability of the crew and the launcher by significantly reducing the time on the firing point and the time for reload operations. The versatility of the system permits adaptation to other warheads such as scatterable mines, unitary warheads, terminally guided munitions, and other smart munitions which will expand the systems' target set. This system supports the Legacy transition path of the Transformation Campaign Plan (TCP).

Justification:

FY04/FY05 funding provides for continued support of the remanufacture of Launcher Loader Module (LLM)/Carriers and supports production of the M270A1 launchers and associated support equipment to meet testing and fielding requirements.

The MLRS Launcher program production has been terminated after FY03 in order to fund Transformation and other higher priority Army programs.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: P-1 Item Nomenclature
 Missile Procurement, Army /2/Other missiles MLRS LAUNCHER (C65900)

Program Elements for Code B Items: Code: Other Related Program Elements: C66400

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	838	66	41	34								979
Gross Cost	2473.7	196.9	130.6	134.7	40.2	41.3	24.5					3041.9
Less PY Adv Proc	56.9											56.9
Plus CY Adv Proc	56.9											56.9
Net Proc (P-1)	2473.7	196.9	130.6	134.7	40.2	41.3	24.5					3041.9
Initial Spares	166.6	6.4	9.9	6.6	6.5	6.4						202.4
Total Proc Cost	2640.2	203.3	140.5	141.4	46.7	47.7	24.5					3244.3
Flyaway U/C												
Wpn Sys Proc U/C		3.0	3.2	4.0								

Description:

The M270A1 improves survivability by decreasing the time to aimpoint by 83%, decreasing the maintenance requirement by improving the system reliability, and decreasing operation and support costs by 31%. It also extends the range to engage targets to 300+ kilometers. The objectives of the MLRS are counterfire, suppression of enemy air defenses, light materiel and personnel targets. Operationally, the system is designed for mobility, flexibility, and range requirements necessary on the modern battlefield. Mounted on a derivative of the Bradley Fighting Vehicle (BFV), the launcher/loader requires a crew of three soldiers to conduct rocket and missile launches. The M270A1 is capable of firing either 12 rockets or 2 missiles from a single launcher. Utilizing the MLRS Family of Munitions, the system is now capable of engaging targets from ranges extending from 15 to 300+ kilometers. The M270A1 is one of the Army's recapitalization systems in which the launcher is completely remanufactured. The remanufactured launcher then adds the Improved Fire Control System (IFCS) and the Improved Launcher Mechanical System (ILMS) to complete the M270A1 upgrade. Procurement of the IFCS and ILMS upgrades began in FY98. The M270A1 upgrades are needed to fire the Army Tactical Missile System (ATACMS) Block IA missile, Block II missile, ATACMS Unitary and Guided MLRS. The IFCS is a modification to the current Fire Control System that upgrades the system's electronics, providing increased processing capability, an embedded global positioning system for accurate position location for the launcher and munitions, and improved fault isolation for ease of launcher maintenance. The ILMS allows for faster target engagement on time-sensitive, short-dwell-time targets, greatly improves the survivability of the crew and the launcher by significantly reducing the time on the firing point and the time for reload operations. The versatility of the system permits adaptation to other warheads such as scatterable mines, unitary warheads, terminally guided munitions, and other smart munitions which will expand the systems' target set. This system supports the Legacy transition path of the Transformation Campaign Plan (TCP).

Justification:

FY04-FY05 funding provides for continued support of the remanufacture of Launcher Loader Module (LLM)/Carriers and supports production of the M270A1 launchers and associated support equipment to meet testing and FY04 fielding to 1-21 FA (1st Cav Div) and 3-13 FA, FY05 fielding to 1-142 FA (AR NG), and 1-147 FA (SD NG).

The MLRS Launcher program production has been terminated after FY03 in order to fund Transformation and other higher priority Army programs.

Exhibit P-5, Weapon MSLS Cost Analysis		Appropriation/Budget Activity/Serial No. Missile Procurement, Army / 2 / Other missiles			P-1 Line Item Nomenclature: MLRS LAUNCHER (C65900)			Weapon System Type:			Date: February 2003		
MSLS Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
GROUND EQUIPMENT HARDWARE													
Launcher		65314	41	1593	63695	34	1873						
Remanufacture		12419			19599								
Launcher Pod/Container (LP/C) Trainer													
System Safety Reduction Evaluation		1600											
2x9/3x6 Launcher													
Peculiar Support Equipment		7264			7338			8618			8294		
Engineering Services		13930			14019			11050			11546		
Production Engineering		8521			8198			5454			6195		
Other Government Agencies		3941			5011			2798			3092		
Fielding		4480			6597			4453			5852		
Facilitization		3481			1604								
SUBTOTAL		120950			126061			32373			34979		
PROCUREMENT SUPPORT													
Project Management Admin		9656			8681			7782			6347		
SUBTOTAL		9656			8681			7782			6347		
Gross P-1 End Cost		130606			134742			40155			41326		
Total		130606			134742			40155			41326		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No:
Missile Procurement, Army / 2 / Other missiles

Weapon System Type:

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

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Launcher										
FY 2002	Lockheed Martin M.&F.C.Sys Dallas, Texas	SS/FFP	AMCOM	Dec 01	Dec 03	41	1593	Yes		
FY 2003	Lockheed Martin M.&F.C.Sys Dallas, Texas	SS/FFP	AMCOM	Dec 02	Jul 04	34	1824	Yes		

REMARKS: Lockheed Martin is currently the only industry source that is both facilitized and qualified to produce the M270A1 Launcher.

FY 02 / 03 BUDGET PRODUCTION SCHEDULE							P-1 Item Nomenclature: MLRS LAUNCHER (C65900)										Date: February 2003														
COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 02												Fiscal Year 03												L A T E R
							Calendar Year 02												Calendar Year 03												
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
Launcher M270A1																															
	1	FY 00	A	39	0	39																									
	1	FY 01	A	66	0	66																									
	1	FY 02	A	41	0	41																									
	1	FY 02	FMS	10	0	10																									
	1	FY 03	A	34	0	34																									
Total				190		190																									
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	
MFR	NAME/LOCATION	PRODUCTION RATES			REACHED	MFR Number	ADMINLEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS																				
		MIN.	1-8-5	MAX.			D+	Prior 1 Oct				After 1 Oct																			
1	Lockheed Martin M.&F.C.Sys, Dallas, Texas	2.00	8.00	12.00	0	1	INITIAL	8	2	24	26																				
							REORDER	0	2	24	26																				
							INITIAL																								
							REORDER																								
							INITIAL																								
							REORDER																								
							INITIAL																								
							REORDER																								

FY 04 / 05 BUDGET PRODUCTION SCHEDULE						P-1 Item Nomenclature: MLRS LAUNCHER (C65900)										Date: February 2003															
COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 04												Fiscal Year 05												LATER
							Calendar Year 04												Calendar Year 05												
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Launcher M270A1																															
	1	FY 00	A	39	39	0																									
	1	FY 01	A	66	54	12	6	6																					0		
	1	FY 02	A	41	0	41																							0		
	1	FY 02	FMS	10	4	6	1	1		6	6	6	6	6	6	5													0		
	1	FY 03	A	34	0	34											3	3	3	3	3	3	3	3	3	3	3	1	0		
Total				190	97	93	7	7	7	7	7	7	6	6	5	3	3	3	3	3	3	3	3	3	3	3	3	1			
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
MFR	NAME/LOCATION	PRODUCTION RATES			REACHED D+	MFR Number	ADMINLEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS																				
		MIN.	1-8-5	MAX.			Prior 1 Oct	After 1 Oct																							
1	Lockheed Martin M.&F.C.Sys, Dallas, Texas	2.00	8.00	12.00	0	1	INITIAL	8	2	24	26																				
							REORDER	0	2	24	26																				
							INITIAL																								
							REORDER																								
							INITIAL																								
							REORDER																								
							INITIAL																								
							REORDER																								

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: Missile Procurement, Army /2/Other missiles
 P-1 Item Nomenclature: HIMARS LAUNCHER (C03000)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty				28	24	37	48	51	58	60	582	888
Gross Cost				128.6	124.2	169.8	211.1	229.7	231.6	241.9	2565.9	3902.7
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)				128.6	124.2	169.8	211.1	229.7	231.6	241.9	2565.9	3902.7
Initial Spares					7.5	4.0	8.5	7.6	13.1	10.5	171.9	223.2
Total Proc Cost				128.6	131.7	173.8	219.5	237.4	244.6	252.4	2737.9	4125.9
Flyaway U/C												
Wpn Sys Proc U/C				4.6	5.2	4.6	4.4	4.5	4.0	4.0	4.4	

Description:

High Mobility Artillery Rocket System (HIMARS) is a C-130 transportable, wheeled, indirect fire, rocket/missile launcher that is capable of firing all rockets and missiles in the current and future Multiple Launch Rocket System (MLRS) Family of Munitions (MFOM). The HIMARS launcher (XM142) has extensive commonality with the MLRS M270A1 track launcher and will consist of a Fire Control System (FCS), a carrier (FMTV M1096 automotive chassis) and a launcher-loader module (LLM) that will perform all operations necessary to complete a fire mission. The MFOM is a family of rockets and missiles capable of attacking a variety of tactical and operational targets, providing the requisite range and lethality to support maneuver commanders. HIMARS meets Army's digitization requirements by interfacing with the Advanced Field Artillery Tactical Data System (AFATDS), fire support command and control system and the Force XXI Battle Command Brigade and Below (FBCB2). HIMARS will be interoperable with existing MLRS units in terms of communications and reloading capabilities. HIMARS will be an all-weather, day/night, indirect fire, single or multiple launch system capable of delivering the MFOM in support of light, airborne, air assault divisions and forced/early entry contingency force operations using a more deployable, lethal, survivable and tactically mobile long range system. The HIMARS will be deployable worldwide and will operate in a wide range of climatic conditions. It is already certified by the Air Force for fixed-wing air transport in a fully combat loaded, combat ready configuration. HIMARS as part of the Objective Force Unit of Employment will provide fires that share and isolate the battle space. The HIMARS will provide maneuver forces a flexible and lethal rocket/missile capability that can be employed by platoon, battery, or battalion, each with the ability to operate independently for a limited period. HIMARS units will execute general support, general support reinforcing, or limited reinforcing missions. Stryker and Objective Force commanders will employ HIMARS to provide counterfire, Theater Missile Defense Attack Operations, Suppression of Enemy Air Defenses (SEAD) and precision interdiction in both the offense and the defense. HIMARS units can be quickly tailored for centralized or decentralized execution throughout the depth and breadth of the battle space in support of distributed forces. This system supports the Legacy to Objective transition path of the Transformation Campaign Plan (TCP).

Justification:

FY 04/05 procures Low Rate Initial Production (LRIP) II and LRIP III HIMARS launchers, trainers and associated support equipment. HIMARS meets the Army's modernization goal for the 21st century, is designated Army's "Legacy to Objective" rocket/missile delivery system, and was selected by Army strategic planners as one of the Army's "core" Transformation systems.

Exhibit P-5, Weapon MSLS Cost Analysis		Appropriation/Budget Activity/Serial No. Missile Procurement, Army / 2 / Other missiles			P-1 Line Item Nomenclature: HIMARS LAUNCHER (C03000)			Weapon System Type:			Date: February 2003		
MSLS Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
GROUND EQUIPMENT HARDWARE													
Launcher				86478	28	3089	66412	24	2767	90619	37	2449	
Carrier				10808	28	386	10554	24	440	17574	37	475	
Engineering Services				2488			16213			16743			
Fielding							1902			10289			
Facilitization				6809			5562						
SUBTOTAL				106583			100643			135225			
PROCUREMENT SUPPORT													
Project Management Admin				8579			8531			9398			
Production Engineering				9231			7971			9852			
Government Testing							512			2274			
SUBTOTAL				17810			17014			21524			
Support Equipment													
Peculiar Support Equipment				3668			1886			4056			
Trainers				560	28	20	4648	24	194	8973	37	243	
SUBTOTAL				4228			6534			13029			
Gross P-1 End Cost				128621			124191			169778			
Other Non P-1 Costs													
Initial Spares							7510			4044			
Total							7510			4044			
Total				128621			131701			173822			

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No: Missile Procurement, Army / 2 / Other missiles		Weapon System Type:			P-1 Line Item Nomenclature: HIMARS LAUNCHER (C03000)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Launcher										
FY 2003	Lockheed Martin M.&F.C. Sys Dallas Texas	SS/FFP	AMCOM	Dec 02	Jun 04	28	3089	no		
FY 2004	Lockheed Martin M.&F.C. Sys Dallas Texas	SS/FFP	AMCOM	Dec 03	Jun 05	24	2767	no		
FY 2005	Lockheed Martin M.&F.C. Sys Dallas Texas	SS/FFP	AMCOM	Dec 04	Jun 06	37	2449	no		

REMARKS: Sole Source - Lockheed Martin Missiles and Fire Control System (LMMFC) is currently the only industry source that is both facilitized and qualified to produce the HIMARS Launcher.

Note: Unit cost shown above reflects launcher costs only. HIMARS unit cost includes cost of carriers provided to LMMFC as GFE. Carrier unit costs follow: FY03(\$386k), FY04 (\$440k), FY05 (\$475k)

FY 03 / 04 BUDGET PRODUCTION SCHEDULE							P-1 Item Nomenclature: HIMARS LAUNCHER (C03000)														Date: February 2003											
COST ELEMENTS	M F R	FY	S E R V	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 03														Fiscal Year 04										L A T E R	
							Calendar Year 03														Calendar Year 04											
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P		
Launcher	1	FY 03	A	28	0	28																										
	1	FY 04	A	24	0	24			A																							
	1	FY 05	A	37	0	37												A														
	1	FY 06	A	48	0	48																										
	1	FY 07	A	51	0	51																										
	1	FY 08	A	58	0	58																										
	1	FY 09	A	60	0	60																										
	1	FY 03	MC	2	0	2																										
	1	FY 04	MC	1	0	1																										
	1	FY 05	MC	1	0	1																										
	1	FY 06	MC	15	0	15																										
	1	FY 07	MC	19	0	19																										
Total				344		344																										
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P		
M F R	PRODUCTION RATES				REACHED D+	MFR Number	ADMINLEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS																					
	NAME/LOCATION	MIN.	1-8-5	MAX.			Prior 1 Oct	After 1 Oct																								
1	Lockheed Martin M.&F.C. Sys, Dallas Texas	2.00	6.00	12.00	0	1	INITIAL	8	3	16	19	REORDER	0	3	15	18																
							INITIAL					REORDER																				
							INITIAL					REORDER																				
							INITIAL					REORDER																				
							INITIAL					REORDER																				

FY 09 / 10 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature:
HIMARS LAUNCHER (C03000)

Date:
February 2003

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 09												Fiscal Year 10												L A T E R
							Calendar Year 09												Calendar Year 10												
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Launcher																															
	1	FY 03	A	28	28	0																									
	1	FY 04	A	24	24	0																				0					
	1	FY 05	A	37	37	0																				0					
	1	FY 06	A	48	48	0																				0					
	1	FY 07	A	51	28	23	4	4	5	5	5															0					
	1	FY 08	A	58	0	58						5	5	5	5	5	5	5	5	5	5	4	4	5		0					
	1	FY 09	A	60	0	60				A														5	5	5	25				
	1	FY 03	MC	2	2	0																				0					
	1	FY 04	MC	1	1	0																				0					
	1	FY 05	MC	1	1	0																				0					
	1	FY 06	MC	15	15	0																				0					
	1	FY 07	MC	19	13	6	2	1	1	1	1															0					
Total				344	197	147	6	5	6	6	6	5	5	5	5	5	5	5	5	5	5	5	4	4	5	5	25				
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	25				

MFR	NAME/LOCATION	PRODUCTION RATES			REACHED D+	MFR Number	ADMIN LEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS	
		MIN.	1-8-5	MAX.			Prior 1 Oct	After 1 Oct				
1	Lockheed Martin M.&F.C. Sys, Dallas Texas	2.00	6.00	12.00	0	1	INITIAL	8	3	16	19	
							REORDER	0	3	15	18	
							INITIAL					
							REORDER					
							INITIAL					
							REORDER					
							INITIAL					
							REORDER					

FY 11 / 12 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature:
HIMARS LAUNCHER (C03000)

Date:
February 2003

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 11											Fiscal Year 12											LATER
							Calendar Year 11											Calendar Year 12											
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	
Launcher																													
	1	FY 03	A	28	28	0																				0			
	1	FY 04	A	24	24	0																				0			
	1	FY 05	A	37	37	0																				0			
	1	FY 06	A	48	48	0																				0			
	1	FY 07	A	51	51	0																				0			
	1	FY 08	A	58	58	0																				0			
	1	FY 09	A	60	35	25	5	5	5	5	5															0			
	1	FY 03	MC	2	2	0																				0			
	1	FY 04	MC	1	1	0																				0			
	1	FY 05	MC	1	1	0																				0			
	1	FY 06	MC	15	15	0																				0			
	1	FY 07	MC	19	19	0																				0			
Total				344	319	25	5	5	5	5	5																		

MFR	NAME/LOCATION	PRODUCTION RATES			REACHED D+	MFR Number	ADMINLEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS	
		MIN.	1-8-5	MAX.			Prior 1 Oct	After 1 Oct				
1	Lockheed Martin M.&F.C. Sys, Dallas Texas	2.00	6.00	12.00	0	1	INITIAL	8	3	16	19	
							REORDER	0	3	15	18	
							INITIAL					
							REORDER					
							INITIAL					
							REORDER					
							INITIAL					
							REORDER					

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: Missile Procurement, Army /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 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	2199	100	24	16	50	50	50	66	66	66		2687
Gross Cost	1538.4	105.1	35.0	28.5	50.3	51.6	52.9	33.9	35.3	36.7		1967.7
Less PY Adv Proc	75.1											75.1
Plus CY Adv Proc	75.1											75.1
Net Proc (P-1)	1538.4	105.1	35.0	28.5	50.3	51.6	52.9	33.9	35.3	36.7		1967.7
Initial Spares	4.2											4.2
Total Proc Cost	1542.6	105.1	35.0	28.5	50.3	51.6	52.9	33.9	35.3	36.7		1971.9
Flyaway U/C												
Wpn Sys Proc U/C		1.1	1.5		1.0	1.0	1.1	0.5	0.5	0.6		

Description:

The Army Tactical Missile System (ATACMS) plays a critical role in supporting the Legacy Force Transformation to the Objective Force. ATACMS Block 1A is a ground-launched missile system consisting of a surface-to-surface guided missile with an anti-personnel, anti-materiel (APAM) warhead. The ATACMS Block IA Quick Reaction Unitary (QRU) integrates global positioning system (GPS) components and increases the range of the Block I missile. The QRU replaces the Block IA APAM warhead with a Harpoon Warhead procured from the Navy. The inherent GPS accuracies will be achievable independent of range. ATACMS missiles are fired from the Multiple Launch Rocket System (MLRS) modified M270A1 launcher or the High Mobility Artillery Rocket System (HIMARS) and are being deployed within the ammunition loads of Corps MLRS battalions and/or Division artillery MLRS batteries. HIMARS is a Legacy to Objective Force Weapons platform that provides a technology bridge to the Objective Force. ATACMS QRU is also a critical asset for the Objective Force. This system supports the Legacy to Objective transition path of the Transformation Campaign Plan (TCP).

Justification:

FY04/FY05 funding procures 50 each year of the ATACMS Block IA Quick Reaction Unitary (QRU) missiles. The ATACMS Block IA QRU supports the Army's Objective Force by providing the ground commander an air-transportable, deep-fire missile system that operates in nearly all weather conditions, day or night. The ATACMS Block IA QRU is fired from the M270A1 launcher and the High Mobility Artillery Rocket System, the technology bridge to the Objective Force. 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 QRU missile will destroy high value targets at ranges approximately twice that of the current Block I. The Block IA QRU will be especially suited for destroying enemy surface-to-surface missile system launchers.

In addition to the funding shown above, this budget line item received:

Non-add FY 2002 Defense Emergency Response Fund (DERF) Supplemental Funding (\$27.2M) for ATACMS Quick Reaction Unitary (QRU) Missile.

Exhibit P-5, Weapon MSLS Cost Analysis		Appropriation/Budget Activity/Serial No. Missile Procurement, Army / 2 / Other missiles			P-1 Line Item Nomenclature: ARMY TACTICAL MSL SYS (ATACMS) - SYS SUM (C98510)			Weapon System Type:			Date: February 2003		
MSLS Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Missile Hardware - Recurring (BLK IA)													
Prime Contract		17580	24	733	17992	16	1125	36906	50	738	36494	50	730
DERF QRUs		9999											
Engineering Services		422			2436			3241			3532		
Fielding		90						28			29		
SubTotal Missile Hardware		28091			20428			40175			40055		
Procurement Support													
Project Management		2971			1970			2508			2749		
Production Engineering Support		2231			3804			2879			3437		
Test and Evaluation		1406			1562			1368			1551		
Subtotal Procurement Support		6608			7336			6755			7737		
Total Missile Flyaway		34699			27764			46930			47792		
Command & Launch Hardware													
Command & Launch Integration Support		263			295			603			805		
Subtotal C & L Integration		263			295			603			805		
Support Costs													
Missile Test Device					485			2250			2041		
ATMF Test and Support Equipment								518			931		
Subtotal Support Cost					485			2768			2972		
Gross P-1 End Cost													
Less: Prior Year Adv Proc													
Net P-1 Full Funding Cost													
PLUS P-1 CY Adv. Proc.													
Other Non P-1 Costs													
Initial Spares													
Total		34962			28544			50301			51569		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No: Missile Procurement, Army / 2 / Other missiles		Weapon System Type:			P-1 Line Item Nomenclature: ARMY TACTICAL MSL SYS (ATACMS) -SYS SUM (C98510)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Prime Contract										
FY 2002	Lockheed Martin Missiles Dallas, TX	SS/FFP	AMCOM	MAR 02	FEB 03	24	733	Yes		Sep 96
FY 2003	Lockheed Martin Missiles Dallas, TX	SS/FFP	AMCOM	MAR 03	MAR04	16	1125			
FY 2004	Lockheed Martin Missiles Dallas, TX	SS/FFP	AMCOM	MAR 04	MAR 05	50	738			
FY 2005	Lockheed Martin Missiles Dallas, TX	SS/FFP	AMCOM	MAR 05	MAR 06	50	730			

REMARKS: Lockheed Martin is currently the industry source that is both facilitized and qualified to produce the ATACMS Block 1A missile and all variants.

FY 06 / 07 BUDGET PRODUCTION SCHEDULE						P-1 Item Nomenclature: ARMY TACTICAL MSL SYS (ATACMS) - SYS SUM (C98510)															Date: February 2003										
COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 06												Fiscal Year 07												LATER
							Calendar Year 06						Calendar Year 07																		
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Army TACMS BLK 1A Msl																															
	1	FY 00	A	110	110	0																							0		
	1	FY 01	A	100	100	0																							0		
	1	FY 02	A	24	24	0																							0		
Army TACMS Block 1 Missile																													0		
	1	FY 01	FMS	111	111	0																							0		
Defense Emergency Response Funding (DERF)																													0		
	1	FY 02	OTH	44	44	0																							0		
ATACMS BLK 1A Quick Response Unitary (QRU)																													0		
	1	FY 03	A	16	16	0																							0		
	1	FY 04	A	50	28	22	4	4	4	5	5																		0		
	1	FY 05	A	50	0	50						4	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5		0		
ATACMS BLK 1A SLEP																													0		
																													0		
																													0		
																													0		
Total				535	463	72	4	4	4	5	5	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5			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			REACHED D+	MFR Number	ADMINLEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS																				
		MIN.	1-8-5	MAX.			Prior 1 Oct	After 1 Oct																							
1	Lockheed Martin Missiles, Dallas, TX	10.00	38.00	48.00	15	1	INITIAL	0	1	11	12																				
							REORDER	0	1	11	12																				
							INITIAL																								
							REORDER																								
							INITIAL																								
							REORDER																								
							INITIAL																								
							REORDER																								

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: Missile Procurement, Army /2/Other missiles	P-1 Item Nomenclature ATACMS BLKII SYSTEM SUMMARY (CA6101)
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Program Elements for Code B Items:	Code:	Other Related Program Elements:
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	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	72	24										96
Gross Cost	381.6	205.4	40.6									627.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	381.6	205.4	40.6									627.6
Initial Spares		1.4	1.4									2.7
Total Proc Cost	381.6	206.7	42.0									630.3
Flyaway U/C												
Wpn Sys Proc U/C		8.6										

Description:

The Army Tactical Missile System Block II (ATACMS BLK II) is a version of the currently fielded and combat-proven Army TACMS Block I missile, a ground-launched, solid propellant, inertially guided (Global Positioning System aided) missile system with 13 BATs as its payload. It is launched from the Multiple Launch Rocket System (MLRS) M270A1 launcher or the High Mobility Artillery Rocket System (HIMARS), the technology bridge to the Objective Force, 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. ATACMS Block II with BAT is the Army's only unmanned system with multimode sensors capable of attacking time critical, high value targets with large target location errors in near all weather conditions. This system supports the Legacy to Objective transition path of the Transformation Campaign Plan (TCP).

Justification:

The ATACMS BLK II and P3I BAT programs have been terminated in order to fund Transformation and other higher priority Army programs. The ATACMS BLK II Missile System will use available funding to complete testing, delivery and fielding of assets previously purchased by the Government.

Exhibit P-5, Weapon MSLS Cost Analysis		Appropriation/Budget Activity/Serial No. Missile Procurement, Army / 2 / Other missiles			P-1 Line Item Nomenclature: ATACMS BLKII SYSTEM SUMMARY (CA6101)			Weapon System Type:			Date: February 2003		
MSLS Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000
Missile Hardware - Recurring													
ATACMS Block II Missile System (CA6101)													
Prime Contract (BLK II Missile CA6105)													
Prime Contract (BAT Submunition CA6100)													
ATACMS Penetrator Missile (CA6111)													
Flight Kits		760											
Engineering Services		5188											
Facilitization													
FDT		42											
Engineering Change Orders (ECOs)													
SubTotal Missile Hardware		5990											
Procurement Support													
Project Management		11455											
Production Engineering Support		5460											
Test and Evaluation		14110											
Subtotal Procurement Support		31025											
Total Missile Flyaway		37015											
Command & Launch Integration													
Command & Launch Integration Support		240											
SubTotal C&L Hardware		240											
Support Costs													
Missile Test Device and Trainer		3393											
Army Tac Msl Fac Test & Spt Equipment													
SubTotal Support Costs		3393											
Initial Spares		1355											
TOTAL													
Total		42003											

FY 02 / 03 BUDGET PRODUCTION SCHEDULE										P-1 Item Nomenclature: ATACMS BLKII SYSTEM SUMMARY (CA6101)										Date: February 2003											
COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 02												Fiscal Year 03												LATER
							Calendar Year 02												Calendar Year 03												
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
ATACMS BLK II																															
	1	FY 99	A	24	2	22	2	2	2	2	2	3	3	3	3															0	
	1	FY 00	A	48	0	48									4	4	4	4	4	4	4	4	4	4	4	4	4	4	0		
	1	FY 01	A	24	0	24						A															4	4	4	12	
Total				96	2	94	2	2	2	2	2	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	12		
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
MFR	PRODUCTION RATES					REACHED	MFR Number	ADMINLEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS																			
	NAME/LOCATION	MIN.	1-8-5	MAX.	D+			Prior 1 Oct	After 1 Oct																						
1	Lockheed Martin Missiles, Dallas, TX	8.00	12.00	24.00	21	1	INITIAL	0	5	16	21																				
							REORDER	0	0	0	0																				
2	Lockheed Martin Missiles	10.00	38.00	48.00	15	2	INITIAL	0	1	11	12																				
							REORDER	0	1	11	12																				
							INITIAL																								
							REORDER																								
							INITIAL																								
							REORDER																								

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: P-1 Item Nomenclature
 Missile Procurement, Army /2/Other missiles ATACMS Penetrator (CA6111)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty						39	51	45	45			180
Gross Cost						68.5	87.9	99.6	99.4	4.9		360.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)						68.5	87.9	99.6	99.4	4.9		360.3
Initial Spares												
Total Proc Cost						68.5	87.9	99.6	99.4	4.9		360.3
Flyaway U/C												
Wpn Sys Proc U/C						1.8	1.7	2.2	2.2			

Description:

The Army Tactical Missile System-Penetrator (ATACMS-P) is a standoff ballistic-missile-delivered penetrator weapon for use against fixed and deeply buried operational and tactical targets. ATACMS-P will complement current ATACMS Family of Munitions (AFOM) operational capabilities by adding the capability to attack and destroy Hardened and/or Deeply Buried Targets (HDBT) with a penetrator payload/warhead. These targets, considered High Value Targets (HVT), pose a considerable threat to U.S. and Coalition forces. The ATACMS-P missile provides the theater joint forces commander with all weather capability to defeat HDBTs with a standoff weapons system that eliminates the risk to aircrews required by existing air dropped penetrating weapons. Due to missile speed, the ATACMS-P provides time critical response in disrupting or neutralizing high value hard targets in support of the joint forces commanders maneuver warfare plans. ATACMS-P provides the land component commander a system that meets or exceeds the penetration capability of existing air dropped weapons. This system supports the Legacy to Objective transition path of the Transformation Campaign Plan (TCP).

Justification:

FY05 will procure 39 ATACMS-P Missiles. This missile provides the Army and Navy with a standoff ballistic-missile-delivered penetrator weapon for use in a counter-proliferation role against hard and deeply buried targets.

Exhibit P-5, Weapon MSLS Cost Analysis		Appropriation/Budget Activity/Serial No. Missile Procurement, Army / 2 / Other missiles			P-1 Line Item Nomenclature: ATACMS Penetrator (CA6111)			Weapon System Type:			Date: February 2003		
MSLS Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000
ATACMS Penetrator Missile (CA6111)											57056	39	1463
Engineering Services											2376		
Facilitization											792		
Subtotal Missile Hardware											60224		
Procurement Support													
Project Management											3496		
Production Engineering Support											2728		
Test and Evaluation											594		
Subtotal Procurement Support											6818		
Total Missile Flyaway											67042		
Command and Launch Integration													
Command and Launch Integration Support											715		
Subtotal C&L Hardware											715		
Support Costs													
Missile Test Device and Trainer											736		
Subtotal Support Costs											736		
Total											68493		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No: Missile Procurement, Army / 2 / Other missiles		Weapon System Type:			P-1 Line Item Nomenclature: ATACMS Penetrator (CA6111)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Units	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
ATACMS Penetrator Missile (CA6111) FY 2005	Lockheed Martin Missiles Dallas, TX	SS/FFP	AMCOM	MAR-05	FEB-06	39	1463	No		

REMARKS: Lockheed Martin is currently the industry source that is both facilitized and qualified to produce the ATACMS-P.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: P-1 Item Nomenclature
 Missile Procurement, Army /3/Modification of missiles Patriot MODS (C50700)

Program Elements for Code B Items: Code: Other Related Program Elements: Patriot Modification Initial Spares, CA0267

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	473.9	24.0	24.8	148.7	212.6	86.1	75.4	77.5	71.9	41.9		1236.8
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	473.9	24.0	24.8	148.7	212.6	86.1	75.4	77.5	71.9	41.9		1236.8
Initial Spares	60.9	2.6	0.7	39.9	32.1	14.8	14.8	9.6	9.0	8.1		192.6
Total Proc Cost	534.8	26.7	25.5	188.6	244.6	100.9	90.3	87.1	80.9	50.0		1429.4
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. This system supports the Legacy to Objective transition path of the Transformation Campaign Plan (TCP).

Justification:

FY04/05 procures the planned system Growth Program which will add hardware enhancements/improvements to the total PATRIOT Weapon System as well as recapitalization to ensure operational readiness and a zero time/zero mile system.

Exhibit P-40M, Budget Item Justification Sheet

Date:

February 2003

Appropriation/Budget Activity/Serial No:
Missile Procurement, Army /3/Modification of missiles

P-1 Item Nomenclature
Patriot Mods (C50700)

Program Elements for Code B Items:

Code:

Other Related Program Elements:
Patriot Modification Initial Spares, CA0267

Description		Fiscal Years									
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
RLCEU											
1-92-03-1233-00-0000		53.4	22.5	43.3	10.8	0.0	0.0	0.0	0.0	0.0	130.0
Integrated Diagnostic Support System											
1-97-03-1244		12.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.9
BCP (Link 16/JTIDS)											
1-97-03-1246		11.2	13.8	19.1	7.3	0.0	0.0	0.0	0.0	0.0	51.4
Tactical Command System											
1-98-03-1251		2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5
RAM MODS											
1-98-03-1249		27.0	10.7	11.5	23.1	20.9	38.1	51.0	27.3	0.0	209.6
Radar Phase III											
1-89-03-1231		0.0	43.7	65.6	0.0	0.0	0.0	0.0	0.0	0.0	109.3
CDI Phase III											
1-92-03-1238		0.0	17.0	25.5	0.0	0.0	0.0	0.0	0.0	0.0	42.5
TCS (TIBS/IBS, FO, C4I, NMNG)											
1-01-01-1251		0.0	14.3	11.4	11.3	9.1	9.8	0.0	0.0	0.0	55.9
Recapitalization											
1-01-01-1252		0.0	26.6	36.3	33.6	45.4	29.6	20.9	14.5	0.0	206.9
Totals											
		107.0	148.6	212.7	86.1	75.4	77.5	71.9	41.8	0.0	821.0

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: RLCEU [MOD 1] 1-92-03-1233-00-0000

MODELS OF SYSTEM AFFECTED: Information Coordination Central (ICC), Engagement Control Station (ECS), Commo Relay Group (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, requirements for interoperability and communications are satisfied by this effort.

	Prior	FY02	FY03	FY04	FY05
CRG	22	4	5	13	1
ECS	39	6	8	10	3
ICC	12	1		1	

RLCEU Financial Plan reflects total quantity (ECS/ICC/CRG).

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

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

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs	58	5	5	5	3	3	3	2	4	4	4	1	6	6	6	5	5			
Outputs	58		5	5	5	3	3	3	2	4	4	4	1	6	6	6	5	5		

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		125
Outputs																		125

METHOD OF IMPLEMENTATION:

	ADMINISTRATIVE LEADTIME:				PRODUCTION LEADTIME:			
Contract Dates:	FY 2004	Dec 03	FY 2005	Dec 04	FY 2006			24 Months
Delivery Date:	FY 2004	Dec 05	FY 2005	Dec 06	FY 2006			

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): RLCEU [MOD 1] 1-92-03-1233-00-0000

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RD&E																			
Procurement																				
Kit Quantity	84	48.5	13	20.5	23	39.4	5	9.8											125	118.2
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment																				
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware	0																			
FY2002 & Prior Equip-- Kits	84	4.9																	84	4.9
FY2003 Equip-- Kits			13	2.0															13	2.0
FY2004 Equip-- Kits					23	3.9													23	3.9
FY2005 Equip-- Kits							5	1.0											5	1.0
FY2006 Equip-- Kits																				
FY2007 Equip-- Kits																				
FY2008 Equip-- Kits																				
FY2009 Equip-- Kits																				
TC Equip- Kits																				
Total Installment	84	4.9	13	2.0	23	3.9	5	1.0		0.0		0.0		0.0		0.0		0.0	125	11.8
Total Procurement Cost		53.4		22.5		43.3		10.8		0.0		0.0		0.0		0.0		0.0		130.0

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: Integrated Diagnostic Support System [MOD 2] 1-97-03-1244

MODELS OF SYSTEM 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 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs	19																			
Outputs	19																			

	FY 2008				FY 2009				FY 2010				FY 2011				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:

Contract Dates: FY 2004

Delivery Date: FY 2004

ADMINISTRATIVE LEADTIME: 3 Months

FY 2005

FY 2005

PRODUCTION LEADTIME: 9 Months

FY 2006

FY 2006

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): Integrated Diagnostic Support System [MOD 2] 1-97-03-1244

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RD&E																			
Procurement																				
Kit Quantity	19	12.2																	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																				
FY2002 & Prior Equip-- Kits	0																			
FY2003 Equip-- Kits	19	0.7																		0.7
FY2004 Equip-- Kits																				
FY2005 Equip-- Kits																				
FY2006 Equip-- Kits																				
FY2007 Equip-- Kits																				
FY2008 Equip-- Kits																				
FY2009 Equip-- Kits																				
TC Equip- Kits																				
Total Installment	19	0.7		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.7
Total Procurement Cost		12.9		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		12.9

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: BCP (Link 16/JTIDS) [MOD 3] 1-97-03-1246

MODELS OF SYSTEM 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 PATRIOT Air Defense Information Language (PADIL) Data Link 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.

	PRIOR	FY 03	FY 04	FY 05	FY 06	Total
Full-up	23	20	15			58
Retro			14	10		24
Dismounted	1		5			6
TOTAL	24	20	34	10		88

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Major milestones are not applicable.

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
Totals	15	3	3	2	1	5	5	5	5	9	9	8	8	5	5						
Inputs	14	1	3	3	2	1	5	5	5	5	9	9	8	8	5	5					
Outputs																					

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		88
Outputs																		88

METHOD OF IMPLEMENTATION:

	ADMINISTRATIVE LEADTIME:				PRODUCTION LEADTIME:				
Contract Dates:	FY 2004	Apr 04	FY 2005	Apr 05	FY 2006				6 Months
Delivery Date:	FY 2004	Oct 04	FY 2005	Oct 04	FY 2006				6 Months

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): BCP (Link 16/JTIDS) [MOD 3] 1-97-03-1246

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
	RD&E																				
Procurement																					
Kit Quantity	24	10.0	20	12.3	34	17.0	10	6.5											88	45.8	
Installation Kits																					
Installation Kits, Nonrecurring																					
Equipment																					
Equipment, Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interim Contractor Support																					
Installation of Hardware																					
FY2002 & Prior Equip-- Kits	24	1.2																		24	1.2
FY2003 Equip-- Kits			20	1.5																20	1.5
FY2004 Equip-- Kits					34	2.1														34	2.1
FY2005 Equip-- Kits							10	0.8												10	0.8
FY2006 Equip-- Kits																					
FY2007 Equip-- Kits																					
FY2008 Equip-- Kits																					
FY2009 Equip-- Kits																					
TC Equip- Kits																					
Total Installment	24	1.2	20	1.5	34	2.1	10	0.8		0.0		0.0		0.0		0.0		0.0	88	5.6	
Total Procurement Cost		11.2		13.8		19.1		7.3		0.0		0.0		0.0		0.0		0.0			51.4

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: Tactical Command System [MOD 4] 1-98-03-1251

MODELS OF SYSTEM AFFECTED:

DESCRIPTION/JUSTIFICATION:

Provides for a modification/integration of the existing Tactical Command System shelters to integrate CHS-2 computers.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Major milestones are not applicable.

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs	15																			
Outputs	15																			

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		15
Outputs																		15

METHOD OF IMPLEMENTATION:

Contract Dates: FY 2004

Delivery Date: FY 2004

ADMINISTRATIVE LEADTIME:

FY 2005

FY 2005

3 Months

PRODUCTION LEADTIME:

FY 2006

FY 2006

6 Months

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): Tactical Command System [MOD 4] 1-98-03-1251

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RD&E																			
Procurement																				
Kit Quantity	15	2.4																	15	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																				
FY2002 & Prior Equip-- Kits	0																			
FY2003 Equip-- Kits	15	0.1																		0.1
FY2004 Equip-- Kits																				
FY2005 Equip-- Kits																				
FY2006 Equip-- Kits																				
FY2007 Equip-- Kits																				
FY2008 Equip-- Kits																				
FY2009 Equip-- Kits																				
TC Equip- Kits																				
Total Installment	15	0.1		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.1
Total Procurement Cost		2.5		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		2.5

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: RAM MODS [MOD 5] 1-98-03-1249

MODELS OF SYSTEM 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 2003				FY 2004				FY 2005				FY 2006				FY 2007				
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	1240	60	60	91	91	91	90	66	66	66	66	139	138	138	138	125	125	124	124	228	227
Outputs	1179	61	60	60	91	91	91	90	66	66	66	66	139	138	138	138	125	125	124	124	228

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
Inputs	227	227	305	305	304	304	164	163	163	163											5818
Outputs	227	227	227	305	305	304	304	164	163	163	163										5818

METHOD OF IMPLEMENTATION:

Contract Dates:	FY 2004	Dec 03	ADMINISTRATIVE LEADTIME:	6 Months	PRODUCTION LEADTIME:	6 Months
Delivery Date:	FY 2004	Jun 04	FY 2005	Dec 04	FY 2006	Dec 05
			FY 2005	Jun 05	FY 2006	Jun 06

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): RAM MODS [MOD 5] 1-98-03-1249

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
	RD&E																				
Procurement																					
Kit Quantity	1360	24.4	363	9.5	264	10.1	553	20.6	498	18.6	909	33.9	1218	45.4	653	24.3			5818	186.8	
Installation Kits																					
Installation Kits, Nonrecurring																					
Equipment																					
Equipment, Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interim Contractor Support																					
Installation of Hardware																					
FY2002 & Prior Equip-- Kits	1360	2.6																		1360	2.6
FY2003 Equip-- Kits			363	1.2																363	1.2
FY2004 Equip-- Kits					264	1.4														264	1.4
FY2005 Equip-- Kits							553	2.5												553	2.5
FY2006 Equip-- Kits									498	2.3										498	2.3
FY2007 Equip-- Kits											909	4.2								909	4.2
FY2008 Equip-- Kits													1218	5.6						1218	5.6
FY2009 Equip-- Kits															653	3.0				653	3.0
TC Equip- Kits																					
Total Installment	1360	2.6	363	1.2	264	1.4	553	2.5	498	2.3	909	4.2	1218	5.6	653	3.0		0.0	5818	22.8	
Total Procurement Cost		27.0		10.7		11.5		23.1		20.9		38.1		51.0		27.3		0.0		209.6	

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: Radar Phase III [MOD 6] 1-89-03-1231

MODELS OF SYSTEM AFFECTED: Radar

DESCRIPTION/JUSTIFICATION:

The objective of this modification is to increase the average power providing greater multifunction capability and increase the reliability and maintainability of the radar. Transmitter and receiver modifications will be made to the radar.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Planned	Accomplished		
Preliminary Design Review	2QFY92	2QFY92	
Critical Design Review (CDR)	3QFY93	3QFY93	
Contractor Test and Evaluation (CDE)	4QFY99	1QFY00	
Development Test and Evaluation (DTE)	1QFY00	1QFY00	
Initial Operational Test and Evaluation (IOTE)	2QFY02	2QFY02	

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs	0								1	1	1	1	1	2	1	2				
Outputs	0									1	1	1	1	1	2	1	2			

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		10
Outputs																		10

METHOD OF IMPLEMENTATION:

Contract Dates:	FY 2004	Dec 03	ADMINISTRATIVE LEADTIME:	5 Months	PRODUCTION LEADTIME:	24 Months
Delivery Date:	FY 2004	Nov 05	FY 2005		FY 2006	
			FY 2005		FY 2006	

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): Radar Phase III [MOD 6] 1-89-03-1231

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RD&E																			
Procurement																				
Kit Quantity			4	38.5	6	57.7													10	96.2
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment																				
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware	0																			
FY2002 & Prior Equip-- Kits																				
FY2003 Equip-- Kits			4	5.2															4	5.2
FY2004 Equip-- Kits					6	7.9													6	7.9
FY2005 Equip-- Kits																				
FY2006 Equip-- Kits																				
FY2007 Equip-- Kits																				
FY2008 Equip-- Kits																				
FY2009 Equip-- Kits																				
TC Equip- Kits																				
Total Installment	0	0.0	4	5.2	6	7.9		0.0		0.0		0.0		0.0		0.0		0.0	10	13.1
Total Procurement Cost		0.0		43.7		65.6		0.0		0.0		0.0		0.0		0.0		0.0		109.3

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: CDI Phase III [MOD 7] 1-92-03-1238

MODELS OF SYSTEM AFFECTED: Radar

DESCRIPTION/JUSTIFICATION:

CDI III involves the integration of state-of-the-art High Range Resolution (HRR) technology into the PATRIOT radar. This capability will provide for Tactical Ballistic Missile (TBM)/debris discrimination and categorization of Air Breathing Targets (ABT).

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Planned	Accomplished		
Preliminary Design Review	2QFY92	2QFY92	
Critical Design Review (CDR)	3QFY93	3QFY93	
Contractor Test and Evaluation (CDE)	4QFY99	1QFY00	
Development Test and Evaluation (DTE)	1QFY00	1QFY00	
Initial Operational Test and Evaluation (IOTE)	2QFY02	2QFY02	

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs	0								1	1	1	1	1	2	1	2				
Outputs	0									1	1	1	1	1	2	1	2			

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		10
Outputs																		10

METHOD OF IMPLEMENTATION:

Contract Dates:	FY 2004	Dec 03	ADMINISTRATIVE LEADTIME:	5 Months	PRODUCTION LEADTIME:	24 Months
Delivery Date:	FY 2004	Nov 05	FY 2005		FY 2006	
			FY 2005		FY 2006	

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): CDI Phase III [MOD 7] 1-92-03-1238

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RD&E																			
Procurement																				
Kit Quantity			4	15.0	6	22.4													10	37.4
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment																				
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware	0																			
FY2002 & Prior Equip-- Kits																				
FY2003 Equip-- Kits			4	2.0															4	2.0
FY2004 Equip-- Kits					6	3.1													6	3.1
FY2005 Equip-- Kits																				
FY2006 Equip-- Kits																				
FY2007 Equip-- Kits																				
FY2008 Equip-- Kits																				
FY2009 Equip-- Kits																				
TC Equip- Kits																				
Total Installment	0	0.0	4	2.0	6	3.1		0.0		0.0		0.0		0.0		0.0		0.0	10	5.1
Total Procurement Cost		0.0		17.0		25.5		0.0		0.0		0.0		0.0		0.0		0.0		42.5

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: TCS (TIBS/IBS, FO, C4I, NMNG) [MOD 8] 1-01-01-1251

MODELS OF SYSTEM AFFECTED:

DESCRIPTION/JUSTIFICATION:

Provides for implementation of the Tactical Information Broadcast Service (TIBS) updates and Integrated Broadcast Service (IBS) HW and SW at the PATRIOT BN. This includes integration of the Joint Tactical Terminal (JTT) and integration of the IBS.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Major milestones are not applicable.

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs	0					5	5			4	4			1	2				3	3
Outputs	0						5	5			4	4			1	2				3

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs		4	3															34
Outputs			4	3														34

METHOD OF IMPLEMENTATION:

Contract Dates:	FY 2004	Mar 04	ADMINISTRATIVE LEADTIME:	33 Months	PRODUCTION LEADTIME:	12 Months
Delivery Date:	FY 2004	Mar 05	FY 2005	Mar 05	FY 2006	Mar 06
			FY 2005	Mar 06	FY 2006	Mar 07

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): TCS (TIBS/IBS, FO, C4I, NMNG) [MOD 8] 1-01-01-1251

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
	RD&E																				
Procurement																					
Kit Quantity			10	12.4	8	9.9	3	10.0	6	7.9	7	8.5							34	48.7	
Installation Kits																					
Installation Kits, Nonrecurring																					
Equipment																					
Equipment, Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interim Contractor Support																					
Installation of Hardware	0																				
FY2002 & Prior Equip-- Kits																					
FY2003 Equip-- Kits			10	1.9																10	1.9
FY2004 Equip-- Kits					5	1.5														5	1.5
FY2005 Equip-- Kits							3	1.3												3	1.3
FY2006 Equip-- Kits									6	1.2										6	1.2
FY2007 Equip-- Kits											7	1.3								7	1.3
FY2008 Equip-- Kits																					
FY2009 Equip-- Kits																					
TC Equip- Kits																					
Total Installment	0	0.0	10	1.9	5	1.5	3	1.3	6	1.2	7	1.3		0.0		0.0		0.0	31	7.2	
Total Procurement Cost		0.0		14.3		11.4		11.3		9.1		9.8		0.0		0.0		0.0		55.9	

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: Recapitalization [MOD 9] 1-01-01-1252

MODELS OF SYSTEM AFFECTED: ECS, ICC, LS,CRG

DESCRIPTION/JUSTIFICATION:

Rebuild and selected upgrade of fielded systems to ensure operational readiness and a zero time/zero mile system. Program plan is to recap one battalion per year.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Major milestones not applicable.

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs	0					1				1				1				1		
Outputs	0							1				1				1				1

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs		1				1											8	14
Outputs				1				1									8	14

METHOD OF IMPLEMENTATION:

Contract Dates:	FY 2004	Mar 04	ADMINISTRATIVE LEADTIME:	3 Months	PRODUCTION LEADTIME:	12 Months
Delivery Date:	FY 2004	Mar 05	FY 2005	Mar 05	FY 2006	Mar 06
	FY 2004	Mar 05	FY 2005	Mar 06	FY 2006	Mar 07

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): Recapitalization [MOD 9] 1-01-01-1252

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
	RD&E	0																			
Procurement	0																				
Kit Quantity	0		1	24.2	1	33.0	1	30.6	1	41.3	1	26.9	1	19.0	1	13.2			7	188.2	
Installation Kits	0																				
Installation Kits, Nonrecurring	0																				
Equipment	0																				
Equipment, Nonrecurring	0																				
Engineering Change Orders	0																				
Data	0																				
Training Equipment	0																				
Support Equipment	0																				
Other	0																				
Interim Contractor Support	0																				
Installation of Hardware	0																				
FY2002 & Prior Equip-- Kits	0																				
FY2003 Equip-- Kits	0		1	2.4																1	2.4
FY2004 Equip-- Kits	0				1	3.3														1	3.3
FY2005 Equip-- Kits	0						1	3.0												1	3.0
FY2006 Equip-- Kits	0								1	4.1										1	4.1
FY2007 Equip-- Kits	0										1	2.7								1	2.7
FY2008 Equip-- Kits	0												1	1.9						1	1.9
FY2009 Equip-- Kits	0														1	1.3				1	1.3
TC Equip- Kits	0																				
Total Installment	0	0.0	1	2.4	1	3.3	1	3.0	1	4.1	1	2.7	1	1.9	1	1.3		0.0	7	18.7	
Total Procurement Cost		0.0		26.6		36.3		33.6		45.4		29.6		20.9		14.5		0.0		206.9	

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: Missile Procurement, Army /3/Modification of missiles	P-1 Item Nomenclature STINGER MODS (C20000)
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Program Elements for Code B Items:	Code:	Other Related Program Elements: C14900, C16000
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	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	124.7	33.0	5.8	1.5	1.0							165.9
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	124.7	33.0	5.8	1.5	1.0							165.9
Initial Spares												
Total Proc Cost	124.7	33.0	5.8	1.5	1.0							165.9
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

The Stinger Block I missile upgrade incorporates hardware and software modifications into the Stinger-Reprogrammable Micro-Processor (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 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. This system supports the Legacy transition path of the Transformation Campaign Plan (TCP).

Justification:

FY04/05 funds upgrade Stinger firing platforms to launch Block I missiles. The Stinger Block I program corrects deficiencies in precision engagements and information dominance against head/tail-on and slow-moving targets, counter-measures, and night-time engagements and corrects a safety deficiency whereby aviation platforms must super-elevate to fire the missile.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: P-1 Item Nomenclature
 Missile Procurement, Army /3/Modification of missiles STINGER BLK I UPGRADES (C21300)

Program Elements for Code B Items: Code: Other Related Program Elements: C14900, C16000

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	123.2	33.0	5.8	1.5	1.0							164.4
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	123.2	33.0	5.8	1.5	1.0							164.4
Initial Spares												
Total Proc Cost	123.2	33.0	5.8	1.5	1.0							164.4
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

Block I hardware and software modifications to the Stinger-Reprogrammable Micro-Processor (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. 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. This system supports the Legacy transition path of the Transformation Campaign Plan (TCP).

Justification:

FY04 funds upgrade Stinger firing platforms to launch Block I missiles. The Stinger Block I program corrects deficiencies in precision engagements and information dominance against head/tail-on and slow-moving targets, counter-measures, and night-time engagements and corrects a safety deficiency whereby aviation platforms must super-elevate to fire the missile.

Exhibit P-40M, Budget Item Justification Sheet

Date:

February 2003

Appropriation/Budget Activity/Serial No:
Missile Procurement, Army /3/Modification of missiles

P-1 Item Nomenclature
STINGER BLK I UPGRADES (C21300)

Program Elements for Code B Items:

Code:

Other Related Program Elements:
C14900, C16000

Description		Fiscal Years									
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
Stinger Block I Platform Upgrades (C21300)											
01-87-03-1510	Operational	14.2	1.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	16.7
Stinger Block I Missile Upgrades (C21300)											
01-87-03-1510	Operational	138.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	138.9
Stinger Troop Proficiency Trainer											
TBP	Operational	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1
Linebacker Training Devices											
TBP	Operational	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8
Totals		162.0	1.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	164.5

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: Stinger Block I Platform Upgrades (C21300) [MOD 1] 01-87-03-1510

MODELS OF SYSTEM 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 Erasable 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 was completed in 1997.

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
Totals																					
Inputs	6385																				
Outputs	5080	126	192	192	192	194	195	106	108												

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		6385
Outputs																		6385

METHOD OF IMPLEMENTATION:	Contractor & In-House	ADMINISTRATIVE LEADTIME:	4 Months	PRODUCTION LEADTIME:	7 Months
Contract Dates:	FY 2004 Jan 04	FY 2005		FY 2006	
Delivery Date:	FY 2004 Aug 04	FY 2005		FY 2006	

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): Stinger Block I Platform Upgrades (C21300) [MOD 1] 01-87-03-1510

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
	RD&E	0																			
Procurement	0																				
Kit Quantity	6385	13.0																	6385	13.0	
Installation Kits	0																				
Installation Kits, Nonrecurring	0																				
Equipment	0																				
Equipment, Nonrecurring	0																				
Engineering Change Orders	0																				
Data	0																				
Training Equipment	0																				
Support Equipment	0																				
Other	0																				
Interim Contractor Support	0																				
Installation of Hardware	0																				
FY2002 & Prior Equip-- Kits	5080	1.2																	5080	1.2	
FY2003 Equip-- Kits	0		702	1.5															702	1.5	
FY2004 Equip-- Kits	0				603	1.0													603	1.0	
FY2005 Equip-- Kits	0																				
FY2006 Equip-- Kits	0																				
FY2007 Equip-- Kits	0																				
FY2008 Equip-- Kits	0																				
FY2009 Equip-- Kits	0																				
TC Equip- Kits	0																				
Total Installment	5080	1.2	702	1.5	603	1.0		0.0		0.0		0.0		0.0		0.0		0.0	6385	3.7	
Total Procurement Cost		14.2		1.5		1.0		0.0		0.0		0.0		0.0		0.0		0.0			16.7

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: Stinger Block I Missile Upgrades (C21300) [MOD 2] 01-87-03-1510

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

DESCRIPTION/JUSTIFICATION:

The Stinger Block I Missile Upgrade material 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 nighttime 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 material change was recommended by the Air-to-Air Missile General Officer's Steering Committee as the near-term solution to the Stinger-RMP deficiencies.

Hardware and installations costs are included in the contract price for retrofits.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Development was completed in 1997.

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	8021																			
Outputs	6801	284	343	357	236															

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals		
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
Inputs																				8021
Outputs																				8021

METHOD OF IMPLEMENTATION:	Contractor	ADMINISTRATIVE LEADTIME:	4 Months	PRODUCTION LEADTIME:	18 Months
Contract Dates:	FY 2004	FY 2005		FY 2006	
Delivery Date:	FY 2004	FY 2005		FY 2006	

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): Stinger Block I Missile Upgrades (C21300) [MOD 2] 01-87-03-1510

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RD&E	0																		
Procurement	0																			
Kit Quantity	8021	138.9																	8021	138.9
Installation Kits	0																			
Installation Kits, Nonrecurring	0																			
Equipment	0																			
Equipment, Nonrecurring	0																			
Engineering Change Orders	0																			
Data	0																			
Training Equipment	0																			
Support Equipment	0																			
Other	0																			
Interim Contractor Support	0																			
Installation of Hardware	0																			
FY2002 & Prior Equip-- Kits	0																			
FY2003 Equip-- Kits	0																			
FY2004 Equip-- Kits	0																			
FY2005 Equip-- Kits	0																			
FY2006 Equip-- Kits	0																			
FY2007 Equip-- Kits	0																			
FY2008 Equip-- Kits	0																			
FY2009 Equip-- Kits	0																			
TC Equip- Kits	0																			
Total Installment	0	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0
Total Procurement Cost		138.9		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		138.9

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: Stinger Troop Proficiency Trainer [MOD 3] TBP

MODELS OF SYSTEM AFFECTED:

DESCRIPTION/JUSTIFICATION:

The Stinger Troop Proficiency Trainer (STPT) is the primary gunnery trainer for Stinger gunners and it is the only field deployable, scenario driven trainer available to units. The STPT is a lightweight, two man-portable training system which uses computer generated graphics and sound to provide a realistic training environment for Stinger gunners. The gunner views a missile-mounted display and reacts to pre-programmed scenarios with single or multiple threats and friendly aircraft. The current STPT has significant training deficiencies, has never been upgraded, and is experiencing growing obsolescence of components, making sustainment difficult. This effort will upgrade the system to correct major training deficiencies, improve realism, and replace obsolete components with commercial off the shelf items. The upgrade will eliminate the need for the manpower intensive Moving Target Simulator (MTS) and Improved MTS, resulting in additional O&S cost savings.

Hardware, software, and installation are included in the total contract price provided by the contractor.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

This involves commercial off the shelf equipment with integration of Stinger scenarios.

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs	14	6	18	20	21															
Outputs	3	5	6	6	18	20	21	21												

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		100
Outputs																		100

METHOD OF IMPLEMENTATION:	Contractor	ADMINISTRATIVE LEADTIME:	2 Months	PRODUCTION LEADTIME:	9 Months
Contract Dates:	FY 2004 Nov 01	FY 2005		FY 2006	
Delivery Date:	FY 2004 Aug 02	FY 2005		FY 2006	

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): Stinger Troop Proficiency Trainer [MOD 3] TBP

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RD&E	0																		
Procurement	0																			
Kit Quantity	100	3.1																	100	3.1
Installation Kits	0																			
Installation Kits, Nonrecurring	0																			
Equipment	0																			
Equipment, Nonrecurring	0																			
Engineering Change Orders	0																			
Data	0																			
Training Equipment	0																			
Support Equipment	0																			
Other	0																			
Interim Contractor Support	0																			
Installation of Hardware	0																			
FY2002 & Prior Equip-- Kits	0																			
FY2003 Equip-- Kits	0																			
FY2004 Equip-- Kits	0																			
FY2005 Equip-- Kits	0																			
FY2006 Equip-- Kits	0																			
FY2007 Equip-- Kits	0																			
FY2008 Equip-- Kits	0																			
FY2009 Equip-- Kits	0																			
TC Equip- Kits	0																			
Total Installment	0	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0
Total Procurement Cost		3.1		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		3.1

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: Linebacker Training Devices [MOD 4] TBP

MODELS OF SYSTEM AFFECTED:

DESCRIPTION/JUSTIFICATION:

The Bradley Linebacker Training systems are used to train soldiers in Bradley Linebacker weapon system engagements and operations. The training devices provide gunner and commander proficiency training in missile and gun engagement of aerial and ground targets. The devices provide force-on-force engagement training at the Combat Training Centers (CTC) and provide an After Action Review (AAR) capability for missile and gun live fire engagements. The Director of Training and doctrine, USAADASH on 9 Jan 2001, modified training device requirements.

Hardware, software, and installation are included in the total contract price provided by the contractor.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

This involves commercial off the shelf equipment and scenarios with integration of aerial and ground targets for Stinger Missile engagements.

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
Totals																					
Inputs	49	9	9	9	12																
Outputs	24	12	13	9	9	9	12														

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		88
Outputs																		88

METHOD OF IMPLEMENTATION:	Contractor	ADMINISTRATIVE LEADTIME:	4 Months	PRODUCTION LEADTIME:	6 Months
Contract Dates:	FY 2004 Jan 02	FY 2005		FY 2006	
Delivery Date:	FY 2004 Jul 02	FY 2005		FY 2006	

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): Linebacker Training Devices [MOD 4] TBP

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RD&E	0																		
Procurement	0																			
Kit Quantity	88	5.8																	88	5.8
Installation Kits	0																			
Installation Kits, Nonrecurring	0																			
Equipment	0																			
Equipment, Nonrecurring	0																			
Engineering Change Orders	0																			
Data	0																			
Training Equipment	0																			
Support Equipment	0																			
Other	0																			
Interim Contractor Support	0																			
Installation of Hardware	0																			
FY2002 & Prior Equip-- Kits	0																			
FY2003 Equip-- Kits	0																			
FY2004 Equip-- Kits	0																			
FY2005 Equip-- Kits	0																			
FY2006 Equip-- Kits	0																			
FY2007 Equip-- Kits	0																			
FY2008 Equip-- Kits	0																			
FY2009 Equip-- Kits	0																			
TC Equip- Kits	0																			
Total Installment	0	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0
Total Procurement Cost		5.8		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		5.8

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: P-1 Item Nomenclature
 Missile Procurement, Army /3/Modification of missiles AVENGER MODS (CE8710)

Program Elements for Code B Items: Code: Other Related Program Elements: C14900, C16000

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	39.1	6.8	1.9									47.8
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	39.1	6.8	1.9									47.8
Initial Spares	1.0											1.0
Total Proc Cost	40.2	6.8	1.9									48.8
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

AVENGER is a highly mobile, Stinger missile based, Short Range Air Defense system capable of day, night, adverse weather and shoot on-the-move for precision engagement operations. It provides Division and Corps units with low altitude air defense/information dominance against fixed and rotary wing threats, unmanned aerial vehicles and cruise missiles. Mounted on a High Mobility, Multipurpose Wheeled Vehicle, (HMMWV) and manned by a crew of two, the turreted system is equipped with 8 Stinger missiles and a very high rate of fire .50 cal machine gun. A Forward Looking Infrared Receiver (FLIR) provides Avenger with a night fighting capability. Production fire units are now equipped with a Slew-to-Cue capability that permits the system to automatically slew to externally reported radar tracks. By placing targets directly into the gunner's sight, time consuming manual searching is eliminated and detections and engagements are increased. Avenger can be remotely controlled and operated from the safety of a nearby foxhole/building/position. Capability is provided via an eye-safe laser range finder and a Mark XII crypto-secure Identification Friend or Foe (IFF) device. Because of its FLIR, video recording capability and machine gun, the system is routinely employed in Bosnia and Kosovo for nighttime roadblock security, crowd surveillance, and reconnaissance. This system supports the Legacy transition path of the Transformation Campaign Plan (TCP).

Justification:

FY02 funds were used to field remaining 101 Slew-to-Cue Kits and procure and field 71 Environmental Control Unit/Prime Power Units (ECU/PPU). The ECU/PPU is required to eliminate a current heat stress safety issue.

Exhibit P-40M, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: Missile Procurement, Army /3/Modification of missiles			P-1 Item Nomenclature AVENGER MODS (CE8710)								
Program Elements for Code B Items:			Code:	Other Related Program Elements: C14900, C16000							

Description		Fiscal Years									
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
Slew-To-Cue (STC)											
TBD	Operational	27.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.9
Environmental Control Unit/Prime Power Unit											
01-88-03-1515	Safety	19.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.9
Totals		47.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.8

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: Slew-T o-Cue (STC) [MOD 1] TBD

MODELS OF SYSTEM AFFECTED:

DESCRIPTION/JUSTIFICATION:

Slew-to-Cue (STC) provides the fire unit with a required automatic, digital capability to rapidly slew to an externally reported radar target, placing it directly into the gunner's sighting field of view. This speeds engagements and increases kills by eliminating time consuming manual searches. The STC capability will be embedded into a new Common Fire Control Computer (CFCC) that replaces the existing obsolete fire control. This upgrade also replaces the existing obsolete Automatic Video Tracker (AVT) by embedding an improved AVT capability into the CFCC. The AVT aids the gunner by providing an automatic tracking capability.

STC/CFCC/AVT: STC is an Army category 2 digitization initiative that increases system performance/kills against all targets, especially low observable threats such as UAVs and cruise missiles. It will initially be fielded as part of the First Digitized Corps, then to the remaining force. CFCC/AVT replacement is required to replace critical obsolete components and improve performance. It will result in 50% improved performance, continued sustainment and lower Operations & Support (O&S) costs. The Avenger Required Operational Capability (ROC) was revised July 16, 1993.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs	151																			
Outputs	138	13																		

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		151
Outputs																		151

METHOD OF IMPLEMENTATION:	Contractor	ADMINISTRATIVE LEADTIME:	1 Months	PRODUCTION LEADTIME:	11 Months
Contract Dates:	FY 2004		FY 2005		FY 2006
Delivery Date:	FY 2004		FY 2005		FY 2006

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): Slew-T o-Cue (STC) [MOD 1] TBD

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RD&E	0																		
Procurement	0																			
Kit Quantity	151	19.5																	151	19.5
Installation Kits	0																			
Nonrecurring Engineering	0																			
I&KP/NETT Training	0	0.3																		0.3
FAT/PCI	0	0.4																		0.4
Kit Refurbishment	0	0.6																		0.6
Engineering Services	0	0.3																		0.3
Project Management	0	1.6																		1.6
Contractor Logistics Support	0	3.9																		3.9
Installation of Hardware	0																			
FY2002 & Prior Equip-- Kits	138	1.3	13																151	1.3
FY2003 Equip-- Kits	0																			
FY2004 Equip-- Kits	0																			
FY2005 Equip-- Kits	0																			
FY2006 Equip-- Kits	0																			
FY2007 Equip-- Kits	0																			
FY2008 Equip-- Kits	0																			
FY2009 Equip-- Kits	0																			
TC Equip- Kits	0																			
Total Installment	138	1.3	13	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	151	1.3
Total Procurement Cost		27.9		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		27.9

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: Environmental Control Unit/Prine Power Unit [MOD 2] 01-88-03-1515

MODELS OF SYSTEM AFFECTED:

DESCRIPTION/JUSTIFICATION:

The Environmental Control Unit/Prine Power Unit (ECU/PPU) is a required subsystem that provides turret air conditioning and provides a separate power source in lieu of vehicle battery power. The ECU/PPU is required to eliminate a turret heat stress safety issue and to lift the conditional fire unit materiel release. ECU/PPU removes restrictions on operational use of Avenger in hot climates. This modification fulfills the user requirement for a separate, reliable power source and for heat and air conditioning to fully operate in a broad spectrum of combat environments (i.e., desert). The Avenger Required Operational Capability (ROC) was revised July 16, 1993.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs	370	15	36	20																
Outputs	370	15	36	20																

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		441
Outputs																		441

METHOD OF IMPLEMENTATION:	Contractor	ADMINISTRATIVE LEADTIME:	4 Months	PRODUCTION LEADTIME:	12 Months
Contract Dates:	FY 2004	FY 2005		FY 2006	
Delivery Date:	FY 2004	FY 2005		FY 2006	

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): Environmental Control Unit/Prime Power Unit [MOD 2] 01-88-03-1515

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RD&E	0																		
Procurement	0																			
Kit Quantity	441	15.1																	441	15.1
Installation Kits	0																			
Nonrecurring Engineering	0																			
Engineering Services	0																			
Net Training	0	0.5																		0.5
Program Management	0	0.5																		0.5
Contractor Logistics Support	0	1.1																		1.1
Production Verification Test	0																			
Installation of Hardware	0																			
FY2002 & Prior Equip-- Kits	370	2.7	71																441	2.7
FY2003 Equip-- Kits	0																			
FY2004 Equip-- Kits	0																			
FY2005 Equip-- Kits	0																			
FY2006 Equip-- Kits	0																			
FY2007 Equip-- Kits	0																			
FY2008 Equip-- Kits	0																			
FY2009 Equip-- Kits	0																			
TC Equip- Kits	0																			
Total Installment	370	2.7	71	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	441	2.7
Total Procurement Cost		19.9		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		19.9

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: Missile Procurement, Army /3/Modification of missiles	P-1 Item Nomenclature ITAS/TOW MODS (C61700)
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Program Elements for Code B Items:	Code:	Other Related Program Elements:
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	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	747.2	69.7	64.3	58.9	15.7	9.8	9.7					975.4
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	747.2	69.7	64.3	58.9	15.7	9.8	9.7					975.4
Initial Spares	34.9											34.9
Total Proc Cost	782.1	69.7	64.3	58.9	15.7	9.8	9.7					1010.3
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

The Tube-launched, Optically tracked, Wire command-link guided (TOW) Improved Target Acquisition (ITAS) is an upgrade to our light infantry's TOW 2 weapon system and provides a 2d-generation forward-looking infrared capability that will enable defeat of threat armored vehicles at extended ranges in all expected battlefield conditions. ITAS provides an operational warfighting capability now to ensure combat overmatch and dominance at every point on the spectrum of operations. 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 modification provides the TOW 2B missile with the capability to counter Active Protection Systems currently being deployed on threat armor systems. This system supports the Legacy transition path of the Transformation Campaign Plan.

Justification:

Funding in FY04/FY05 will be used for procurement of training devices to meet increased Field Tactical Trainer density requirement, fielding of systems, Contractor Logistics Support, application of TOW training missile conversion hardware procured in FY03, government asset layaway, engineering services and production delivery support.

The ITAS/TOW Program has been terminated after FY03 in order to fund Transformation and other higher priority Army programs.

Exhibit P-40M, Budget Item Justification Sheet

Date:

February 2003

Appropriation/Budget Activity/Serial No:
Missile Procurement, Army /3/Modification of missiles

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	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
Missile Conversion (HEAT TO PRACTICE)											
MC-1-82-03-3020	SAFETY	40.7	5.4	1.4	0.0	0.0	0.0	0.0	0.0	0.4	47.9
MISSILE MODIFICATION (MOIC)											
MC-1-82-03-3021	SAFETY	14.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.0
ITAS (IMPROVED TARGET ACQUISITION SYSTEM)											
MC-1-89-03-3028	OPERATIONAL	352.0	53.5	14.3	9.8	9.7	0.0	0.0	0.0	0.0	439.3
CAPS (COUNTER ACTIVE PROTECTION SYSTEM)											
MC-1-98-03-3030	OPERATIONAL	6.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.8
Totals		413.5	58.9	15.7	9.8	9.7	0.0	0.0	0.0	0.4	508.0

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: Missile Conversion (HEAT TO PRACTICE) [MOD 1] MC-1-82-03-3020

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

DESCRIPTION/JUSTIFICATION:

The modifications will convert TOW Basic, ITOW and TOW 2 heat missiles to practice missiles and 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 and the safe and arming unlatch mechanism in the event of delay in ignition of the flight motor. Epoxy -coated T250 steel was incorporated into a new design as a result of launch motor failures.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	63213			1500	1500	1032														
Outputs	63213				1500	1500	120													

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		67245
Outputs																	912	67245

METHOD OF IMPLEMENTATION:

Contract Dates:	FY 2004	Mar 03	ADMINISTRATIVE LEADTIME:	12 Months	PRODUCTION LEADTIME:	3 Months
Delivery Date:	FY 2004	Jul 03	FY 2005		FY 2006	
			FY 2005	Oct 03	FY 2006	Mar 04

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): Missile Conversion (HEAT TO PRACTICE) [MOD 1] MC-1-82-03-3020

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RD&E	0																		
Procurement	0																			
Kit Quantity	0																			
Installation Kits	0																			
Installation Kits, Nonrecurring	0																			
Equipment	63213	25.8	4032	5.4															67245	31.2
Equipment, Nonrecurring	0																			
Engineering Change Orders	0																			
Data	0																			
Training Equipment	0																			
Support Equipment	0																			
Other	0																			
Interim Contractor Support	0																			
Installation of Hardware	0																			
FY2002 & Prior Equip-- Kits	63213	14.9																	63213	14.9
FY2003 Equip-- Kits	0				3120	1.4											912	0.4	4032	1.8
FY2004 Equip-- Kits	0																			
FY2005 Equip-- Kits	0																			
FY2006 Equip-- Kits	0																			
FY2007 Equip-- Kits	0																			
FY2008 Equip-- Kits	0																			
FY2009 Equip-- Kits	0																			
TC Equip- Kits	0																			
Total Installment	63213	14.9		0.0	3120	1.4		0.0		0.0		0.0		0.0		0.0	912	0.4	67245	16.7
Total Procurement Cost		40.7		5.4		1.4		0.0		0.0		0.0		0.0		0.0		0.4		47.9

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: ITAS (IMPROVED TARGET ACQUISITION SYSTEM) [MOD 3] MC-1-89-03-3028

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

DESCRIPTION/JUSTIFICATION:

The Tube-launched, Optically tracked, Wire command-link guided (TOW) Improved Target Acquisition System (ITAS) is a critical system to the interim forces, selected as the off-the-shelf anti-tank system for the Interim Armored Vehicle's Anti-Tank Guided Missile variant and as the surrogate for the Mobile Gun System (MGS) variant until a MGS variant is developed. ITAS is an upgrade to the light infantry's TOW 2 weapon system and provides a capability that will defeat threat armored vehicle at extended ranges in all expected battlefield conditions. The ITAS meets the immediate needs of the National Command Authority and the CINCs. ITAS provides an operational warfighting capability now to ensure combat overmatch and dominance at every point on the spectrum of operations. TOW ITAS is an extremely lethal and survivable anti-armor system that also provides significant reconnaissance, surveillance, and target acquisition (RSTA) capabilities. ITAS provides the National Command Authority and CINCs with a responsive, agile and lethal anti-armor option and capability for regional engagement, peacekeeping, crisis response, and sustained land force operations.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007					
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
Inputs	315	53	49	31	31	25	28	26	22	22	21	14										
Outputs	256	40	37	2	31	20	60	40		20		20	44	16	32	19						

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4						
Inputs																						637
Outputs																						637

METHOD OF IMPLEMENTATION:

Contract Dates:	FY 2004	Dec 01	ADMINISTRATIVE LEADTIME:	10 Months	PRODUCTION LEADTIME:	18 Months
Delivery Date:	FY 2004	Jun 03	FY 2005	Dec 02	FY 2006	Dec 03
	FY 2004	Jun 03	FY 2005	Jun 04	FY 2006	Jun 05

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): ITAS (IMPROVED TARGET ACQUISITION SYSTEM) [MOD 3] MC-1-89-03-3028

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RD&E	0																		
Procurement	0																			
Kit Quantity	551		86																637	
Installation Kits	0																			
Installation Kits, Nonrecurring	0																			
Equipment	0	310.8		42.5		5.7		3.3		8.0										370.3
Equipment, Nonrecurring	0																			
Engineering Change Orders	0																			
Data	0	1.1		0.1																1.2
Training Equipment	0	18.8		7.8		4.9		4.0												35.5
Support Equipment	0																			
Other	0	3.0		0.4																3.4
ICS/CLS Contractor Support	0	17.8		2.5		3.4		2.3		1.5										27.5
Installation of Hardware	0																			
FY2002 & Prior Equip-- Kits	256	0.5	110	0.2	120	0.3	65	0.2											551	1.2
FY2003 Equip-- Kits	0						19	0.0	67	0.2									86	0.2
FY2004 Equip-- Kits	0																			
FY2005 Equip-- Kits	0																			
FY2006 Equip-- Kits	0																			
FY2007 Equip-- Kits	0																			
FY2008 Equip-- Kits	0																			
FY2009 Equip-- Kits	0																			
TC Equip- Kits	0																			
Total Installment	256	0.5	110	0.2	120	0.3	84	0.2	67	0.2		0.0		0.0		0.0		0.0	637	1.4
Total Procurement Cost		352.0		53.5		14.3		9.8		9.7		0.0		0.0		0.0		0.0		439.3

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: P-1 Item Nomenclature
 Missile Procurement, Army /3/Modification of missiles MLRS MODS (C67500)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	246.0	7.1	13.4	31.2	19.9	21.3	16.1	9.9	19.3	6.7	140.1	531.1
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	246.0	7.1	13.4	31.2	19.9	21.3	16.1	9.9	19.3	6.7	140.1	531.1
Initial Spares	14.6	0.8	0.9	5.5	1.3	5.8	5.9	4.3	3.3	2.6	44.0	88.9
Total Proc Cost	260.6	7.9	14.3	36.7	21.2	27.1	22.1	14.2	22.6	9.3	184.1	620.1
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. Modifications are vital to the Counterattack Corps and are projected to decrease Operations & Support (O&S) costs and reduce logistics impacts. This system supports the Legacy transition path of the Transformation Campaign Plan (TCP).

Justification:

The FY04/FY05 program funding supports Interim Improved Position Determining System (IPDS) Launcher Contractor Logistics Support (CLS), Joint Technical Architecture-Army (JTA-A), Improved Weapons Interface Unit (IWIU), M270A1 Generator Improvements, Obsolescence Mitigation/Engineering Change Proposal Reliability Integration (to include Environmental Control Unit (ECU)/Auxiliary Power Unit (APU), and 600hp Engine Carrier Modification.

Exhibit P-40M, Budget Item Justification Sheet

Date:

February 2003

Appropriation/Budget Activity/Serial No:
Missile Procurement, Army /3/Modification of missiles

P-1 Item Nomenclature
MLRS MODS (C67500)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

Description		Fiscal Years									
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
Inactive Mods											
Prior Year MCs	Oper/Safety/Reliat	220.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	220.3
Interim Improved Position Determining System Lchr											
1-95-03-0528	Operational	23.9	1.4	1.4	0.0	0.0	0.0	0.0	0.0	0.0	26.7
Selective Availability Anti-Spoofing Module											
1-96-03-0534	Operational	0.0	0.0	0.0	0.0	0.0	0.0	13.1	2.2	6.3	21.6
Joint Technical Architecture -Army (JTA-A)											
1-97-03-0537	Operational	11.1	0.3	0.3	7.2	4.1	3.7	0.4	0.0	0.0	27.1
Improved Weapons Interface Unit Modification MOD											
1-99-03-0546	Operational	0.0	14.6	4.4	4.7	2.8	0.7	0.0	0.0	0.0	27.2
Engine/Transmission Diagnostic (Common IEDB)											
1-98-03-0542	Oper/Reliat	0.0	0.0	0.0	1.1	1.7	2.3	2.9	2.6	0.2	10.8
Streamlined Technology Enhancement Program (STEP)											
1-98-03-0541	Operational	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	105.8	105.8
M270A1 Generator Improvements											
1-02-02-0553	Reliability	0.0	0.0	1.1	0.8	0.8	0.1	0.0	0.0	0.0	2.8
Obsolescence Mitigation/ECP Reliability Intg											
1-99-03-0541	Oper/Reliat	11.2	4.8	3.3	3.2	2.8	2.3	2.9	1.9	27.8	60.2
600 hp Engine Conversion											
1-02-02-0551	Reliability	0.0	5.9	6.5	0.5	0.0	0.0	0.0	0.0	0.0	12.9

Exhibit P-40M, Budget Item Justification Sheet

Date:

February 2003

Appropriation/Budget Activity/Serial No:
Missile Procurement, Army /3/Modification of missiles

P-1 Item Nomenclature
MLRS MODS (C67500)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

Description		Fiscal Years									
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
Environmental Control Unit/Auxiliary Power Unit											
1-02-02-0552	Operational	0.0	4.2	2.9	3.8	3.9	0.8	0.0	0.0	0.0	15.6
Totals		266.5	31.2	19.9	21.3	16.1	9.9	19.3	6.7	140.1	531.0

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: Interim Improved Position Determining System Lehr [MOD 2] 1-95-03-0528

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

DESCRIPTION/JUSTIFICATION:

A special interim launcher configuration is 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 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. Funding for FY00 through FY04 provides interim contractor support of IPDS Launchers. This effort is necessary to support the Counterattack Corps until an adequate quantity of M270A1s are fielded.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

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

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs	29																			
Outputs	29																			

	FY 2008				FY 2009				FY 2010				FY 2011				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:	0 Months
Contract Dates:	FY 2004	FY 2005		FY 2006	
Delivery Date:	FY 2004	FY 2005		FY 2006	

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): Interim Improved Position Determining System Lchr [MOD 2] 1-95-03-0528

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
	RD&E	0																			
Procurement	0																				
Kit Quantity	29	18.0																	29	18.0	
Installation Kits	0																				
Installation Kits, Nonrecurring	0																				
Equipment	0																				
Equipment, Nonrecurring	0																				
Engineering Change Orders	0																				
Data	0																				
Training Equipment	0																				
Support Equipment	0																				
Other	0																				
Interim Contractor Support	0	5.9		1.4		1.4															8.7
Installation of Hardware	0																				
FY2002 & Prior Equip-- Kits	0																				
FY2003 Equip-- Kits	0																				
FY2004 Equip-- Kits	0																				
FY2005 Equip-- Kits	0																				
FY2006 Equip-- Kits	0																				
FY2007 Equip-- Kits	0																				
FY2008 Equip-- Kits	0																				
FY2009 Equip-- Kits	0																				
TC Equip- Kits	0																				
Total Installment	0	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
Total Procurement Cost		23.9		1.4		1.4		0.0		0.0		0.0		0.0		0.0		0.0		0.0	26.7

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: Selective Availability Anti-Spoofing Module [MOD 3] 1-96-03-0534

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

DESCRIPTION/JUSTIFICATION:

The Selective Availability Anti-Spoofing Module (SAASM) is required because enhancements to the Global Positioning System (GPS) are required to prevent tampering from outside sources. This change is required by the National Security Agency (NSA) to provide tamper resistant measures in maintaining national security with respect to GPS downlinks. These programs will be compatible with the emerging Electronic Key Management System (EKMS) and will call for the modification of the Position Navigation Unit (PNU). This modification will include SAASM installation to the GPS receiver card, addition of an updated computer processor and revision of the backplane. Future GPS enhancements for authorized DoD usage are required for NSA compliance in the FY09 time frame. This modification is critical for future combat operations and weapon system accuracy in support of the Counterattack Corps.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

The changes to the PNU have been cut into LRIP5 M270A1 contract.

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs	0																			
Outputs	0																			

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs									17	17	18	18	8	9	9	9	50	155
Outputs											18	19	19	19		17	63	155

METHOD OF IMPLEMENTATION: Depot ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 18 Months
 Contract Dates: FY 2004 FY 2004 FY 2005 FY 2005 FY 2006 FY 2006
 Delivery Date: FY 2004 FY 2004 FY 2005 FY 2005 FY 2006 FY 2006

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): Selectiv e Availability Anti-Spoofing Module [MOD 3] 1-96-03-0534

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
	RD T&E	0																			
Procurement	0																				
Kit Quantity	0												70	2.8	35	1.4	50	2.1	155	6.3	
Installation Kits	0												70	1.6	35	0.8	50	1.2	155	3.6	
Installation Kits, Nonrecurring	0																				
Equipment	0																				
Equipment, Nonrecurring	0												40	8.7						40	8.7
Engineering Change Orders	0																				
Data	0																				
Training Equipment	0																				
Support Equipment	0																				
Other	0																155	0.0	155		
Interim Contractor Support	0																				
Installation of Hardware	0																				
FY2002 & Prior Equip-- Kits	0																				
FY2003 Equip-- Kits	0																				
FY2004 Equip-- Kits	0																				
FY2005 Equip-- Kits	0																				
FY2006 Equip-- Kits	0																				
FY2007 Equip-- Kits	0																				
FY2008 Equip-- Kits	0																70	1.3	70	1.3	
FY2009 Equip-- Kits	0																35	0.7	35	0.7	
TC Equip- Kits	0																50	1.0	50	1.0	
Total Installment	0	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0	155	3.0	155	3.0	
Total Procurement Cost		0.0		0.0		0.0		0.0		0.0		0.0		13.1		2.2		6.3		21.6	

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: Joint Technical Architecture-Army (JTA-A) [MOD 4] 1-97-03-0537

MODELS OF SYSTEM 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. The M270A1 Low Cost Fire Control Panel (LCFCP) is an initial hardware change that will provide the M270A1 Launcher with soldier-computer interface, external communication interfaces, and internal system interfaces. It also provides 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 changes of fratricide on the battlefield. This LCFCP is a Tactical Display set that consists of the following three components: Tactical Processor Unit (TPU), Gunner's Display Unit (GDU) and the Mass Storage Unit (MSU). This effort includes procurement of 100 LCFCP kits in FY02 and this hardware will be installed in FY03 and FY04. An additional special kit will be required in FY04 to integrate the Force XXI Battle Command Brigade & Below (FBCB2). This hardware will be procured in FY04 through FY07 and installed in FY05 through FY08. Total FBCB2 kits to be procured is 230. This modification is critical for future operations within the Counterattack Corps and is critical to Legacy to Objective issue.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

The LCFCP is a requirement for the M270A1 to be compliant with First Digitized Corps (FDC) by the end of FY06. The planned production cut-in of the LCFCP is with the M270A1 Low Rate Initial Production (LRIP)4. A contract for the procurement of 100 retrofit kits was awarded 3QFY02.

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs	8	13	12	12	12	12	16	15				30	30	30	31	13	14	14	14	13
Outputs	0		16	21	13		7	21	22				19	38	38	26		19	19	17

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs	13	14	14															330
Outputs		19	19	16														330

METHOD OF IMPLEMENTATION:	Depot	ADMINISTRATIVE LEADTIME:	3 Months	PRODUCTION LEADTIME:	9 Months
Contract Dates:	FY 2004	FY 2005	Jan 05	FY 2006	Jan 06
Delivery Date:	FY 2004	FY 2005	Oct 05	FY 2006	Oct 06

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): Joint Technical Architecture-Army (JTA-A) [MOD 4] 1-97-03-0537

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
	RD&E	0																			
Procurement	0																				
Kit Quantity	100	11.1					121	7.2	55	3.3	54	3.3							330	24.9	
Installation Kits	0																				
Installation Kits, Nonrecurring	0																				
Equipment	0																				
Equipment, Nonrecurring	0																				
Engineering Change Orders	0																				
Data	0																				
Training Equipment	0																				
Support Equipment	0																				
Other	0																				
Interim Contractor Support	0																				
Installation of Hardware	0																				
FY2002 & Prior Equip-- Kits	0		50	0.3	50	0.3													100	0.6	
FY2003 Equip-- Kits	0																				
FY2004 Equip-- Kits	0																				
FY2005 Equip-- Kits	0								121	0.8									121	0.8	
FY2006 Equip-- Kits	0										55	0.4							55	0.4	
FY2007 Equip-- Kits	0												54	0.4					54	0.4	
FY2008 Equip-- Kits	0																				
FY2009 Equip-- Kits	0																				
TC Equip- Kits	0																				
Total Installment	0	0.0	50	0.3	50	0.3		0.0	121	0.8	55	0.4	54	0.4		0.0		0.0	330	2.2	
Total Procurement Cost		11.1		0.3		0.3		7.2		4.1		3.7		0.4		0.0		0.0		27.1	

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: Improved Weapons Interface Unit Modification MOD [MOD 5] 1-99-03-0546

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

DESCRIPTION/JUSTIFICATION:

The Development of the Guided MLRS Rocket and HIMARS has generated a requirement for a new circuit card to be added to the Improved Weapons Interface Unit (IWIU). This IWIU is one of the new Line Replaceable Units (LRU), which is a component of the Improved Fire Control System (IFCS) to be incorporated into the M270A1 Launcher. This circuit card, known as the Ethernet Hub card, and a modified W20 Cable will contain signal distribution functions, which will be incorporated into the IWIU instead of each individual rocket. These changes are planned for incorporation into 196 Weapons Interface Units. Procurement is required to retrofit WIU to launchers produced in LRIP 1-5 and associated Spares. This modification is essential to standardize WIU configurations and eliminate modification costs to missiles and rockets.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Development began in 3QFY01 and this on-going development effort is expected to provide Improved Weapons Interface Unit (IWIU) for Guided MLRS testing, HIMARS Integration, and M270A1 Retrofit. Retrofit contract award is scheduled for Mar 03.

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals					28	28	28	29	8	8	8	9	9	9	9	9	7	7		
Inputs																				
Outputs						19	19	19		19	19	19		19	19	19	19	19	6	

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		196
Outputs																		196

METHOD OF IMPLEMENTATION:	Depot	ADMINISTRATIVE LEADTIME:	3 Months	PRODUCTION LEADTIME:	9 Months
Contract Dates:	FY 2004 Apr 04	FY 2005 Apr 05		FY 2006 Apr 06	
Delivery Date:	FY 2004 Jan 05	FY 2005 Jan 06		FY 2006 Jan 07	

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): Improved Weapons Interface Unit Modification MOD [MOD 5] 1-99-03-0546

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RDT&E																			
Procurement																				
Kit Quantity			113	9.7	33	2.9	36	3.2	14	1.3									196	17.1
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment																				
Equipment, Nonrecurring			25	4.2															25	4.2
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment				0.7																0.7
Other					57	0.0	57	0.0	57	0.0	25	0.0							196	
Interim Contractor Support																				
Installation of Hardware																				
FY 2002 & Prior Equip -- Kits																				
FY 2003 -- Kits					57	1.5	56	1.5											113	3.0
FY 2004 Equip -- Kits							1	0.0	34	0.9									35	0.9
FY 2005 Equip -- Kits									23	0.6	13	0.4							36	1.0
FY 2006 Equip -- Kits											12	0.3							12	0.3
FY 2007 Equip -- Kits																				
FY 2008 Equip -- Kits																				
FY 2009 Equip -- Kits																				
TC Equip- Kits																				
Total Installment		0.0		0.0	57	1.5	57	1.5	57	1.5	25	0.7		0.0		0.0		0.0	196	5.2
Total Procurement Cost		0.0		14.6		4.4		4.7		2.8		0.7		0.0		0.0		0.0		27.2

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: Obsolescence Mitigation/ECP Reliability Intg [MOD 9] 1-99-03-Obsc

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

DESCRIPTION/JUSTIFICATION:

Technology obsolescence is dictating the replacement of many launcher components. Because of rapid electronic obsolescence, 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. Funding on this program procures modification kits which will incorporate improved components necessary to replace parts no longer available. In addition, this modification reestablishes the MLRS baseline at the optimal configuration for integration of the Improved Fire Control System and the Improved Launcher Mechanical System by aiding 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. Additional procurement of kits and funding was required for installation in FY01 to facilitate the preparation of the M270 Launcher and Carrier into a M270A1 "ready" configuration. Additional hardware requirements are expected due to increased digitization equipment added to the cab. This modification program will reduce logistics supportability cost and will provide enhanced equipment in support of the Counterattack Corps.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Modifications will be incorporated into production based on obsolescence analysis and determination.

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs	0																			
Outputs	0																			

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		0
Outputs																		

METHOD OF IMPLEMENTATION:

Contract Dates:	FY 2004	ADMINISTRATIVE LEADTIME:	0 Months	PRODUCTION LEADTIME:	0 Months
Delivery Date:	FY 2004				

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): Obsolescence Mitigation/ECP Reliability Intg [MOD 9] 1-99-03-Obse

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RD&E	0																		
Procurement	0																			
Kit Quantity	0																			
Installation Kits	0																			
Installation Kits, Nonrecurring	0																			
Equipment	0	11.2		4.8		3.3		3.2		2.8		2.3		2.9		1.9		27.8		60.2
Equipment, Nonrecurring	0																			
Engineering Change Orders	0																			
Data	0																			
Training Equipment	0																			
Support Equipment	0																			
Other	0																			
Interim Contractor Support	0																			
Installation of Hardware	0																			
FY2002 & Prior Equip-- Kits	0																			
FY2003 Equip-- Kits	0																			
FY2004 Equip-- Kits	0																			
FY2005 Equip-- Kits	0																			
FY2006 Equip-- Kits	0																			
FY2007 Equip-- Kits	0																			
FY2008 Equip-- Kits	0																			
FY2009 Equip-- Kits	0																			
TC Equip- Kits	0																			
Total Installment	0	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0
Total Procurement Cost		11.2		4.8		3.3		3.2		2.8		2.3		2.9		1.9		27.8		60.2

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: P-1 Item Nomenclature
 Missile Procurement, Army /3/Modification of missiles HIMARS MODIFICATIONS: (NON AAO) (C67501)

Program Elements for Code B Items: Code: Other Related Program Elements: C67500

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost					0.5	0.5	8.0	11.8	16.1	8.3	131.8	176.9
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)					0.5	0.5	8.0	11.8	16.1	8.3	131.8	176.9
Initial Spares												
Total Proc Cost					0.5	0.5	8.0	11.8	16.1	8.3	131.8	176.9
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

Modification kits will be procured for the High Mobility Artillery Rocket System (HIMARS) Laucher and associated training and ground support equipment. These modifications are vital to the Counterattack Corps and are projected to decrease Operations & Support (O&S) costs, reduce logistical impacts and mitigate obsolescence. This system supports the Legacy to Objective transition path of the Transformation Campaign Plan (TCP).

Justification:

Justification: FY04/FY05 funds support the initiation of the HIMARS modification program.

Exhibit P-40M, Budget Item Justification Sheet

Date:

February 2003

Appropriation/Budget Activity/Serial No:
Missile Procurement, Army /3/Modification of missiles

P-1 Item Nomenclature

HIMARS MODIFICATIONS: (NON AAO) (C67501)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

C67500

Description		Fiscal Years									
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
Block Reliability MODs											
1-03-02-0556		0.0	0.0	0.2	0.2	3.2	8.4	12.7	5.0	119.0	148.7
Cordless Vehicular Intercommunication System (VIS)											
1-03-02-0557		0.0	0.0	0.0	0.0	4.1	2.5	2.6	2.6	1.9	13.7
Obsolescence Mitigation											
1-03-02-0558		0.0	0.0	0.3	0.3	0.7	0.9	0.8	0.7	10.9	14.6
Totals		0.0	0.0	0.5	0.5	8.0	11.8	16.1	8.3	131.8	177.0

Exhibit P-40, Budget Item Justification Sheet

Date:

February 2003

Appropriation/Budget Activity/Serial No:
Missile Procurement, Army /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 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	2748.2	18.9	15.1	55.0	50.5	34.1	30.7	22.8	26.6	22.2	241.5	3265.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	2748.2	18.9	15.1	55.0	50.5	34.1	30.7	22.8	26.6	22.2	241.5	3265.6
Initial Spares												
Total Proc Cost	2748.2	18.9	15.1	55.0	50.5	34.1	30.7	22.8	26.6	22.2	241.5	3265.6
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

Provides for the 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 activity of the Army Working Capital Fund. To provide initial support, funds are normally required in the same year that end items are fielded. FY 04 funds will procure Javelin, MLRS, Patriot Mods and MLRS Mods, HIMARS and HIMARS Mods initial spares.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: P-1 Item Nomenclature
 Missile Procurement, Army /5/Support equipment and facilities AIR DEFENSE TARGETS (C93000)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	368.4	2.4	3.3	3.3	3.5	3.6	3.7	3.8	3.8	3.9		399.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	368.4	2.4	3.3	3.3	3.5	3.6	3.7	3.8	3.8	3.9		399.6
Initial Spares	1.3											1.3
Total Proc Cost	369.7	2.4	3.3	3.3	3.5	3.6	3.7	3.8	3.8	3.9		400.9
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

The Air Defense Targets program provides target vehicles, scoring ancillary equipment, and ground support equipment for worldwide active Army and Reserve Component air defense training. This training consists of Standards In Training Commission (STRAC) required gun system live fire and Precision Gunnery System (PGS) training and scoring. These systems support the Legacy to Objective transition path of the Transformation Campaign Plan (TCP).

Justification:

FY04/FY05 funds the Air Defense Artillery Target System and ancillary hardware consisting of scoring devices and ground support equipment in support of gun, aerial tracking, and Precision Gunnery System (PGS) training. These targets support the U.S. Army Avenger, Bradley Stinger Fighting Vehicle (BSFV) and Linebacker systems worldwide in the U.S., Korea, and Germany. Training requirements are generated by Department of Army Major Field Commands, Training Centers, and Division Level Commands. These field requirements have been reviewed against force restructuring plans and Transformation plans and are consistent with the approved training doctrine. These targets are necessary to meet training strategy and standards and are essential to qualify soldiers and units to U.S. Army Readiness standards.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: P-1 Item Nomenclature
 Missile Procurement, Army /5/Support equipment and facilities ITEMS LESS THAN \$5.0M (MISSILES) (CL2000)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	38.7	1.0	1.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0		41.7
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	38.7	1.0	1.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0		41.7
Initial Spares												
Total Proc Cost	38.7	1.0	1.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0		41.7
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

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

Justification:

FY04/FY05 funding will procure tools and shop sets to support the MRLS system.

Exhibit P-5, Weapon MSLS Cost Analysis		Appropriation/Budget Activity/Serial No. Missile Procurement, Army / 5 / Support equipment and facilities			P-1 Line Item Nomenclature: ITEMS LESS THAN \$5.0M (MISSILES) (CL2000)			Weapon System Type:			Date: February 2003		
MSLS Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
MLRS													
Components		483			429			6			6		
Assembly		291			257			4			4		
TOW													
Components		25			21								
Assembly		13			11								
AVENGER													
Components		125			109								
Assembly		90			64								
NOTE: All are missile tool kits no mods. Each system has more than one kit with varying quantities and unit costs for each kit.													
Total		1027			891			10			10		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: P-1 Item Nomenclature
 Missile Procurement, Army /5/Support equipment and facilities MISSILE DEMILITARIZATION (HL2000)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	7.8	1.3	2.3	4.8								16.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	7.8	1.3	2.3	4.8								16.3
Initial Spares												
Total Proc Cost	7.8	1.3	2.3	4.8								16.3
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

Missile Demilitarization Program demilitarizes Army missile and missile components that are unserviceable, obsolete or excess to Army requirements.

Justification:

FY03 funding procures 1) demilitarization of Army tactical missiles (SHILLELAGH, HAWK, STINGER, DRAGON, and PATRIOT) and missile components using Open Burning and Open Detonation (OB/OD) techniques, 2) demilitarization of basic TOW missiles by mechanical resource recovery and recycling (R3) techniques, 3) LRIP demilitarization of improved TOW missiles to include energetics recycling, and 4) the conduct and analysis of a production scale Risk Reduction Program for MLRS Demilitarization using R3 technologies. The missile and missile component demilitarization stockpile is increasing due to 1) inventory ageing, 2) Army modernization efforts, and 3) serviceability issues caused by increased deployments. The stockpile today is over 60,000 missiles and missile components that will grow to over 600,000 by FY14. Currently, the Army uses the destructive method of OB/OD to demilitarize tactical missiles. However, pursuant to Executive Order 13101, "Greening of the Government," an aggressive R3 integrated program has been established by AMCOM which requires environmentally safe and cost effective alternatives to the OB/OD processes. FY 04-05 funding will be used for 1) OB/OD execution, 2) R3 demilitarization using mechanical segregation technologies for TOW missile, 3) R3 demilitarization using chemical processing technologies for TOW missile energetics, 4) production engineering, fabrication, installation, testing of production tooling, and renovation/repair of demilitarization facilities, and 5) optimization of R3 processes to include marketability analyses to improve reuse and re-certification of R3 materials for military reuse and commercial applications. The operational R3 production facilities will allow the Army to decrease its dependence on OB/OD to a minimum. Demilitarization utilizing R3 techniques will provide the Army with the capability to recycle/reuse much of the recovered materials for military and/or commercial applications.

During the FY04 Budget Cycle, funding for the Missile Demilitarization Program was transferred from the Missile Procurement, Army Appropriation to the Procurement Ammunition, Army Appropriation in order to consolidate the effort for all conventional munitions demilitarization.

Exhibit P-5, Weapon MSLS Cost Analysis		Appropriation/Budget Activity/Serial No. Missile Procurement, Army / 5 / Support equipment and facilities			P-1 Line Item Nomenclature: MISSILE DEMILITARIZATION (HL2000)			Weapon System Type:			Date: February 2003		
MSLS Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Shillelagh		975	4085	0	896	7539	0						
TOW R3 (MRC Support)		1000											
TOW R3					3172	5075	1						
R 3 Acq.Study					100								
Hawk Motors		164	256	1	696	1000	1						
MLRS													
Stinger		54	163	0	97	428	0						
Patriot					50	110	0						
Dragon		85	201	0									
SS-11		52	93	1									
Total		2330			4811								

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: Missile Procurement, Army /5/Support equipment and facilities	P-1 Item Nomenclature PRODUCTION BASE SUPPORT (CA0100)
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Program Elements for Code B Items:	Code:	Other Related Program Elements:
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	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	602.4	3.1	3.3	3.3	3.4	3.5	3.7	3.8	3.9	4.0		634.4
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	602.4	3.1	3.3	3.3	3.4	3.5	3.7	3.8	3.9	4.0		634.4
Initial Spares												
Total Proc Cost	602.4	3.1	3.3	3.3	3.4	3.5	3.7	3.8	3.9	4.0		634.4
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

This program provides Production Base Support and Equipment Replacement (PSR) of Government-owned equipment used in production and production testing of missile systems or missile components.

Justification:

FY04/FY05 funds will be used to establish, modernize, expand or replace Army-owned industrial facilities. These funds are essential to sustain the Army's missile warhead production capability, to eliminate safety hazards by replacing worn equipment, and to refurbish facilities.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: P-1 Item Nomenclature
 Missile Procurement, Army /5/Support equipment and facilities PIF FOR OTHER (CA4002)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	303.9	3.1	3.3	3.3	3.4	3.5	3.7	3.8	3.9	4.0		335.9
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	303.9	3.1	3.3	3.3	3.4	3.5	3.7	3.8	3.9	4.0		335.9
Initial Spares												
Total Proc Cost	303.9	3.1	3.3	3.3	3.4	3.5	3.7	3.8	3.9	4.0		335.9
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

Army Test and Evaluation Command (ATEC): This program provides funding to the ATEC, Developmental Test Command (DTC) to establish, modernize, expand or replace Army-owned industrial facilities used in production testing of missiles and missile components. It sustains Army production test capabilities through upgrade and replacement of instrumentation and equipment that is technologically and/or economically obsolete. Modernization of test instrumentation and equipment provides increased automation and efficiencies, improved data quality and quantity and cost avoidances to Army Program Managers. At DTC, funding is required to upgrade or replace production test instrumentation and equipment at Redstone Technical Test Center (RTTC), Huntsville, AL and White Sands Missile Range (WSMR), NM.

Iowa Army Ammunition Plant: This program provides funding for Iowa Army Ammunition Plant's (AAP) continuing modernization, layaway, and maintenance of production capability for missile end items.

This program supports all transition paths of the Army Transformation Campaign Plan (TCP).

Justification:

ATEC: At RTTC, FY04/FY05 funds will fund: replacement of aging flight test instrumentation at the small missile production test range with automated, remotely controlled and configured devices; remotely programmable signal conditioning equipment for shock and vibration testing; upgraded instrumentation and equipment for the rocket motor dissection facility used in mechanical and chemical analysis of rocket motors; and a high performance electrodynamic exciter system and power amplifier for shock and vibration testing.

At WSMR, FY04/FY05 funds will fund: remotely controlled instrumentation and site monitoring equipment used in hazardous test areas during missile warhead testing; replacement sensors, telemetry equipment, time, space and position instrumentation, radio frequency measurement instruments and data processing equipment used for pre-launch missile systems measurements; remote assembly/disassembly equipment for missile component failure analysis; replacement shock and vibration data collection, analysis, and test equipment (accelerometers, amplifier systems, data lines, pyroshock test equipment, power amplifiers, electrodynamic shaker systems, etc.); replacement climatic and environmental test equipment (temperature, humidity, altitude, solar, fungal); and missile flight termination receiver laboratory test equipment used to test and certify flight safety equipment. The majority of the instrumentation being upgraded or replaced is obsolete and has met or exceeded its economic life. This instrumentation is required to ensure complete and accurate test data is collected and safety and environmental hazards are minimized.

Exhibit P-40C, Budget Item Justification Sheet

Date:

February 2003

Appropriation/Budget Activity/Serial No:

Missile Procurement, Army /5/Support equipment and facilities

P-1 Item Nomenclature

PIF FOR OTHER (CA4002)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

Benefits of this project include increased test efficiencies and decreased costs and risks to Army Program Managers.

Iowa AAP: In order to support the production of precision shaped charge warheads to specified tolerances, FY04 funds will replace the heating, ventilation, and air conditioning (HVAC) system in Building 4B-22. Project will purchase/install a mass spectrometer for use in the pressing of warhead billets/assembly of complete warheads and will construct an environmentally-controlled tooling area to store the precision press tooling fixtures/gauges in Building 1-01. In support of replenishment requirements for the Javelin and Tow-Launched, Optically Tracked, Wire-Guided (TOW) missile, effort will place several buildings/ramps into layaway. Work includes building/equipment decontamination, securing buildings, asbestos remediation, utility disconnects, removal of excess equipment. In FY 2005, project provides for the reconstruction of the exterior building ramp enclosures at Building 4B-22. Effort replaces doors and lighting and provides adequate ventilation. Resources also provide required inspection and maintenance of the Javelin and TOW Missile production facilities/equipment in layaway.

These efforts support the Legacy transition path of the Transformation Campaign Plan (TCP).