

# DEPARTMENT OF THE ARMY

## Procurement Programs



Committee Staff Procurement Backup Book  
Fiscal Year (FY) 2010 Budget Estimates

### MISSILE PROCUREMENT, ARMY

---

APPROPRIATION

May 2009



# MISSILE PROCUREMENT, ARMY

## Appropriation Language

For construction, procurement, production, modification, and modernization of missile equipment, including ordnance, ground handling equipment, spare parts, and accessories therefore; specialized equipment and training devices; expansion of public and private plants, including the land necessary therefore, 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, \$ 1,901,679 to remain available for obligation until September 30, 2012



APPROPRIATION: MISSILE PROCUREMENT, ARMY

TABLE OF CONTENTS

SUMMARY BY ACTIVITY:			PAGE
<b>Missile Procurement, Army</b>			
ACTIVITY:	02	Other Missiles	3
ACTIVITY:	03	Modification Of Missiles	4
ACTIVITY:	04	Spares and Repair Parts	5
ACTIVITY:	05	Support Equipment and Facilities	5

\*\*\* UNCLASSIFIED \*\*\*  
 DEPARTMENT OF THE ARMY  
 FY 2010 Budget Submission

EXHIBIT P-1  
 DATE: May 2009

APPROPRIATION A Missile Procurement, Army

ACTIVITY	FY 2008	FY 2009	Dollars in Thousands		
			FY 2010		
			Base	OCO	Total
02 Other Missiles	1,673,229	2,240,084	1,243,887	480,479	1,724,366
03 Modification of Missiles	768,406	670,306	94,120	51,091	145,211
04 Spares and repair parts	24,221	24,828	22,338	0	22,338
05 Support Equipment and Facilities	8,276	10,539	9,764	0	9,764
<b>APPROPRIATION TOTALS</b>	<b>2,474,132</b>	<b>2,945,757</b>	<b>1,370,109</b>	<b>531,570</b>	<b>1,901,679</b>

\*\*\* UNCLASSIFIED \*\*\*

\*\*\* UNCLASSIFIED \*\*\*  
DEPARTMENT OF THE ARMY  
FY 2010 Budget Submission

EXHIBIT P-1  
DATE: May 2009

APPROPRIATION Missile Procurement, Army    ACTIVITY 02 Other Missiles

Dollars in Thousands

LINE NO	ITEM NOMENCLATURE	FY 2008		FY 2009		FY 2010						
		ID	QTY	COST	QTY	COST	QTY	Base COST	QTY	OCO COST	QTY	Total COST
<b>SURFACE-AIR-MISSILE SYSTEM</b>												
1	PATRIOT SYSTEM SUMMARY (C49100)		108	479,710	108	510,576	59	348,351			59	348,351
2	PATRIOT / MEADS CAP System Summary (C50001)					30,957		16,406				16,406
3	SURFACE-LAUNCHED AMRAAM System Summary (C81001) Advance Procurement (CY)						13	113,269			13	72,920
								-40,349				72,920
4	SURFACE-LAUNCHED AMRAAM System Summary (C81001) Advance Procurement (CY)					40,349						
	<b>SUB-ACTIVITY TOTAL</b>			<b>479,710</b>		<b>581,882</b>		<b>437,677</b>		<b>0</b>		<b>437,677</b>
<b>AIR-TO-SURFACE MISSILE SYSTEM</b>												
5	HELLFIRE SYS SUMMARY (C70000)		2,850	252,588	2,945	274,124	240	31,154	2,133	219,700	2,373	250,854
	<b>SUB-ACTIVITY TOTAL</b>			<b>252,588</b>		<b>274,124</b>		<b>31,154</b>		<b>219,700</b>		<b>250,854</b>
<b>ANTI-TANK ASSAULT MISSILE SYSTEM</b>												
6	JAVELIN (AAWSM) SYSTEM SUMMARY (CC0007)		1,320	278,475	1,320	377,888	470	148,649	864	140,979	1,334	289,628
7	TOW 2 SYSTEM SUMMARY (C59300)		2,255	107,999	8,400	436,445	1,165	108,066	1,294	59,200	2,459	167,266
				-22,700		-10,000						
				85,299		426,445						
8	Guided MLRS Rocket (GMLRS) (C64400)		2070	263,712	2652	309,205	2628	293,617	678	60,600	3,306	354,217
9	RRPR			3,532	4014	25,225	2064	15,663			2,064	15,663
10	High Mobility Artillery Rocket System (HIMARS) (C02901)		57	225,133	57	245,315	46	209,061			46	209,061
11	ATACMS		84	84,780								
	<b>SUB-ACTIVITY TOTAL</b>			<b>940,931</b>		<b>1,384,078</b>		<b>775,056</b>		<b>260,779</b>		<b>1,035,835</b>
	<b>ACTIVITY TOTAL</b>			<b>1,673,229</b>		<b>2,240,084</b>		<b>1,243,887</b>		<b>480,479</b>		<b>1,724,366</b>

\*\*\* UNCLASSIFIED \*\*\*

EXHIBIT P-1  
Page 3 of 5

\*\*\* UNCLASSIFIED \*\*\*  
 DEPARTMENT OF THE ARMY  
 FY 2010 Budget Submission

EXHIBIT P-1  
 DATE: May 2009

APPROPRIATION Missile Procurement, Army ACTIVITY 03 Modifications

Dollars in Thousands

LINE NO	ITEM NOMENCLATURE	FY 2008		FY 2009		FY 2010					
		ID	QTY	COST	QTY	COST	Base	OCO	Total		
						QTY	COST	QTY	COST	QTY	COST
<b>MODIFICATIONS</b>											
12	PATRIOT MODS (C50700)			515,172			515,375		44,775		44,775
13	ITAS / TOW MODS (C61700)			237,962			136,705		6,983		6,983
14	MLRS MODS			4,802			1,866		3,662	18,772	22,434
15	HIMARS MODS			10,470			16,360		38,690	32,319	71,009
16	HELLFIRE Modifications (C71500)								10		10
<b>SUB-ACTIVITY TOTAL</b>				<b>768,406</b>		<b>670,306</b>		<b>94,120</b>		<b>51,091</b>	<b>145,211</b>
<b>ACTIVITY TOTAL</b>				<b>768,406</b>		<b>670,306</b>		<b>94,120</b>		<b>51,091</b>	<b>145,211</b>

\*\*\* UNCLASSIFIED \*\*\*

EXHIBIT P-1  
 Page 4 of 5



\*\*\* UNCLASSIFIED \*\*\*  
DEPARTMENT OF THE ARMY  
FY 2010 Budget Submission

EXHIBIT P-1  
DATE: May 2009

APPROPRIATION Missile Procurement, Army ACTIVITY 04 Spares and Repair Parts

Dollars in Thousands

LINE NO	ITEM NOMENCLATURE	FY 2008		FY 2009		FY 2010		QTY	COST	QTY	COST	
		ID	QTY	COST	QTY	COST	Base					OCO
<b>SPARES AND REPAIR PARTS</b>												
16	SPARES AND REPAIR PARTS (CA0250)			24,221		24,828		22,338				22,338
<b>SUB-ACTIVITY TOTAL</b>				<u>24,221</u>		<u>24,828</u>		<u>22,338</u>			<u>0</u>	<u>22,338</u>
<b>ACTIVITY TOTAL</b>				<u>24,221</u>		<u>24,828</u>		<u>22,338</u>			<u>0</u>	<u>22,338</u>
<b>ACTIVITY 05 SUPPORT EQUIPMENT AND FACILITIES</b>												
<b>SUPPORT EQUIPMENT AND FACILITIES</b>												
17	AIR DEFENSE TARGETS (C93000)			4,239		6,423		4,188				4,188
18	ITEMS LESS THAN \$5.0M (MISSILES) (CL2000)			10		10		1,178				1,178
19	PRODUCTION BASE SUPPORT (CA0100)			4,027		4,106		4,398				4,398
<b>SUB-ACTIVITY TOTAL</b>				<u>8,276</u>		<u>10,539</u>		<u>9,764</u>			<u>0</u>	<u>9,764</u>
<b>ACTIVITY TOTAL</b>				<u>8,276</u>		<u>10,539</u>		<u>9,764</u>			<u>0</u>	<u>9,764</u>
<b>APPOPRIATION TOTAL</b>				<u>2,474,132</u>		<u>2,945,757</u>		<u>1,370,109</u>			<u>531,570</u>	<u>1,901,679</u>

\*\*\* UNCLASSIFIED \*\*\*

EXHIBIT P-1  
Page 5 of 5



## Table of Contents - Missile Procurement, Army

BLIN	SSN	Nomenclature	Page
001	C49100	PATRIOT SYSTEM SUMMARY .....	1
002	C50001	PATRIOT/MEADS CAP System Summary .....	7
003	C81001	Surface-Launched AMRAAM System Summary: .....	12
004	C81001	Surface-Launched AMRAAM System Summary: (Adv. Proc.) .....	18
005	C70000	HELLFIRE SYS SUMMARY .....	21
006	CC0007	JAVELIN (AAWS-M) SYSTEM SUMMARY .....	29
007	C59300	TOW 2 SYSTEM SUMMARY .....	42
008	C64400	Guided MLRS Rocket (GMLRS) .....	49
009	C65405	MLRS REDUCED RANGE PRACTICE ROCKETS (RRPR) .....	61
010	C02901	High Mobility Artillery Rocket System (HIMARS) .....	67
011	C98510	ARMY TACTICAL MSL SYS (ATACMS) - SYS SUM .....	73
012	C50700	PATRIOT MODS .....	80
013	C61700	ITAS/TOW MODS .....	100
014	C67500	MLRS MODS .....	104
015	C67501	HIMARS MODIFICATIONS .....	110
016	C71500	HELLFIRE Modifications .....	118
017	CA0250	SPARES AND REPAIR PARTS .....	120
018	C93000	AIR DEFENSE TARGETS .....	121

# Table of Contents - Missile Procurement, Army

<b>BLIN</b>	<b>SSN</b>	<b>Nomenclature</b>	<b>Page</b>
019	CL2000	ITEMS LESS THAN \$5.0M (MISSILES) .....	124
020	CA0100	PRODUCTION BASE SUPPORT .....	126

### Exhibit P-40, Budget Item Justification Sheet

Date: May 2009

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

P-1 Item Nomenclature  
PATRIOT SYSTEM SUMMARY (C49100)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

PE 0604865A, 0603869A, 0604869A, SSN C49200, C53000

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty	467	108	108	59		742
Gross Cost	2081.5	479.7	510.6	348.4		3420.2
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	2081.5	479.7	510.6	348.4		3420.2
Initial Spares						
Total Proc Cost	2081.5	479.7	510.6	348.4		3420.2
Flyaway U/C						
Weapon System Proc U/C	4.5	4.4	4.7	5.9		19.5

**Description:**

Patriot is an advanced Surface-to-Air guided missile system with a high probability of kill 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 U.S. 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. The system integrates with the U.S. Air Force and U.S. Navy in the overall air defense of theater operations. The Patriot Advanced Capability 3 (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. Radar enhancements, communications upgrades, and increased command, control, and computer capability, will increase Patriot's effectiveness, survivability, flexibility of defense design, footprint, and detection of smaller low radar cross section targets.

**Justification:**

FY10 Base funding in the amount of \$348.351 million procures 59 PAC-3 missiles and 5 Enhanced Launcher Electronics System (ELES).

<b>Exhibit P-40, Budget Item Justification Sheet</b>					Date: May 2009	
Appropriation / Budget Activity / Serial No: Missile Procurement, Army / 2 / Other missiles			P-1 Item Nomenclature PATRIOT PAC-3 (C49200)			
Program Elements for Code B Items:		Code:	Other Related Program Elements: PE 0604865A, PE 0604869A, SSN C49100			
	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty	467	108	108	59		742
Gross Cost	2081.5	479.7	510.6	348.4		3420.2
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	2081.5	479.7	510.6	348.4		3420.2
Initial Spares						
Total Proc Cost	2081.5	479.7	510.6	348.4		3420.2
Flyaway U/C						
Weapon System Proc U/C	4.5	4.4	4.7	5.9		19.5
<b>Description:</b> Patriot is an advanced Surface-to-Air guided missile system with a high probability of kill 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 U.S. 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. The system integrates with the U.S. Air Force and U.S. Navy in the overall air defense of theater operations. The Patriot Advanced Capability 3 (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. Radar enhancements, communications upgrades, and increased command, control, and computer capability, will increase Patriot's effectiveness, survivability, flexibility of defense design, footprint, and detection of smaller low radar cross section targets.						
<b>Justification:</b> FY10 Base funding in the amount of \$348.351 procures 59 PAC-3 missiles and 5 Enhanced Launcher Electronics System (ELES).						

<b>Exhibit P-5, Weapon MSLS Cost Analysis</b>		Appropriation/Budget Activity/Serial No: Missile Procurement, Army / 2 / Other missiles			P-1 Line Item Nomenclature: PATRIOT PAC-3 (C49200)			Weapon System Type:		Date: May 2009	
<b>MSLS Cost Elements</b>		ID CD	<b>FY 08</b>			<b>FY 09</b>			<b>FY 10</b>		
			Total Cost \$000	Qty Units	Unit Cost \$000	Total Cost \$000	Qty Units	Unit Cost \$000	Total Cost \$000	Qty Units	Unit Cost \$000
<b>Missile Hardware - Recurring</b>											
Missile Hardware			333072	108	3084	333030	108	3084	212480	59	3601
Field Surveillance			20187			32724			6025		
Obsolescence			22145			32940			7558		
Tooling/Maintenance			1300			1400					
<b>SUBTOTAL</b>			<b>376704</b>			<b>400094</b>			<b>226063</b>		
<b>Ground Support Equipment</b>											
ELES									25060	5	5012
Electric Power Plants						14490	8	1811			
<b>SUBTOTAL</b>						<b>14490</b>			<b>25060</b>		
<b>Support Cost</b>											
Contractor Engineering			47580			38442			38891		
Government/Software Engineering			19665			20614			20903		
Sys Engrg/Proj Mgmt (SEPM)			13960			14421			14583		
Integrated Logistics Support			12605			13022			13223		
Depot Maint Plant Equipment (DMPE)			992			1022			1071		
Fielding			8204			8471			8557		
<b>SUBTOTAL</b>			<b>103006</b>			<b>95992</b>			<b>97228</b>		
<b>Total:</b>			<b>479710</b>			<b>510576</b>			<b>348351</b>		

## Exhibit P-5a, Budget Procurement History and Planning

Date:  
May 2009

Appropriation/Budget Activity/Serial No: Missile Procurement, Army/ 2/ Other missiles			Weapon System Type:		P-1 Line Item Nomenclature: PATRIOT PAC-3 (C49200)					
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
<b>Missile Hardware</b>										
FY 2008	LMMFC Dallas, TX	SS/FFP	AMCOM	Dec 07	Oct 09	108	3084	NA		Mar-06
FY 2009	LMMFC Dallas, TX	SS/FFP	AMCOM	Dec 08	Aug 10	108	3084	NA		Apr-08
FY 2010	LMMFC Dallas, TX	SS/FFP	AMCOM	Dec 09	Aug 11	59	3601	NA		Mar-09

REMARKS: LMMFC - Lockheed Martin Missiles and Fire Control  
 SS - Sole Source  
 FFP - Firm Fixed Price  
 AMCOM - US Army Aviation and Missile Command



**FY 09 / 10 BUDGET PRODUCTION SCHEDULE**

P-1 ITEM NOMENCLATURE  
PATRIOT PAC-3 (C49200)

Date:  
May 2009

COST ELEMENTS				Fiscal Year 09														Fiscal Year 10														Later				
MFR	FY	S E R V	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	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							
PAC-3 Missile (FY08)																																				
1	FY 08	A	108	0	108															14	12	12	12	12	12	12	8	8	8	10			0			
1	FY 08	FMS	24	0	24																								8	8	8			0		
PAC-3 Missile (FY09)																																				
1	FY 09	A	108	0	108					A																								10	8	90
1	FY 09	FMS	64	0	64					A																									64	
PAC-3 Missile (FY10)																																				
1	FY 10	A	59	0	59																															59
					363															14	12	12	12	12	12	12	8	16	16	18	10	8		213		
					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	Initial	ADMIN LEAD 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	20	30		Initial	7	3	20	23	FY08 24 = Germany FMS Case (24 PAC-3 missiles) FY09 64 = United Arab Emirates (64 PAC-3 Missiles)	
						Reorder	7	3	20	23		
						Initial						
						Reorder						
						Initial						
						Reorder						
						Initial						
						Reorder						

<b>FY 11 / 12 BUDGET PRODUCTION SCHEDULE</b>	P-1 ITEM NOMENCLATURE PATRIOT PAC-3 (C49200)	Date: May 2009
--	---	-------------------

COST ELEMENTS					Fiscal Year 11													Fiscal Year 12													Later	
M F R	FY	S E R V	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Calendar Year 11													Calendar Year 12													
						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 (FY08)																																
1	FY 08	A	108	108																									0			
1	FY 08	FMS	24	24																									0			
PAC-3 Missile (FY09)																																
1	FY 09	A	108	18	90	8	8	8	8	8	12	8	12	8	10														0			
1	FY 09	FMS	64	0	64						8	12	16	12	16														0			
PAC-3 Missile (FY10)																																
1	FY 10	A	59	0	59											4	4	6	8	4	4	4	6	8	4	4	3		0			
					213	8	8	8	8	8	20	20	28	20	26	4	4	6	8	4	4	4	6	8	4	4	3					
						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			Reached D+	MFR	ADMIN LEAD 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	20	30		1	Initial	7	3	20	23	FY08 24 = Germany FMS Case (24 PAC-3 Missiles) FY09 64 = United Arab Emirates (64 PAC-3 Missiles)
							Reorder	7	3	20	23	
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					

<b>Exhibit P-40, Budget Item Justification Sheet</b>	Date: May 2009
--	----------------

Appropriation / Budget Activity / Serial No: Missile Procurement, Army / 2 / Other missiles	P-1 Item Nomenclature PATRIOT/MEADS CAP System Summary (C50001)
--	--

Program Elements for Code B Items:	Code:	Other Related Program Elements: PE 0604865A, PE0603869A, PE0604869A, C53101, C53201
------------------------------------	-------	--

	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty					1528	1528
Gross Cost			31.0	16.4	6819.7	6867.0
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1			31.0	16.4	6819.7	6867.0
Initial Spares						
Total Proc Cost			31.0	16.4	6819.7	6867.0
Flyaway U/C						
Weapon System Proc U/C					4.5	4.5

**Description:**  
The Combined Aggregate Program (CAP) is an acquisition strategy that will provide for the transition of the Patriot/PAC-3 Missile Segment Enhancement (MSE) to the Medium Extended Air and Missile Defense (MEADS) objective system. The MEADS system will provide lower tier air and missile defense protection to maneuver forces and other critical forward-deployed assets throughout all phases of tactical operation. CAP will be an integral component of the Integrated Air and Missile Defense (IAMD) network. It will interoperate with other airborne, ground and sea-based sensors and will have improved seeker/sensor components.

The MSE missile evolves from the PAC-3 missile. The MSE upgrade takes the Cost Reduction Initiative (CRI) missile design and improves on it with a higher performance, dual pulse, eleven inch diameter Solid Rocket Motor (SRM) design, improved Lethality Enhancer, thermally hardened front end for longer fly out, upgraded batteries, enlarged fixed fins, more responsive control surfaces, and upgraded guidance software. These improvements provide a more agile, lethal interceptor missile, which results in a substantial missile performance improvement while enhancing Insensitive Munitions (IM) compliance. A more IM compliant hydroxy-terminated polyether (HTPE) propellant for the SRM is being developed for the MSE program as well as a less sensitive Lethality Enhancer. A single canister design is also being developed under the MSE contract, which provides the capability to meet the MEADS requirements for single round loading and reconstitution. The MSE is being developed to meet the US operational requirements and is the internationally accepted missile for MEADS.

MEADS is a tri-national cooperative program with Germany and Italy as partners. MEADS has been in design and development since 2004. The MEADS will provide air and missile defense of vital assets associated with Army and Marine Corps maneuver forces. MEADS will provide forces with 360-degree defense against multiple and simultaneous attacks by tactical ballistic missiles, stressing cruise missiles, and other air breathing threats. MEADS will have a netted and distributed architecture with modular components to increase survivability and flexibility of employment in a number of operational configurations. MEADS provides improved tactical mobility via C-130 and helicopter transport and reduced strategic lift requirements due to use of smaller and lighter end-items. The objective MEADS system will be comprised of the Battle Manager improvements as well as the Surveillance Radar and the Multifunction Fire Control Radar, and will ultimately replace Patriot at a rate of one battalion equivalent per year.

**Justification:**  
FY10 Base funding in the amount of \$16.406 million will procure MSE Initial Production Facilitization (IPF). The MSE IPF will adapt the PAC-3 All Up Round and production line to produce the MSE configuration.

<b>Exhibit P-40, Budget Item Justification Sheet</b>						Date: May 2009
Appropriation / Budget Activity / Serial No: Missile Procurement, Army / 2 / Other missiles				P-1 Item Nomenclature MSE Missile (C53101)		
Program Elements for Code B Items:		Code:	Other Related Program Elements: PE 0604865A, PE0603869A, PE0604869A, C53001, C53201			
	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty					1528	1528
Gross Cost			31.0	16.4	6819.7	6867.0
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1			31.0	16.4	6819.7	6867.0
Initial Spares						
Total Proc Cost			31.0	16.4	6819.7	6867.0
Flyaway U/C						
Weapon System Proc U/C					4.5	4.5
<b>Description:</b> The Missile Segment Enhancement (MSE) missile evolves from the PAC-3 missile. The MSE upgrade takes the CRI missile design and improves on it with a higher performance, dual pulse, eleven-inch diameter Solid Rocket Motor (SRM) design, improved Lethality Enhancer, thermally hardened front end for longer fly out, upgraded batteries, enlarged fixed fins, more responsive control surfaces, and upgraded guidance software. These improvements provide a more agile, lethal interceptor missile, which results in a substantial missile performance improvement while enhancing Insensitive Munitions (IM) compliance. A more IM compliant hydroxy-terminated polyether (HTPE) propellant for the SRM is being developed for the MSE program as well as a less sensitive Lethality Enhancer. A single canister design is also being developed under the MSE contract, which provides the capability to meet the MEADS requirements for single round loading and reconstitution. The MSE is being developed to meet US operational requirements and is the internationally accepted missile for MEADS.						
<b>Justification:</b> FY10 Base funding in the amount of \$16.406 million will procure MSE Initial Production Facilitization (IPF). The MSE IPF will adapt the PAC-3 All Up Round and production line to produce the MSE configuration.						

<b>Exhibit P-5, Weapon MSLS Cost Analysis</b>		Appropriation/Budget Activity/Serial No: Missile Procurement, Army / 2 / Other missiles			P-1 Line Item Nomenclature: MSE Missile (C53101)			Weapon System Type:		Date: May 2009	
<b>MSLS Cost Elements</b>		ID CD	<b>FY 08</b>			<b>FY 09</b>			<b>FY 10</b>		
			Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
<b>Missile Hardware - Recurring</b>											
Missile Hardware											
Field Surveillance											
PAC-3 Missile Support Center (P3MSC)											
Obsolescence											
<b>SUBTOTAL</b>											
<b>Ground Support Equipment</b>											
ELES											
<b>SUBTOTAL</b>											
<b>Non-Recurring Costs</b>											
Initial Production Facilitization											
<b>SUBTOTAL</b>											
<b>Support Costs</b>											
Contractor Engineering											
Government/Software Engineering											
Sys Engrg/Proj Mgmt (SEPM)											
Integrated Logistics Support											
Depot Maint Plant Equipment (DMPE)											
Fielding											
<b>SUBTOTAL</b>											
<b>Total:</b>											
						<b>30957</b>			<b>16406</b>		

## Exhibit P-5a, Budget Procurement History and Planning

Date:  
May 2009

Appropriation/Budget Activity/Serial No: Missile Procurement, Army/ 2/ Other missiles		Weapon System Type:	P-1 Line Item Nomenclature: MSE Missile (C53101)								
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	
<b>Missile Hardware</b>											

REMARKS:

<b>BUDGET PRODUCTION SCHEDULE</b>	P-1 ITEM NOMENCLATURE MSE Missile (C53101)	Date: May 2009
	No data to display...	
Empty area for production schedule data		

<b>Exhibit P-40, Budget Item Justification Sheet</b>						Date: May 2009
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: PE 0604802A, Project S23; Adv Proc C81001			
	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	30.3			113.3		143.5
Less PY Adv Proc				40.3		40.3
Plus CY Adv Proc			40.3			40.3
Net Proc P1	30.3		40.3	72.9		143.5
Initial Spares						
Total Proc Cost	30.3		40.3	72.9		143.5
Flyaway U/C						
Weapon System Proc U/C						
<b>Description:</b> The Surface Launched Advanced Medium Range Air-To-Air Missile (SLAMRAAM) is a critical component of the Army's future Integrated Air & Missile Defense (IAMD) system. SLAMRAAM consists of launcher platforms employing the proven AIM-120-C7 Advanced Medium Range Air-to-Air Missile (AMRAAM); Integrated Fire Control Station (IFCS) command, control, and communications platforms; and Improved Sentinel Sensors. SLAMRAAM is a lightweight, day or night, adverse weather, non-line-of-sight system that counters cruise missiles (CM), unmanned aerial vehicle (UAV), fixed wing, and rotary wing threats. SLAMRAAM is highly mobile and able to operate in a variety of combat situations to protect maneuver forces and strategic-level critical assets. SLAMRAAM represents a substantial increase in performance over current short-range air defense systems.						
<b>Justification:</b> FY10 procures 13 launchers (8 LRIP and 5 SDD Refurb), 10 IFCS (5 LRIP and 5 SDD Refurb), and associated non-recurring and recurring support costs. FY09 and FY10 hardware requirement make up the systems for First Unit Equipped.  Advance Procurement - FY09 is for the long lead/Nonrecurring Engineering (NRE) for the LRIP FY10 Launcher/IFCS buy.						



<b>Exhibit P-40, Budget Item Justification Sheet</b>	Date: May 2009
--	----------------

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 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty				13		13
Gross Cost				113.3		113.3
Less PY Adv Proc				40.3		40.3
Plus CY Adv Proc			40.3			40.3
Net Proc P1			40.3	72.9		113.3
Initial Spares						
Total Proc Cost			40.3	72.9		113.3
Flyaway U/C						
Weapon System Proc U/C				5.7		5.7

**Description:**  
The Surface Launched Advanced Medium Range Air-To-Air Missile (SLAMRAAM) is a critical component of the Army's future Integrated Air & Missile Defense (IAMD) system. SLAMRAAM consists of launcher platforms employing the proven AIM-120-C7 Advanced Medium Range Air-to-Air Missile (AMRAAM); Integrated Fire Control Station (IFCS) command, control, and communications platforms; and Improved Sentinel Sensors. SLAMRAAM is a lightweight, day or night, adverse weather, non-line-of-sight system that counters cruise missiles (CM), unmanned aerial vehicle (UAV), fixed wing, and rotary wing threats. SLAMRAAM is highly mobile and able to operate in a variety of combat situations to protect maneuver forces and strategic-level critical assets. SLAMRAAM represents a substantial increase in performance over current short-range air defense systems.

**Justification:**  
FY09 procures long lead/Nonrecurring Engineering (NRE) for the FY10 Launcher/IFCS buy.  
FY10 procures 13 launchers (8 LRIP and 5 SDD Refurb), 10 IFCS (5 LRIP and 5 SDD Refurb), and associated non-recurring and recurring support costs. FY09 and FY10 hardware requirement make up the systems for First Unit Equipped.

<b>Exhibit P-5, Weapon MSLS Cost Analysis</b>		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: May 2009	
<b>MSLS Cost Elements</b>		ID CD	<b>FY 08</b>			<b>FY 09</b>			<b>FY 10</b>		
			Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
			\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000
<b>Non-Recurring Engineering</b>											
IFCS NRE									2807		
Launcher NRE									6654		
Production Base Support											
IFCS Refurbishment									7225	10	723
Launcher Refurbishment									1828	11	166
<b>Total Non Recurring Engineering</b>									<b>18514</b>		
<b>Recurring Production Hardware</b>											
Launcher Manufacturing									5085	8	636
IFCS Manufacturing									4853	5	971
Recurring Engineering									3582		
Sustaining Tooling									1237		
Quality Control									1939		
Engineering Change Proposals									507		
Government Furnished Equipment									6494		
<b>Total Hardware Cost</b>									<b>23697</b>		
<b>Weapons Support Cost</b>											
System Test and Evaluation									1086		
System Engineering/Program Management									44757		
Training Equipment									419		
Data									1361		
Software, Contractor Log Spt, Engr Svcs									17180		
Support Equipment									1386		
Fielding/Spares									4869		
<b>Total Weapons Support Cost</b>									<b>71058</b>		
Less PY Advanced Procurement									-40349		
Plus CY Advanced Procurement							40349				
<b>Total:</b>							<b>40349</b>		<b>72920</b>		

## Exhibit P-5a, Budget Procurement History and Planning

Date:  
May 2009

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 \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
<b>Launcher Manufacturing</b> FY 2010	Raytheon Tewksbury, MA	SS/FPI*	AMCOM***	Nov 09	Dec 10	8	636			

REMARKS: \*SS/FPI - Sole Source/Fixed Price Incentive  
 \*\*SS/FFP - Sole Source/Firm Fixed Price  
 \*\*\*AMCOM - Air and Missile Command

FY09 is for Long Lead Items - Contract Award Date - April 09

Note: FY10 Low Rate Initial Production (LRIP) produces 13 Launchers (8 new + 5 SDD refurbished) and 10 IFCS (5 new and 5 SDD refurbished). Additionally LRIP assets will be utilized to support Initial Operational Test & Evaluation (IOTE). Funds have been set aside to refurbish those LRIP launchers and LRIP IFCS used in support of IOTE.

The Non-recurring costs on the P-5 include the test equipment, special tooling, production line set-up, fab assembly and installation of tools.

**FY 09 / 10 BUDGET PRODUCTION SCHEDULE**

P-1 ITEM NOMENCLATURE  
Surface-Launched AMRAAM Launcher (C81002)

Date: May 2009

COST ELEMENTS						Fiscal Year 09													Fiscal Year 10													Later
MFR	FY	SERV	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	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			
1	FY 09	A	13	0	13													A												13		
1	FY 05	A	5	5																										0		
<b>Total</b>					13																									13		

MFR	Name - Location	PRODUCTION RATES			Reached D+	MFR	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, Tewksbury, MA	1	4		1	Initial	2	3	18	21	FY05 quantities were System Development and Demonstration (SDD) prototypes. These SDD prototypes are to be refurbished in FY10 and are accounted for in the FY10 total quantity.
						Reorder	2	3	18	21	
						Initial					
						Reorder					
						Initial					
						Reorder					
						Initial					
						Reorder					
						Initial					
						Reorder					

**FY 11 / 12 BUDGET PRODUCTION SCHEDULE**

P-1 ITEM NOMENCLATURE  
Surface-Launched AMRAAM Launcher (C81002)

Date: May 2009

COST ELEMENTS					Fiscal Year 11													Fiscal Year 12													Later	
MFR	FY	SERV	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	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			
Fire Unit																																
1	FY 09	A	13	0	13			2	2	2	2	2	2	2	1													0				
1	FY 05	A	5	5																								0				
Total					13			2	2	2	2	2	2	2	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	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, Tewksbury, MA	1	4		1	Initial	2	3	18	21	
						Reorder	2	3	18	21	
						Initial					
						Reorder					
						Initial					
						Reorder					
						Initial					
						Reorder					
						Initial					
						Reorder					

<b>Exhibit P-40, Budget Item Justification Sheet</b>						Date: May 2009
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: PE 0604802A, Project S23, Advance Procurement			
	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost						
Less PY Adv Proc						
Plus CY Adv Proc			40.3			40.3
Net Proc P1			40.3			40.3
Initial Spares						
Total Proc Cost			40.3			40.3
Flyaway U/C						
Weapon System Proc U/C						
<b>Description:</b> The Surface Launched Advanced Medium Range Air-To-Air Missile (SLAMRAAM) is a critical component of the Army's future Integrated Air & Missile Defense (IAMD) system. SLAMRAAM consists of launcher platforms employing the proven AIM-120-C7 Advanced Medium Range Air-to-Air Missile (AMRAAM); Integrated Fire Control Station (IFCS) command, control, and communications platforms; and Improved Sentinel Sensors. SLAMRAAM is a lightweight, day or night, adverse weather, non-line-of-sight system that counters cruise missiles (CM), unmanned aerial vehicle (UAV), fixed wing, and rotary wing threats. SLAMRAAM is highly mobile and able to operate in a variety of combat situations to protect maneuver forces and strategic-level critical assets. SLAMRAAM represents a substantial increase in performance over current short-range air defense systems.						
<b>Justification:</b> FY09 procures long lead items and Nonrecurring Engineering (NRE) for the FY10 Launcher/IFCS buy. This funding represents advance procurement for FY10 production.  Advance Procurement - FY09 is for the long lead/Nonrecurring Engineering (NRE) for the FY10 Launcher/IFCS buy. NRE consists of test equipment, special tooling, production line set-up, fab assembly and installation of tools, etc.						

<b>Advance Procurement Requirements Analysis-Funding (P-10A)</b>			First System Award Date:	First System Completion Date:	Date:	May 2009		
Appropriation / Budget Activity / Serial No: Missile Procurement, Army / 2 / Other missiles				P-1 Line Item Nomenclature / Weapon System: Surface-Launched AMRAAM System Summary:				
(\$ in Millions)								
	<b>PLT (mos)</b>	<b>When Rqd (mos)</b>	<b>Pr Yrs</b>	<b>FY 08</b>	<b>FY 09</b>	<b>FY 10</b>	<b>To Comp</b>	<b>Total</b>
End Item Quantity								
GFE Launcher	18	12			4.0			4.0
GFE IFCS	18	12			5.0			5.0
Fire Unit Equipment	18	12			5.6			5.6
FU Factory Start Up/Tooling/TE/Mfg Data Package	18	12			3.2			3.2
Fire Unit Electronics	18	12			7.2			7.2
IFCS Equipment	18	12			2.8			2.8
IFCS Factory Start Up/Tooling/TE/Mfg Data Package	18	12			2.5			2.5
IFCS Electronics	18	12			10.0			10.0
<b>Total Advance Procurement</b>			<b>0.0</b>	<b>0.0</b>	<b>40.3</b>	<b>0.0</b>	<b>0.0</b>	<b>40.3</b>
FY09 procures long lead items and Nonrecurring Engineering (NRE)for the FY10 Launcher/IFCS buy.								

<b>Advance Procurement Requirements Analysis-Funding (P-10B)</b>	Date: May 2009
--	----------------

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

	(\$ in Millions)					
	PLT (mos)	Quantity Per Assembly	Unit Cost	2010		
				Qty	Contract Forecast Date	Total Cost Request
GFE Launcher	18	8	0.5			
GFE IFCS	18	5	1.0			
Fire Unit Equipment	18	8	0.7			
FU Factory Start Up/Tooling/TE/Mfg Data Package	18	1	3.2			
Fire Unit Electronics	18	8	0.9			
IFCS Equipment	18	5	0.6			
IFCS Factory Start Up/Tooling/TE/Mfg Data Package	18	1	2.5			
IFCS Electronics	18	5	2.0			
<b>Total Advance Procurement</b>						

FY09 procures long lead items and Nonrecurring Engineering (NRE)for the FY10 Launcher/IFCS buy.



<b>Exhibit P-40, Budget Item Justification Sheet</b>						Date: May 2009
Appropriation / Budget Activity / Serial No: Missile Procurement, Army / 2 / Other missiles				P-1 Item Nomenclature HELLFIRE SYS SUMMARY (C70000)		
Program Elements for Code B Items:		Code:	Other Related Program Elements: PE 0203802A, Projects 781 and 785; C71500			
	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty	50800	2850	2945	2373		58968
Gross Cost	2233.4	252.6	274.1	250.9		3010.9
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	2233.4	252.6	274.1	250.9		3010.9
Initial Spares	5.7					5.7
Total Proc Cost	2239.1	252.6	274.1	250.9		3016.6
Flyaway U/C						
Weapon System Proc U/C		0.1	0.1	0.1		0.3
<b>Description:</b> The HELLFIRE systems family of air-to-ground missiles (all variants) provides precision-kill capability against heavy, advanced armor and individual hard point targets. HELLFIRE II and Longbow HELLFIRE comprise the primary anti-tank armament of the AH-64 A/D Apache, OH-58D Kiowa Warrior, Army Unmanned Aerial Systems (UAS), and Special Operations aircraft. Laser HELLFIRE (all variants) provides for point-target precision strike, defeats future advanced armor threats and non-armor targets, 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-64 D Longbow Apache helicopter.						
<b>Justification:</b> FY2010 procures predominately the P+ missile which was instituted by Engineering Change Order (ECO) in FY2009. The unit price reflects this new configuration.  FY2010 Base funding in the amount of \$31.154 million will procure 240 HELLFIRE Missiles. FY2010 Overseas Contingency Operations (OCO) funding in the amount of \$219.700 million will procure 2133 HELLFIRE Missiles. FY2010 Total: \$250.854 million  Approved Acquisition Objective (AAO) is 34,292.						

<b>Exhibit P-40, Budget Item Justification Sheet</b>						Date: May 2009
Appropriation / Budget Activity / Serial No: Missile Procurement, Army / 2 / Other missiles				P-1 Item Nomenclature LASER HELLFIRE MSL (BASIC/IHW/HFII) (C70100)		
Program Elements for Code B Items:		Code:	Other Related Program Elements: PE 0203802, Projects 781; C71500			
	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty	50800	2850	2945	2373		58968
Gross Cost	2233.4	252.6	274.1	250.9		3010.9
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	2233.4	252.6	274.1	250.9		3010.9
Initial Spares	5.7					5.7
Total Proc Cost	2239.1	252.6	274.1	250.9		3016.6
Flyaway U/C						
Weapon System Proc U/C	0.0	0.1	0.1	0.1		0.3
<b>Description:</b> The Laser Hellfire system family of air-to-ground missiles (all variants) provides attack helicopters and unmanned aircraft systems (UAS) with point-target precision strike capability to defeat heavy, advanced armor, individual hard point and non-traditional targets. Hellfire missiles use a semi-active laser terminal guidance and are the primary anti-tank armament of the AH-64 Apache, OH-58 Kiowa Warrior, Army UAS and Special Operations aircraft. The Hellfire II includes Electro-Optical Countermeasure capability, warhead improvements and an updated electronic fuze. At the request of warfighters in the field, blast fragmentation sleeves have been added to Hellfire K-2 to increase anti-personnel capabilities. Hellfire procurement funding supports the entire Hellfire system to include resolution of obsolescence, safety, reliability, engineering changes and production issues.						
<b>Justification:</b> FY2010 procures predominately the P+ missile which was instituted by Engineering Change Order (ECO) in FY2009. The unit price reflects this new configuration.  FY2010 Base funding in the amount of \$31.154 million will procure 240 HELLFIRE Missiles. FY2010 Overseas Contingency Operations (OCO) funding in the amount of \$219.700 million will procure 2133 HELLFIRE Missiles. FY2010 Total: \$250.854 million  Approved Acquisition Objective (AAO) is 34,292.						

<b>Exhibit P-5, Weapon MSLS Cost Analysis</b>		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: May 2009	
<b>MSLS Cost Elements</b>		ID CD	<b>FY 08</b>			<b>FY 09</b>			<b>FY 10</b>		
			Total Cost \$000	Qty Units	Unit Cost \$000	Total Cost \$000	Qty Units	Unit Cost \$000	Total Cost \$000	Qty Units	Unit Cost \$000
<b>Flyaway Costs</b>											
<b>Hardware Costs - Recurring</b>											
All-up Rounds			209428	2850	73	196301	2945	67	199506	2373	84
Gov Furn Eq (GFE) Explosives											
Gov Furn Eq (GFE) Containers											
Missile Conversions			7024								
Engineering Change Orders (ECO)						7182					
Engineering Services			8260			5162			3124		
Fielding			4135			4308			3545		
Acceptance Testing			4445			4350			1515		
<b>SUBTOTAL</b>			<b>233292</b>			<b>217303</b>			<b>207690</b>		
<b>Engineering Support</b>											
Project Mgt Admin			14340			18665			19606		
Production Engineering Support			4956			31156			19728		
<b>SUBTOTAL</b>			<b>19296</b>			<b>49821</b>			<b>39334</b>		
<b>Non-Recurring</b>											
Disposal of Tool/test Equipment											
Initial Production Facilitization (IPF)											
Rate tooling/Test Equipment						7000			3830		
<b>SUBTOTAL</b>						<b>7000</b>			<b>3830</b>		
<b>Peculiar Support Equipment</b>											
Environmental Protections											
Subtotal											
<b>Gross P-1 End Item</b>			<b>252588</b>			<b>274124</b>			<b>250854</b>		
Less: Prior Year Adv Proc											
<b>Net P-1 Full Funding Cost</b>											
Plus: P-1 Cy Adv Proc											
Other Non P-1 Costs											
Initial Spares											
<b>Total:</b>			<b>252588</b>			<b>274124</b>			<b>250854</b>		

## Exhibit P-5a, Budget Procurement History and Planning

Date:  
May 2009

Appropriation/Budget Activity/Serial No: Missile Procurement, Army/ 2/ Other missiles			Weapon System Type:		P-1 Line Item Nomenclature: LASER HELLFIRE MSL (BASIC/IHW/HFII) (C70100)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Units	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
<b>All-up Rounds</b>										
FY 2008	HELLFIRE Sys Limited Liability Orlando, FL	FFP	AMCOM, Redstone Arsenal, AL	Aug 08	Sep 10	2850	73	Yes		Oct 07
FY 2009	HELLFIRE Sys Limited Liability Orlando, FL	FFP	AMCOM, Redstone Arsenal, AL	Aug 09	Aug 11	2945	67	Yes		Oct 07
FY 2010	HELLFIRE Sys Limited Liability Orlando, FL	FFP	AMCOM, Redstone Arsenal, AL	Aug 10	Aug 12	2373	84	Yes		Oct 07

REMARKS: Firm Fixed Price (FFP)

M F R	FY	S E R V	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														
						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	2850	0	2850																							A	2850			
1	FY 08	AF	802	0	802																							A	802			
1	FY 08	FMS	895	0	895																							A	895			
1	FY 08	NA	980	0	980																							A	980			
1	FY 09	A	2945	0	2945																									2945		
1	FY 09	AF	1384	0	1384																									1384		
1	FY 09	FMS	526	0	526																									526		
1	FY 09	NA	1376	0	1376																									1376		
1	FY 10	A	2373	0	2373																									2373		
1	FY 10	AF	1177	-385	1177																									1177		
1	FY 10	NA	818	0	818																									818		
Total					16126																											16126
						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			Reached D+	MFR	ADMIN LEAD TIME	MFR After 1 Oct	TOTAL After 1 Oct	REMARKS		
		MIN	1-8-5	MAX								
		Prior 1 Oct	After 1 Oct									
1	HELLFIRE Sys Limited Liability, Orlando, FL	64	340	600	9	1	Initial	6	3	24	27	In October 2010 the delivery capability for Hellfire missiles will be at 540 per month.  Projected Air force, Navy, and Foreign Military Sales (FMS) requirements for Laser HELLFIRE are anticipated to satisfy the minimum sustaining rate.
							Reorder	5	3	24	27	
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					

<b>FY 09 / 10 BUDGET PRODUCTION SCHEDULE</b>	P-1 ITEM NOMENCLATURE LASER HELLFIRE MSL (BASIC/IHW/HFII) (C70100)	Date: May 2009
--	---	-------------------

COST ELEMENTS						Fiscal Year 09														Fiscal Year 10										Later		
MFR	FY	S E R V	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Calendar Year 09														Calendar Year 10												
						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	2850	0	2850																											13
1	FY 08	AF	802	0	802																											802
1	FY 08	FMS	895	0	895																											895
1	FY 08	NA	980	0	980																										10	970
1	FY 09	A	2945	0	2945											A																2945
1	FY 09	AF	1384	0	1384											A																1384
1	FY 09	FMS	526	0	526											A																526
1	FY 09	NA	1376	0	1376											A																1376
1	FY 10	A	2373	0	2373																										A	2373
1	FY 10	AF	1177	-385	1177																										A	1177
1	FY 10	NA	818	0	818																										A	818
Total					16126																										23	16103
						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 D+	MFR	ADMIN LEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
		MIN	1-8-5	MAX			Prior 1 Oct	After 1 Oct			
1	HELLFIRE Sys Limited Liability, Orlando, FL	64	340	600	9	1	6	3	24	27	In October 2010 the delivery capability for Hellfire missiles will be at 540 per month.  Projected Air force, Navy, and Foreign Military Sales (FMS) requirements for Laser HELLFIRE are anticipated to satisfy the minimum sustaining rate.
						Initial					
						Reorder	5	3	24	27	
						Initial					
						Reorder					
						Initial					
						Reorder					
						Initial					



COST ELEMENTS							Fiscal Year 13															Fiscal Year 14												Later
MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Calendar Year 13															Calendar Year 14													
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP					
1	FY 08	A	2850	2850																														0
1	FY 08	AF	802	802																														0
1	FY 08	FMS	895	895																														0
1	FY 08	NA	980	980																														0
1	FY 09	A	2945	2945																														0
1	FY 09	AF	1384	1384																														0
1	FY 09	FMS	526	272	254	98	124	32																										0
1	FY 09	NA	1376	1376																														0
1	FY 10	A	2373	398	1975	217	235	170	220	155	209	215	225	258	71																			0
1	FY 10	AF	1177	170	1007	125	110	110	145	154	103	90	85	35	50																			0
1	FY 10	NA	818	264	554	60	31	129	50	50	50	50	45	55	34																			0
Total						3790	500	500	441	415	359	362	355	355	348	155																		
						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	ADMIN LEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
		MIN	1-8-5	MAX	1			Prior 1 Oct	After 1 Oct			
1	HELLFIRE Sys Limited Liability, Orlando, FL	64	340	600	9	1	Initial	6	3	24	27	In October 2010 the delivery capability for Hellfire missiles will be at 540 per month.  Projected Air force, Navy, and Foreign Military Sales (FMS) requirements for Laser HELLFIRE are anticipated to satisfy the minimum sustaining rate.
						1	Reorder	5	3	24	27	
						1	Initial					
						1	Reorder					
						1	Initial					
						1	Reorder					
						1	Initial					
						1	Reorder					



Exhibit P-40, Budget Item Justification Sheet					Date: May 2009	
Appropriation / Budget Activity / Serial No: Missile Procurement, Army / 2 / Other missiles			P-1 Item Nomenclature JAVELIN (AAWS-M) SYSTEM SUMMARY (CC0007)			
Program Elements for Code B Items:		Code:	Other Related Program Elements: CC1000			
	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty	21373	1320	1320	1334		25347
Gross Cost	3212.7	278.5	377.9	289.6		4158.7
Less PY Adv Proc	100.6					100.6
Plus CY Adv Proc	100.6					100.6
Net Proc P1	3212.7	278.5	377.9	289.6		4158.7
Initial Spares	22.6					22.6
Total Proc Cost	3235.3	278.5	377.9	289.6		4181.2
Flyaway U/C	0.1	0.2	0.2	0.1		0.7
Weapon System Proc U/C	0.2	0.2	0.3	0.2		0.9
<p><b>Description:</b>            Javelin provides the US Army and USMC a man-portable, fire-and-forget, medium-range missile with enhanced situational awareness and precision direct-fire effects to defeat armored vehicles, fortifications, and soft targets in full spectrum operations. Javelin has a high kill rate against a variety of targets at extended ranges under day/night, battlefield obscurants, adverse weather and multiple counter-measure conditions. The system's soft launch feature 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 disposable launch tube assembly. The system also includes training devices for tactical training and classroom training. 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 through the use of a tandem warhead which will defeat all known armor threats. It is effective against both stationary and moving targets. This system also provides defensive capability against attacking/hovering helicopters. The performance improvements in current production Javelin Block I CLUs are: increased target identification range, increased surveillance time with new battery and software management of the on time, and external RS-170 interface for video output. The performance improvements in current production Javelin Block I missiles are: increased probability of hit/kill at 2500m, improved warhead lethality, and reduced time of flight. In current conflicts the CLU is being used as a stand-alone surveillance and target acquisition asset. The Army is the lead for this joint program with the USMC.</p> <p><b>Justification:</b>            FY 2010 Base funding in the amount of \$148.649 million procures 470 Rounds.            FY 2010 OCO funding in the amount of \$140.979 million procures 864 Rounds (\$98.9M), 36 CLUs (\$5.6M), and 486 Block I CLU retrofit kits (\$36.5M).</p> <p>In addition to the Rounds and CLUs, the Base funding pays for the training devices, ancilliary equipment and support costs.</p> <p>The Army intends to buy to budget in order to leverage off other procurements for any price advantage created through contract negotiation, other service procurement, and/or foreign military sales (FMS).</p> <p>Procurement quantity above represents the Rounds only, but the dollars include the cost of the Rounds, CLU, and training devices. The Flyaway Unit Cost is derived by dividing the dollars for the</p>						

<b>Exhibit P-40, Budget Item Justification Sheet</b>			Date: May 2009
Appropriation / Budget Activity / Serial No: Missile Procurement, Army / 2 / Other missiles		P-1 Item Nomenclature JAVELIN (AAWS-M) SYSTEM SUMMARY (CC0007)	
Program Elements for Code B Items:	Code:	Other Related Program Elements: CC1000	
Rounds and CLUs by the Rounds quantity. The Weapon System Procurement Unit Cost is derived by dividing the dollars for the Rounds, CLUs, and training devices by the Rounds quantity. Both unit cost calculations exclude the initial spares cost.			

<b>Exhibit P-5, Weapon MSLS Cost Analysis</b>		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: May 2009	
<b>MSLS Cost Elements</b>		ID CD	<b>FY 08</b>			<b>FY 09</b>			<b>FY 10</b>		
			Total Cost \$000	Qty Units	Unit Cost \$000	Total Cost \$000	Qty Units	Unit Cost \$000	Total Cost \$000	Qty Units	Unit Cost \$000
<b>Missile Hardware - Recurring</b>											
All Up Round			146798	1320	111	166816	1320	126	186829	1334	140
Engineering Services			3965			6992			7500		
Engineering Change Orders			147			167			187		
Acceptance Testing			2288			2158			2190		
Fielding			30			29			30		
<b>Subtotal Missile Hardware</b>			<b>153228</b>			<b>176162</b>			<b>196736</b>		
<b>Procurement Support</b>											
Project Management			9580			9952			10253		
Production Engineering			6387			6635			6835		
Publications/Technical Data			60			62			63		
<b>Subtotal Procurement Support</b>			<b>16027</b>			<b>16649</b>			<b>17151</b>		
<b>Command &amp; Launch Hardware</b>											
Command Launch Unit			86685	604	144	130622	920	142	5625	36	156
Engineering Services			3965			6992			7500		
Engineering Change Orders			84			127			5		
Fielding			1271			1683					
CLU Retrofits									36488	486	75
<b>Subtotal C&amp;L Hardware</b>			<b>92005</b>			<b>139424</b>			<b>49618</b>		
<b>Training Devices</b>											
Field Tactical Trainer-Student Station			11695	116	101	36206	365	99	18938	183	103
Basic Skills Trainer			3950	52	76	3571	40	89	4802	53	91
Missile Simulation Round						1700	1128	2			
Fielding			1570			4176			2383		
<b>Subtotal Training Devices</b>			<b>17215</b>			<b>45653</b>			<b>26123</b>		
<b>Gross P-1 End Cost</b>			<b>278475</b>			<b>377888</b>			<b>289628</b>		
Less: Prior Year Adv Proc											
<b>Net P-1 Full Funding Cost</b>											
Plus P-1 CY Adv. Proc.											
Initial Spares											

<b>Exhibit P-5, Weapon MSLS Cost Analysis</b>	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: May 2009		
<b>MSLS Cost Elements</b>	ID	<b>FY 08</b>			<b>FY 09</b>			<b>FY 10</b>		
	CD	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000
<b>Total:</b>		<b>278475</b>			<b>377888</b>			<b>289628</b>		

--	--	--	--	--	--	--	--	--	--	--

## Exhibit P-5a, Budget Procurement History and Planning

Date:  
May 2009

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 \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
<b>All Up Round</b>										
FY 2006	JV/All Up Round Tucson, AZ/Orlando, FL	SS/FP	AMCOM, Redstone Arsenal, AL	Aug 06	Nov 08	199	126	Yes		
FY 2007	JV/All Up Round Tucson, AZ/Orlando, FL	SS/FP	AMCOM, Redstone Arsenal, AL	Jul 07	Apr 09	250	133	Yes		
FY 2008	JV/All Up Round Tucson, AZ/Orlando, FL	SS/FP	AMCOM, Redstone Arsenal, AL	May 08	Mar 11	1320	111	Yes		
FY 2009	JV/All Up Round Tucson, AZ/Orlando, FL	SS/FP	AMCOM, Redstone Arsenal, AL	Aug 09	Jul 11	1320	126	Yes		
FY 2010	JV/All Up Round Tucson, AZ/Orlando, FL	SS/FP	AMCOM, Redstone Arsenal, AL	Jan 10	Dec 11	1334	140	Yes		
<b>Command Launch Unit</b>										
FY 2006	JV/CLU Tucson,AZ/Orlando,FL	SS/FP	AMCOM, Redstone Arsenal, AL	Aug 06	Jul 08	102	133	Yes		
FY 2007	JV/CLU Tucson,AZ/Orlando,FL	SS/FP	AMCOM, Redstone Arsenal, AL	Jul 07	Sep 08	859	123	Yes		
FY 2008	JV/CLU Tucson,AZ/Orlando,FL	SS/FP	AMCOM, Redstone Arsenal, AL	May 08	Mar 10	604	144	Yes		
FY 2009	JV/CLU Tucson,AZ/Orlando,FL	SS/FP	AMCOM, Redstone Arsenal, AL	Aug 09	Jun 11	920	142	Yes		
FY 2010	JV/CLU Tucson,AZ/Orlando,FL	SS/FP	AMCOM, Redstone Arsenal, AL	Jan 10	Jun 12	36	156	Yes		

REMARKS: Joint Venture (JV), Sole Source/Fixed Price (SS/FP), Aviation and Missile Command (AMCOM)  
Unit costs are dependent on the quantity procured at one time.

FY09 base and OCO buys are assumed to be awarded at the same time due to late contract award date. The base quantity is 396 rounds and supplemental quantity is 924 rounds.

The FY10 unit cost is because base and OCO buys are assumed to be awarded at different times in the fiscal year. The awards will be based upon the receipt of the base and OCO funding.

<b>FY 07 / 08 BUDGET PRODUCTION SCHEDULE</b>	P-1 ITEM NOMENCLATURE JAVELIN (AAWS-M) SYSTEM SUMMARY (CC0007)	Date: May 2009
--	---	-------------------

COST ELEMENTS						Fiscal Year 07														Fiscal Year 08														Later
M F R	FY	S E R V	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Calendar Year 07														Calendar Year 08														
						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 Round																													
1	FY 06	A	199	0	199																								199
1	FY 07	A	250	0	250									A															250
1	FY 07	FMS	160	0	160									A															160
1	FY 08	A	1320	0	1320																					A			1320
1	FY 08	FMS	828	0	828																					A			828
1	FY 08	MC	75	0	75																						A		75
1	FY 09	A	1320	0	1320																								1320
1	FY 09	MC	265	0	265																								265
1	FY 10	A	1334	0	1334																								1334

Command Launch Unit																														
2	FY 06	A	102	0	102																						39	63		0
2	FY 07	A	859	0	859									A															66	793
2	FY 07	MC	38	0	38									A																38
2	FY 08	A	604	0	604																					A				604
2	FY 08	FMS	112	0	112																					A				112
						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			Reached D+	MFR	ADMIN LEAD 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, Tucson, AZ/Orlando, FL	110	540	670		1	Initial	11	3	22	25	Total line sums the Rounds and CLUs resulting in a meaningless value.  FY09 OCO funds for the Army or USMC have not been received but acquisition is planned.
							Reorder	1	1	22	23	
2	JV/CLU, Tucson,AZ/Orlando,FL	10	70	80		2	Initial	11	3	21	24	
							Reorder	1	1	21	22	
							Initial					
							Reorder					
							Initial					
							Reorder					

<b>FY 07 / 08 BUDGET PRODUCTION SCHEDULE</b>	P-1 ITEM NOMENCLATURE JAVELIN (AAWS-M) SYSTEM SUMMARY (CC0007)	Date: May 2009
--	---	----------------

<b>COST ELEMENTS</b>						<b>Fiscal Year 07</b>													<b>Fiscal Year 08</b>													Later			
M F R	FY	S E R V	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	<b>Calendar Year 07</b>													<b>Calendar Year 08</b>																
						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						
2	FY 09	A	920	0	920																													920	
2	FY 10	A	36	0	36																													36	
Total					8422																											39	63	66	8254
						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			Reached D+	MFR	ADMIN LEAD 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, Tucson, AZ/Orlando, FL	110	540	670		1	Initial	11	3	22	25	Total line sums the Rounds and CLUs resulting in a meaningless value.  FY09 OCO funds for the Army or USMC have not been received but acquisition is planned.
						2	Reorder	1	1	22	23	
2	JV/CLU, Tucson,AZ/Orlando,FL	10	70	80		2	Initial	11	3	21	24	
							Reorder	1	1	21	22	
							Initial					
							Reorder					
							Initial					
							Reorder					

<b>FY 09 / 10 BUDGET PRODUCTION SCHEDULE</b>	P-1 ITEM NOMENCLATURE JAVELIN (AAWS-M) SYSTEM SUMMARY (CC0007)	Date: May 2009
--	---	----------------

COST ELEMENTS						Fiscal Year 09														Fiscal Year 10														Later	
M F R	FY	S E R V	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Calendar Year 09														Calendar Year 10															
						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 Round																																			
1	FY 06	A	199	0	199			110	89																				0						
1	FY 07	A	250	0	250							110	110	30															0						
1	FY 07	FMS	160	0	160									160															0						
1	FY 08	A	1320	0	1320																								1320						
1	FY 08	FMS	828	0	828																						125	125	120	115	115	228			
1	FY 08	MC	75	0	75																									75					
1	FY 09	A	1320	0	1320																									1320					
1	FY 09	MC	265	0	265																									265					
1	FY 10	A	1334	0	1334																									1334					
Command Launch Unit																																			
2	FY 06	A	102	102																										0					
2	FY 07	A	859	66	793	75	77	70	70	72	72	72	72	72	71	70														0					
2	FY 07	MC	38	0	38																									0					
2	FY 08	A	604	0	604																							60	60	60	60	60	60	60	184
2	FY 08	FMS	112	0	112																										112				
						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			Reached D+	MFR	ADMIN LEAD 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, Tucson, AZ/Orlando, FL	110	540	670		1	Initial	11	3	22	25	Total line sums the Rounds and CLUs resulting in a meaningless value.  FY09 OCO funds for the Army or USMC have not been received but acquisition is planned.
							Reorder	1	1	22	23	
2	JV/CLU, Tucson,AZ/Orlando,FL	10	70	80		2	Initial	11	3	21	24	
							Reorder	1	1	21	22	
							Initial					
							Reorder					
							Initial					
							Reorder					



**FY 09 / 10 BUDGET PRODUCTION SCHEDULE**

P-1 ITEM NOMENCLATURE  
JAVELIN (AAWS-M) SYSTEM SUMMARY (CC0007)

Date: May 2009

COST ELEMENTS						Fiscal Year 09														Fiscal Year 10														Later			
M F R	FY	S E R V	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Calendar Year 09														Calendar Year 10																	
						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								
2	FY 09	A	920	0	920											A																				920	
2	FY 10	A	36	0	36																						A										36
Total					8254	75	187	159	70	72	72	182	182	262	71	70		38											60	60	185	185	180	175	175	5794	
						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			Reached D+	MFR	ADMIN LEAD 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, Tucson, AZ/Orlando, FL	110	540	670		1	Initial	11	3	22	25	Total line sums the Rounds and CLUs resulting in a meaningless value.  FY09 OCO funds for the Army or USMC have not been received but acquisition is planned.
							Reorder	1	1	22	23	
2	JV/CLU, Tucson,AZ/Orlando,FL	10	70	80		2	Initial	11	3	21	24	
							Reorder	1	1	21	22	
							Initial					
							Reorder					
							Initial					
							Reorder					

<b>FY 11 / 12 BUDGET PRODUCTION SCHEDULE</b>	P-1 ITEM NOMENCLATURE JAVELIN (AAWS-M) SYSTEM SUMMARY (CC0007)	Date: May 2009
--	---	-------------------

COST ELEMENTS					Fiscal Year 11													Fiscal Year 12													Later	
M F R	FY	S E R V	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Calendar Year 11													Calendar Year 12													
						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 Round																																
1	FY 06	A	199	199																									0			
1	FY 07	A	250	250																									0			
1	FY 07	FMS	160	160																									0			
1	FY 08	A	1320	0	1320						110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	0			
1	FY 08	FMS	828	600	228	115	113																						0			
1	FY 08	MC	75	0	75							75																	0			
1	FY 09	A	1320	0	1320								110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	0			
1	FY 09	MC	265	0	265								22	22	22	22	22	22	22	22	22	22	22	22	22	22	23		0			
1	FY 10	A	1334	0	1334																	111	111	111	111	111	111	111	111	224		
Command Launch Unit																																
2	FY 06	A	102	102																									0			
2	FY 07	A	859	859																									0			
2	FY 07	MC	38	38																									0			
2	FY 08	A	604	420	184	60	12		60	52																			0			
2	FY 08	FMS	112	0	112		48	64																					0			
						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			Reached D+	MFR	ADMIN LEAD 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, Tucson, AZ/Orlando, FL	110	540	670		1	Initial	11	3	22	25	Total line sums the Rounds and CLUs resulting in a meaningless value.  FY09 OCO funds for the Army or USMC have not been received but acquisition is planned.
						1	Reorder	1	1	22	23	
2	JV/CLU, Tucson,AZ/Orlando,FL	10	70	80		2	Initial	11	3	21	24	
						2	Reorder	1	1	21	22	
							Initial					
							Reorder					
							Initial					
							Reorder					

**FY 11 / 12 BUDGET PRODUCTION SCHEDULE**

P-1 ITEM NOMENCLATURE  
JAVELIN (AAWS-M) SYSTEM SUMMARY (CC0007)

Date: May 2009

COST ELEMENTS						Fiscal Year 11													Fiscal Year 12													Later	
MFR	FY	SERV	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	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				
2	FY 09	A	920	0	920									77	77	77	77	77	77	77	77	76	76	76	76							0	
2	FY 10	A	36	0	36																										36		0
Total						5794	175	173	64	60	52	110	110	185	187	319	319	319	319	319	430	430	429	319	319	319	280	111	111	111	224		
						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	ADMIN LEAD 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, Tucson, AZ/Orlando, FL	110	540	670		1	Initial	11	3	22	25	Total line sums the Rounds and CLUs resulting in a meaningless value.  FY09 OCO funds for the Army or USMC have not been received but acquisition is planned.
						Reorder	1	1	22	23		
2	JV/CLU, Tucson,AZ/Orlando,FL	10	70	80		2	Initial	11	3	21	24	
						Reorder	1	1	21	22		
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					

<b>FY 13 / 14 BUDGET PRODUCTION SCHEDULE</b>	P-1 ITEM NOMENCLATURE JAVELIN (AAWS-M) SYSTEM SUMMARY (CC0007)	Date: May 2009
--	---	-------------------

COST ELEMENTS					Fiscal Year 13													Fiscal Year 14													Later			
M F R	FY	S E R V	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Calendar Year 13													Calendar Year 14															
						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 Round																																		
1	FY 06	A	199	199																														0
1	FY 07	A	250	250																														0
1	FY 07	FMS	160	160																														0
1	FY 08	A	1320	1320																														0
1	FY 08	FMS	828	828																														0
1	FY 08	MC	75	75																														0
1	FY 09	A	1320	1320																														0
1	FY 09	MC	265	265																														0
1	FY 10	A	1334	1110	224	112	112																											0
Command Launch Unit																																		
2	FY 06	A	102	102																														0
2	FY 07	A	859	859																														0
2	FY 07	MC	38	38																														0
2	FY 08	A	604	604																														0
2	FY 08	FMS	112	112																														0
						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			Reached D+	MFR	ADMIN LEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS Total line sums the Rounds and CLUs resulting in a meaningless value.
		MIN	1-8-5	MAX			Prior 1 Oct	After 1 Oct			
1	JV/All Up Round, Tucson, AZ/Orlando, FL	110	540	670	1	Initial	11	3	22	25	
						Reorder	1	1	22	23	
2	JV/CLU, Tucson,AZ/Orlando,FL	10	70	80	2	Initial	11	3	21	24	
						Reorder	1	1	21	22	
						Initial					
						Reorder					
						Initial					
						Reorder					
						Initial					
						Reorder					

**FY 13 / 14 BUDGET PRODUCTION SCHEDULE**

P-1 ITEM NOMENCLATURE  
JAVELIN (AAWS-M) SYSTEM SUMMARY (CC0007)

Date: May 2009

COST ELEMENTS						Fiscal Year 13												Fiscal Year 14												Later
M F R	FY	S E R V	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Calendar Year 13												Calendar Year 14												
						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	
2	FY 09	A	920	920																										0
2	FY 10	A	36	36																										0
Total					224	112	112																							
						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			Reached D+	MFR	ADMIN LEAD 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, Tucson, AZ/Orlando, FL	110	540	670		1	11	3	22	25	Total line sums the Rounds and CLUs resulting in a meaningless value.
							1	1	22	23	
2	JV/CLU, Tucson,AZ/Orlando,FL	10	70	80		2	11	3	21	24	
							1	1	21	22	

<b>Exhibit P-40, Budget Item Justification Sheet</b>						Date: May 2009	
Appropriation / Budget Activity / Serial No: Missile Procurement, Army / 2 / Other missiles				P-1 Item Nomenclature TOW 2 SYSTEM SUMMARY (C59300)			
Program Elements for Code B Items:			Code:	Other Related Program Elements: Adv Proc C59300			
	Prior Years		FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty	153337		2255	8400	2459		166451
Gross Cost	2245.6		108.0	436.4	167.3		2957.3
Less PY Adv Proc	140.4		22.7	10.0			173.1
Plus CY Adv Proc	228.3						228.3
Net Proc P1	2333.5		85.3	426.4	167.3		3012.5
Initial Spares							
Total Proc Cost	2333.5		85.3	426.4	167.3		3012.5
Flyaway U/C							
Weapon System Proc U/C	0.0		0.0	0.1	0.1		0.2
<b>Description:</b> TOW missiles (BGM-71 Series) are combat proven missiles that provide heavy anti-armor/assault capability to the Army's Infantry Brigade Combat Teams (IBCT), the Stryker Brigade Combat Teams (SBCT), and the Bradley equipped Heavy Brigade Combat Team (HBCT). TOW continues to be used consistently in Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF) as the weapon of choice in precision combat engagements. TOW missiles are the primary heavy anti-armor / assault missile for the U.S. Marine Corps (USMC) and 43 allied nations. Warfighters employ TOW missiles against buildings and field fortifications taking advantage of the missile's inherent precise assault capability against such targets. The TOW missiles are 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 Anti-Tank Guided Missile (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 missile provides the warfighter with a highly lethal, cost effective, interoperable, multi-purpose weapon.							
<b>Justification:</b> FY10 Base funding in the amount of \$108.066 provides 1165 missiles. FY10 OCO funding in the amount of \$59.200 provides 1294 missiles.  The Army intends to convert any price advantage created through contract negotiation, other service procurement, and/or foreign military sales into a buy-to-budget procurement strategy.							

<b>Exhibit P-40, Budget Item Justification Sheet</b>						Date: May 2009	
Appropriation / Budget Activity / Serial No: Missile Procurement, Army / 2 / Other missiles				P-1 Item Nomenclature TOW Family of Missiles (C59403)			
Program Elements for Code B Items:		Code:		Other Related Program Elements:			
	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog	
Proc Qty	154286	2255	8400	2459		167400	
Gross Cost	2290.6	108.0	436.4	167.3		3002.3	
Less PY Adv Proc	159.3	22.7	10.0			192.0	
Plus CY Adv Proc	261.0					261.0	
Net Proc P1	2392.3	85.3	426.4	167.3		3071.3	
Initial Spares							
Total Proc Cost	2392.3	85.3	426.4	167.3		3071.3	
Flyaway U/C							
Weapon System Proc U/C	0.0	0.0	0.1	0.1		0.2	
<b>Description:</b>							
<p>TOW missiles (BGM-71 Series) are combat proven missiles that provide heavy anti-armor/assault capability to the Army's Infantry Brigade Combat Teams (IBCT), the Stryker Brigade Combat Teams (SBCT), and the Bradley equipped Heavy Brigade Combat Team (HBCT). TOW continues to be used consistently in Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF) as the weapon of choice in precision combat engagements. TOW missiles are the primary heavy anti-armor / assault missile for the U.S. Marine Corps (USMC) and 43 allied nations. Warfighters employ TOW missiles against buildings and field fortifications taking advantage of the missile's inherent precise assault capability against such targets. The TOW missiles are 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 Anti-Tank Guided Missile (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 missile provides the warfighter with a highly lethal, cost effective, interoperable, multi-purpose weapon.</p>							
<b>Justification:</b>							
<p>FY10 Base funding in the amount of \$108.066 provides 1165 missiles.  FY10 OCO funding in the amount of \$59.200 provides 1294 missiles.</p> <p>The Army intends to convert any price advantage created through contract negotiation, other service procurement, and/or foreign military sales into a buy-to-budget procurement strategy.</p>							

<b>Exhibit P-5, Weapon MSLS Cost Analysis</b>		Appropriation/Budget Activity/Serial No: Missile Procurement, Army / 2 / Other missiles		P-1 Line Item Nomenclature: TOW Family of Missiles (C59403)			Weapon System Type:		Date: May 2009		
<b>MSLS Cost Elements</b>		ID	<b>FY 08</b>			<b>FY 09</b>			<b>FY 10</b>		
		CD	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
			\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000
<b>Missile Non-Recurring</b>											
Missile Contract									9939		
<b>Missile Hardware - Recurring</b>											
Missile Contract			95648	2255	42	398177	8400	47	148013	2459	60
Engineering Services			4498			24447			4906		
Acceptance Testing			611			2373			891		
<b>Subtotal Missile Hardware</b>			<b>100757</b>			<b>424997</b>			<b>163749</b>		
<b>Engineering Support</b>											
Project Mgt Admin			7242			11448			3517		
<b>Subtotal Engineering Support</b>			<b>7242</b>			<b>11448</b>			<b>3517</b>		
<b>Total Flyaway</b>			<b>107999</b>			<b>436445</b>			<b>167266</b>		
Gross P-1 End Cost											
Less: Prior Year Adv Proc			22700			10000					
Net P-1 Full Funding Cost											
PLUS P-1 CY Adv. Proc.											
<b>Total:</b>			<b>85299</b>			<b>426445</b>			<b>167266</b>		



## Exhibit P-5a, Budget Procurement History and Planning

Date:  
May 2009

Appropriation/Budget Activity/Serial No: Missile Procurement, Army/ 2/ Other missiles			Weapon System Type:		P-1 Line Item Nomenclature: TOW Family of Missiles (C59403)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Units	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
<b>Missile Contract</b>										
FY 2007	Raytheon Tucson, AZ	MY2/FFP	AMCOM, Redstone Arsenal, AL	Oct 06	Oct 08	949	44	Yes		
FY 2008	Raytheon Tucson, AZ	MY2/FFP	AMCOM, Redstone Arsenal, AL	Nov 07	May 09	2255	42	Yes		
FY 2009	Raytheon Tucson, AZ	MY2/FFP	AMCOM, Redstone Arsenal, AL	Nov 08	Sep 09	8400	47	Yes		
FY 2010	Raytheon Tucson, AZ	FFP	AMCOM, Redstone Arsenal, AL	Nov 09	Nov 11	2459	60	Yes		

REMARKS: Raytheon is currently the only industry source that is both facilitized and qualified to produce TOW missiles.

The FY10 Unit Cost increased over the FY09 Unit Cost for two reasons. First, the quantities are procured under a single year (SY) option to the existing Multiyear contract and did not receive price-quantity breaks. Second, there are no Foreign Military Sales (FMS) to help reduce the unit cost.

The base and OCO buys are assumed to be awarded at different times in the fiscal year. The contract awards will be based upon receipt of the base and OCO funding.

AMCOM Aviation Missile Command,  
 FFP Firm Fixed Price,  
 FMS Foreign Military Sales,  
 MY Multi-Year,  
 MSR Minimum Sustainment Rate,  
 SY Single-Year

**FY 08 / 09 BUDGET PRODUCTION SCHEDULE**

P-1 ITEM NOMENCLATURE  
TOW Family of Missiles (C59403)

Date: May 2009

COST ELEMENTS						Fiscal Year 08												Fiscal Year 09												Later							
M F R	FY	S E R V	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Calendar Year 08												Calendar Year 09																			
						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 07	A	949	0	949													418		531																	0
1	FY 07	FMS	462	0	462																															462	
1	FY 07	MC	1600	0	1600													18	50	100	200	225	350	400	257									0			
1	FY 08	A	2255	0	2255			A																	243	600	600	600	600	212				0			
1	FY 08	FMS	9166	0	9166			A												214														8952			
1	FY 08	MC	32	0	32			A																										32			
1	FY 09	A	8400	0	8400															A								A							388	8012	
1	FY 09	FMS	2017	0	2017																														2017		
1	FY 09	MC	1200	0	1200																														1200		
1	FY 10	A	2459	0	2459																														2459		
Total					28540													436	264	631	200	225	350	400	500	600	600	600	600	600	600	600	23134				

M F R	Name - Location	PRODUCTION RATES			Reached D+	MFR	ADMIN LEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS		
		MIN	1-8-5	MAX			1	Initial				Prior 1 Oct	After 1 Oct
1	Raytheon, Tucson, AZ	175	350	850	1	1	Initial	2	3	15	18	The FY06-09 Multiyear contract does not follow the Administrative Lead Time and MFR shown for annual year contracts.  FY05 Army: 2256; MC: 1379. FY06 Army: 1353. FY07 Army: 949; USMC 1600; Canada: 462. FY08: Army: 2255; USMC 32; Canada: 1766; Pakistan: 3198; Korea 214; Egypt 2028; Kuwait 1960. FY09 Army: 8400 (Base: 1586, Supl: 6814); Egypt 2014; Spain 3; USMC: 1200 (estimated - USMC Supl Request not confirmed at this time). FY10 Army: 2459 (Base: 1165, Supl: 1294).	
							Reorder	3	2	15	17		
							Initial						
							Reorder						
							Initial						
							Reorder						
							Initial						
							Reorder						

FY 10 / 11 BUDGET PRODUCTION SCHEDULE															P-1 ITEM NOMENCLATURE TOW Family of Missiles (C59403)							Date: May 2009									
COST ELEMENTS							Fiscal Year 10												Fiscal Year 11							Later					
M F R	FY	S E R V	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	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	
1	FY 07	A	949	949																											0
1	FY 07	FMS	462	0	462				462																						0
1	FY 07	MC	1600	1600																											0
1	FY 08	A	2255	2255																											0
1	FY 08	FMS	9166	214	8952	447	550	550	138	645	645	545	545	645	554	700	700	700	700											186	702
1	FY 08	MC	32	0	32	32																									0
1	FY 09	A	8400	388	8012	177	150	150	100	55	55	155	155	55	146					700	700	700	700	700	700	700	700	700	700	514	0
1	FY 09	FMS	2017	0	2017																										2017
1	FY 09	MC	1200	0	1200															120	120	120	120	120	120	120	120	120	120	120	0
1	FY 10	A	2459	0	2459		A							A																2459	
Total					23134	656	700	700	700	700	700	700	700	700	700	700	700	700	820	820	820	820	820	820	820	820	820	820	820	5178	
						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			Reached D+	MFR	ADMIN LEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS	
		MIN	1-8-5	MAX			Prior 1 Oct	After 1 Oct				
												1
1	Raytheon, Tucson, AZ	175	350	850	1	1	Initial	2	3	15	18	The FY06-09 Multiyear contract does not follow the Administrative Lead Time and MFR shown for annual year contracts.  FY05 Army: 2256; MC: 1379. FY06 Army: 1353. FY07 Army: 949; USMC 1600; Canada: 462. FY08: Army: 2255; USMC 32; Canada: 1766; Pakistan: 3198; Korea 214; Egypt 2028; Kuwait 1960. FY09 Army: 8400 (Base: 1586, Supl: 6814); Egypt 2014; Spain 3; USMC: 1200 (estimated - USMC Supl Request not confirmed at this time). FY10 Army: 2459 (Base: 1165, Supl: 1294).
							Reorder	3	2	15	17	
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					

**FY 12 / 13 BUDGET PRODUCTION SCHEDULE**

P-1 ITEM NOMENCLATURE  
TOW Family of Missiles (C59403)

Date: May 2009

**COST ELEMENTS**

**Fiscal Year 12**

**Fiscal Year 13**

M F R	FY	S E R V	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Calendar Year 12																Calendar Year 13						Later											
						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 07	A	949	949																																		0	
1	FY 07	FMS	462	462																																		0	
1	FY 07	MC	1600	1600																																		0	
1	FY 08	A	2255	2255																																		0	
1	FY 08	FMS	9166	8464	702	700	2																															0	
1	FY 08	MC	32	32																																		0	
1	FY 09	A	8400	8400																																		0	
1	FY 09	FMS	2017	0	2017		290	290	290	290	290	289	278																									0	
1	FY 09	MC	1200	1200																																		0	
1	FY 10	A	2459	0	2459		408	410	410	410	410	411																										0	
Total					5178	700	700	700	700	700	700	278																											
						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			Reached D+	MFR	1	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	175	350	850	1		Initial	2	3	15	18	The FY06-09 Multiyear contract does not follow the Administrative Lead Time and MFR shown for annual year contracts.
							Reorder	3	2	15	17	FY05 Army: 2256; MC: 1379.
							Initial					FY06 Army: 1353.
							Reorder					FY07 Army: 949; USMC 1600; Canada: 462.
							Initial					FY08: Army: 2255; USMC 32; Canada: 1766;
							Reorder					Pakistan: 3198; Korea 214; Egypt 2028; Kuwait 1960.
							Initial					FY09 Army: 8400 (Base: 1586, Supl: 6814);
							Reorder					Egypt 2014; Spain 3; USMC: 1200 (estimated -
							Initial					USMC Supl Request not confirmed at this time).
							Reorder					FY10 Army: 2459 (Base: 1165, Supl: 1294).

<b>Exhibit P-40, Budget Item Justification Sheet</b>						Date: May 2009
Appropriation / Budget Activity / Serial No: Missile Procurement, Army / 2 / Other missiles				P-1 Item Nomenclature Guided MLRS Rocket (GMLRS) (C64400)		
Program Elements for Code B Items:		Code:	Other Related Program Elements: C65404, C65406, PE 0603778A, Projects 784/789			
	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty	4368	2070	2652	3306	31164	43560
Gross Cost	597.5	263.7	309.2	354.2	3645.9	5170.5
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	597.5	263.7	309.2	354.2	3645.9	5170.5
Initial Spares						
Total Proc Cost	597.5	263.7	309.2	354.2	3645.9	5170.5
Flyaway U/C						
Weapon System Proc U/C	0.1	0.1	0.1	0.1	0.1	0.6
<b>Description:</b> Guided Multiple Launch Rocket Systems (GMLRS) munitions are the Army's primary organic Joint Expeditionary, all-weather, all-terrain, 24/7, tactical range precision guided rockets employed by modular Fires Brigades supporting Brigade Combat Teams (BCT), Joint Special Operations Force (JSOF) and Joint Force combatant commanders. GMLRS are the primary munitions for units fielded with the High Mobility Artillery Rocket System (HIMARS) and Multiple Launch Rocket System (MLRS) M270A1 rocket and missile launcher platforms. GMLRS provides close, medium and long range pin point precision and area fires to destroy, suppress and shape threat forces and protect friendly forces against: cannon, mortar, rocket and missile artillery; light materiel and armor; personnel; command and control; and air defense surface targets. GMLRS is a major upgrade/replacement for the aging M26A1/A2 rocket inventory that integrates a guidance and control package and an improved rocket motor achieving greater range and precision accuracy requiring fewer rockets to defeat targets than current artillery rockets, thereby reducing the logistics burden. There are two variants of GMLRS; GMLRS with Dual Purpose Improved Conventional Munitions (DPICM) and GMLRS with a 200-pound class high explosive warhead (Unitary). The GMLRS DPICM is a five nation cooperative program among France, Germany, Italy, United Kingdom and the United States. The GMLRS Unitary is a modification to the GMLRS DPICM integrating a multi-mode fuze and high explosive (HE) insensitive munition (IM) designed warhead making it an all-weather, low collateral damage, precision rocket. This expands the MLRS target set into urban and complex environments, adds point targets, and supports Troops in Contact (TIC). Operational requirements may dictate a change in the actual quantity mix (Unitary/DPICM) of munitions proposed in this exhibit. The alternative warhead will replace the DPICM with similar lethal capability that reduces unexploded ordnance and increases warhead Insensitive Munitions (IM) compliance. To meet Central Command (CENTCOM) Operational Need Statements (ONS), two quantities (486/972) of limited capability GMLRS Unitary rockets were accelerated and fielded in Iraq between June 2005 and December 2007. In the more than 1200 missions flown in Operation Iraqi Freedom/Operation Enduring Freedom (OIF/OEF), the GMLRS Unitary Rocket has demonstrated high effectiveness and low collateral damage while supporting Troops in Contact (TIC). The system includes training devices for tactical training, classroom training and handling exercises. GMLRS is also a key component of the Marine Corps Future Fighting Effort. GMLRS Rockets are manufactured in Camden, Arkansas.						
<b>Justification:</b> FY 2010 procures 3306 GMLRS Unitary rockets. FY10 Base Procurement Dollars in the amount of \$293.617 million procures 2,628 Rockets and the Overseas Contingency Operations (OCO) funding in the amount of \$60.600 million procures 678 Rockets. The OCO Supplemental Rockets are required to replace expenditures in OIF/OEF and maintain the required stockpile. The Army Procurement Objective is 43,560 Rockets.						

<b>Exhibit P-5, Weapon MSLS Cost Analysis</b>		Appropriation/Budget Activity/Serial No: Missile Procurement, Army / 2 / Other missiles			P-1 Line Item Nomenclature: Guided MLRS Rocket (GMLRS) (C64400)			Weapon System Type:		Date: May 2009	
<b>MSLS Cost Elements</b>		ID CD	<b>FY 08</b>			<b>FY 09</b>			<b>FY 10</b>		
			Total Cost \$000	Qty Units	Unit Cost \$000	Total Cost \$000	Qty Units	Unit Cost \$000	Total Cost \$000	Qty Units	Unit Cost \$000
<b>Missile Hardware Recurring</b>											
GMLRS Rockets (DPICM) (C65404)			29972	306	98						
GMLRS Rockets (Unitary) (C65404)			186141	1764	106	260115	2652	98	322670	3306	98
Engineering Services			6214			11363			7104		
Ind Maint/Init Prod Fac			16901			9064					
Interim Contractor Support			42								
Fielding			615			788			642		
<b>Subtotal Hardware</b>			<b>239885</b>			<b>281330</b>			<b>330416</b>		
<b>Procurement Support</b>											
Project Management Admin			4715			5471			4853		
Production Engineering Support			15073			16437			12836		
Government Test			3674			5605			5704		
<b>Subtotal Procurement Support</b>			<b>23462</b>			<b>27513</b>			<b>23393</b>		
<b>Total Missile Flyaway</b>			<b>263347</b>			<b>308843</b>			<b>353809</b>		
<b>Support Costs</b>											
GMLRS Training Devices (C65406)			365			362			408		
Msl Test Device and Trainer											
<b>Subtotal Support Costs</b>			<b>365</b>			<b>362</b>			<b>408</b>		
Spares rockets.											
<b>Total:</b>			<b>263712</b>			<b>309205</b>			<b>354217</b>		

## Exhibit P-5a, Budget Procurement History and Planning

Date:  
May 2009

Appropriation/Budget Activity/Serial No: Missile Procurement, Army/ 2/ Other missiles		Weapon System Type:		P-1 Line Item Nomenclature: Guided MLRS Rocket (GMLRS) (C64400)						
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Units	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
<b>GMLRS Rockets (DPICM) (C65404)</b> FY 2008	Lockheed Martin Dallas, Texas	SS/FFP*	AMCOM, RSA, AL**	Dec 07	May 09	306	98	Yes		May-07
<b>GMLRS Rockets (Unitary) (C65404)</b> FY 2008	Lockheed Martin Dallas, Texas	SS/FFP	AMCOM, RSA, AL	Dec 07	May 09	1764	106	Yes		May-07
FY 2009	Lockheed Martin Dallas, Texas	SS/FFP	AMCOM, RSA, AL	Dec 08	Feb 10	2652	98	Yes		May-08
FY 2010	Lockheed Martin Dallas, Texas	SS/FFP	AMCOM, RSA, AL	Dec 09	Feb 11	3306	98	Yes		May-09

REMARKS: Lockheed Martin is currently the industry source that is both facilitized and qualified to produce the Guided Multiple Launch Rocket System (GMLRS) rocket.

\* Sole Source/Firm Fixed Price

\*\* Aviation and Missile Command, Redstone Arsenal, Alabama

**FY 08 / 09 BUDGET PRODUCTION SCHEDULE**

P-1 ITEM NOMENCLATURE  
Guided MLRS Rocket (GMLRS) (C64400)

Date: May 2009

COST ELEMENTS						Fiscal Year 08														Fiscal Year 09														Later																	
MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	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																						
GMLRS Rockets (DPICM/Unitary)																																																			
1	FY 07	A	925	0	925													175	175								31	175	164	31	174								0												
1	FY 08	A	1482	0	1482				A																										216	90					180	996									
1	FY 09	A	1938	0	1938																						A															1938									
1	FY 10	A	2628	0	2628																																					2628									
1	FY 07	MC	1284	0	1284											175	181	18	18	193	193	199	91	24	36	156																0									
1	FY 09	MC	462	0	462																						A																462								
1	FY 10	MC	1518	0	1518																																						1518								
Germany																																																			
1	FY 08	OTH	78	0	78				A																													12							66				0		
1	FY 09	OTH	210	138	72																							A																				72			
1	FY 10	OTH	210	0	210																																												210		
Italy																																																			
United Kingdom																																																			
1	FY 08	OTH	402	0	402																																												402		
1	FY 09	OTH	1308	0	1308																								A																						1308

MFR	Name - Location	PRODUCTION RATES			Reached D+	MFR	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, Dallas, Texas	42	250	500	12	1	Initial	8	2	14	16	REMARKS MC= Marine Corps Facilitization of the Contractor production line, to increase capacity to meet all future Rocket quantity requirements, began in FY08.
							Reorder	0	2	14	16	
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					





**FY 08 / 09 BUDGET PRODUCTION SCHEDULE**

P-1 ITEM NOMENCLATURE  
Guided MLRS Rocket (GMLRS) (C64400)

Date: May 2009

COST ELEMENTS						Fiscal Year 08											Fiscal Year 09											Later				
MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	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		
Japan																																
1	FY 09	FMS	180	0	180																									180		
Total															175	181	193	193	193	193	199	122	211	200	187	174	216	216	198	216	270	13434
						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	ADMIN LEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS	
		MIN	1-8-5	MAX			1	Initial				After 1 Oct
1	Lockheed Martin, Dallas, Texas	42	250	500	12	1	Initial	8	2	14	16	REMARKS MC= Marine Corps Facilitization of the Contractor production line, to increase capacity to meet all future Rocket quantity requirements, began in FY08.
							Reorder	0	2	14	16	
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					

<b>FY 10 / 11 BUDGET PRODUCTION SCHEDULE</b>	P-1 ITEM NOMENCLATURE Guided MLRS Rocket (GMLRS) (C64400)	Date: May 2009
--	--	-------------------

COST ELEMENTS						Fiscal Year 10											Fiscal Year 11											Later
M F R	FY	S E R V	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	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	

GMLRS Rockets (DPICM/Unitary)																															
1	FY 07	A	925	925																									0		
1	FY 08	A	1482	486	996	222	114	192	216	210	42																		0		
1	FY 09	A	1938	0	1938					212	192	192	56	34	64	336	204	162	162	162	162								0		
1	FY 10	A	2628	0	2628			A															157	401	269	57	108	96	104	236	1200
1	FY 07	MC	1284	1284																									0		
1	FY 09	MC	462	0	462					36	36	36	36	36	36	36	42	42	42	42	42									0	
1	FY 10	MC	1518	0	1518			A															280	36	168	126	66	79	71	174	518

Germany																														
1	FY 08	OTH	78	78																										0
1	FY 09	OTH	210	138	72								36	36																0
1	FY 10	OTH	210	0	210			A											108	102										0

Italy

United Kingdom																														
1	FY 08	OTH	402	0	402						180	222																		0
1	FY 09	OTH	1308	0	1308									324	346	346	72	116	104											0

						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			Reached D+	MFR	ADMIN LEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS MC= Marine Corps Facilitization of the Contractor production line, to increase capacity to meet all future Rocket quantity requirements, begins in FY08.
		MIN	1-8-5	MAX			Prior 1 Oct	After 1 Oct			
1	Lockheed Martin, Dallas, Texas	42	250	500	12	1	8	2	14	16	
							0	2	14	16	

FY 10 / 11 BUDGET PRODUCTION SCHEDULE										P-1 ITEM NOMENCLATURE Guided MLRS Rocket (GMLRS) (C64400)										Date: May 2009																	
COST ELEMENTS					Fiscal Year 10										Fiscal Year 11										Later												
MFR	FY	S E R V	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	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							
1	FY 10	OTH	1008	0	1008			A																					248	254	253	253					0
France																																					
1	FY 10	OTH	12	0	12			A																													0
United Arab Emirates																																					
1	FY 08	FMS	516	516																																0	
1	FY 09	FMS	516	0	516												82	132	216	86																0	
Singapore																																					
1	FY 08	FMS	108	0	108			108																												0	
1	FY 10	FMS	108	0	108			A																												108	
GMLRS RDTE OT Rockets																																					
Bahrain																																					
1	FY 10	FMS	36	0	36			A																											36	0	
GMLRS Supplemental Rockets																																					
1	FY 08	A	588	48	540	48	48	48	54	42	48	48	48	48	54	54																				0	
1	FY 09	A	714	0	714												54	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	0		
1	FY 10	A	678	0	678										A																				54	624	
						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 D+	MFR	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, Dallas, Texas	42	250	500	12	1	8	2	14	16	MC= Marine Corps Facilitization of the Contractor production line, to increase capacity to meet all future Rocket quantity requirements, begins in FY08.
							0	2	14	16	

<b>FY 10 / 11 BUDGET PRODUCTION SCHEDULE</b>	P-1 ITEM NOMENCLATURE Guided MLRS Rocket (GMLRS) (C64400)	Date: May 2009
--	--	-------------------

COST ELEMENTS					Fiscal Year 10													Fiscal Year 11													Later	
M F R	FY	S E R V	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	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			

Japan																																																											
1	FY 09	FMS	180	0	180																																	46	134																				0
Total																																																											
					13434	270	162	348	270	500	498	498	500	500	500	498	498	500	480	504	500	500	500	500	500	500	500	500	494	488	488	488	500	2450																									
					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			Reached D+	MFR	ADMIN LEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS		
		MIN	1-8-5	MAX			1	Initial				Prior 1 Oct	
												8	2
										MC= Marine Corps Facilitization of the Contractor production line, to increase capacity to meet all future Rocket quantity requirements, begins in FY08.			
1	Lockheed Martin, Dallas, Texas	42	250	500	12		8	2	14		16		
							0	2	14		16		

<b>FY 12 / 13 BUDGET PRODUCTION SCHEDULE</b>													P-1 ITEM NOMENCLATURE Guided MLRS Rocket (GMLRS) (C64400)										Date: May 2009		
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	-------------------	--	--

COST ELEMENTS					Fiscal Year 12															Fiscal Year 13															Later	
MFR	FY	S E R V	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Calendar Year 12															Calendar Year 13															
						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							

GMLRS Rockets (DPICM/Unitary)																																	
1	FY 07	A	925	925																													0
1	FY 08	A	1482	1482																													0
1	FY 09	A	1938	1938																													0
1	FY 10	A	2628	1428	1200	366	276	270	288																								0
1	FY 07	MC	1284	1284																													0
1	FY 09	MC	462	462																													0
1	FY 10	MC	1518	1000	518	134	126	126	132																								0

Germany																																	
1	FY 08	OTH	78	78																													0
1	FY 09	OTH	210	210																													0
1	FY 10	OTH	210	210																													0

Italy																													
-------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

United Kingdom																																	
1	FY 08	OTH	402	402																													0
1	FY 09	OTH	1308	1308																													0

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

MFR	Name - Location	PRODUCTION RATES			Reached D+	MFR	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, Dallas, Texas	42	250	500	12	1	8	2	14	16	MC= Marine Corps Facilitization of the Contractor production line, to increase capacity to meet all future Rocket quantity requirements, begins in FY08.
							0	2	14	16	

**FY 12 / 13 BUDGET PRODUCTION SCHEDULE**

P-1 ITEM NOMENCLATURE  
Guided MLRS Rocket (GMLRS) (C64400)

Date: May 2009

COST ELEMENTS						Fiscal Year 12																Fiscal Year 13											Later							
MFR	FY	S E R V	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Calendar Year 12																Calendar Year 13																		
						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 10	OTH	1008	1008																																				0
France																																								
1	FY 10	OTH		12	12																																	0		
United Arab Emirates																																								
1	FY 08	FMS	516	516																																	0			
1	FY 09	FMS	516	516																																	0			
Singapore																																								
1	FY 08	FMS	108	108																																	0			
1	FY 10	FMS	108	0	108		44	50	14																												0			
GMLRS RDTE OT Rockets																																								
Bahrain																																								
1	FY 10	FMS	36	36																																	0			
GMLRS Supplemental Rockets																																								
1	FY 08	A	588	588																																	0			
1	FY 09	A	714	714																																	0			
1	FY 10	A	678	54	624		54	54	54	108	54	60	60	60	60																						0			

MFR	Name - Location	PRODUCTION RATES			Reached D+	MFR		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, Dallas, Texas	42	250	500	12	1	Initial	8	2	14	16	MC= Marine Corps Facilitization of the Contractor production line, to increase capacity to meet all future Rocket quantity requirements, begins in FY08.
							Reorder	0	2	14	16	
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					

<b>FY 12 / 13 BUDGET PRODUCTION SCHEDULE</b>	P-1 ITEM NOMENCLATURE Guided MLRS Rocket (GMLRS) (C64400)	Date: May 2009
--	--	-------------------

COST ELEMENTS						Fiscal Year 12												Fiscal Year 13												Later
M F R	FY	S E R V	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Calendar Year 12												Calendar Year 13												
						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	

Japan																														
1	FY 09	FMS	180	180																										0
					2450	500	500	500	488	108	54	60	60	60	60															
					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			Reached D+	MFR	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, Dallas, Texas	42	250	500	12	1	Initial	8	2	14	16	MC= Marine Corps Facilitization of the Contractor production line, to increase capacity to meet all future Rocket quantity requirements, begins in FY08.
							Reorder	0	2	14	16	
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					



<b>Exhibit P-40, Budget Item Justification Sheet</b>						Date: May 2009
Appropriation / Budget Activity / Serial No: Missile Procurement, Army / 2 / Other missiles				P-1 Item Nomenclature MLRS REDUCED RANGE PRACTICE ROCKETS (RRPR) (C65405)		
Program Elements for Code B Items:		Code:	Other Related Program Elements: C65400, C65402, C65404			
	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty	10140		4014	2064	40224	56442
Gross Cost	153.3	3.5	25.2	15.7	341.0	538.7
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	153.3	3.5	25.2	15.7	341.0	538.7
Initial Spares						
Total Proc Cost	153.3	3.5	25.2	15.7	341.0	538.7
Flyaway U/C						
Weapon System Proc U/C	0.0		0.0	0.0	0.0	0.0
<b>Description:</b> The Multiple Launch Rocket System (MLRS) Low Cost Reduced Range Practice Rocket (LCRRPR) is the only live training rocket or missile for the U.S. Army Field Artillery rocket and missile units/crews. In this capacity, the MLRS LCRRPR meets a critical validated requirement for Active and Reserve High Mobility Artillery Rocket System (HIMARS), M270A1 and M270 launcher units to achieve and maintain combat readiness in the Global War on Terror (GWOT). The LCRRPR training rocket supports Army modularity. HIMARS and M270A1 Battalion are organic and attached to modular Fires Brigades supporting Brigade Combat Teams (BCTs), Joint Expeditionary Force (JEF) and Joint Special Operations Force (JSOF) combatant commands. The training rocket has an inert payload section with a blunt nose for inducing reduced range for use at multiple facilities both in the United States of America and other foreign countries. LCRRPR Rockets are manufactured in Camden, Arkansas.						
<b>Justification:</b> FY2010 funding procures 2064 LCRRPRs which are required to maintain the practice rocket inventory for Standards in Training Commission (STRC) requirements.						

<b>Exhibit P-5, Weapon MSLS Cost Analysis</b>		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: May 2009		
<b>MSLS Cost Elements</b>		ID CD	<b>FY 08</b>			<b>FY 09</b>			<b>FY 10</b>		
			Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
<b>HARDWARE</b>											
Reduced Range Practice Rocket (LCRRPR)			58			21945	4014	5	11414	2064	6
Warheads Govt Furnished Equip (GFE)			2009			830			1568		
Engineering Services						260			531		
First Destination Transportation						27			28		
<b>SUBTOTAL</b>			<b>2067</b>			<b>23062</b>			<b>13541</b>		
<b>PROCUREMENT SUPPORT</b>											
Project Management Admin			627			631			644		
Production Engineering Support			558			1133			1071		
Test and Evaluation			280			399			407		
<b>SUBTOTAL</b>			<b>1465</b>			<b>2163</b>			<b>2122</b>		
<b>Total:</b>			<b>3532</b>			<b>25225</b>			<b>15663</b>		

## Exhibit P-5a, Budget Procurement History and Planning

Date:  
May 2009

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
<b>Reduced Range Practice Rocket (LCRRPR)</b>										
FY 2008	Lockheed Martin Dallas, Texas	SS/FFP*	AMCOM, RSA, AL**					Yes		Jun 07
FY 2009	Lockheed Martin Dallas, Texas	SS/FFP	AMCOM, RSA, AL	Dec 08	Nov 09	4014	5	Yes		May 08
FY 2010	Lockheed Martin Dallas, Texas	SS/FFP	AMCOM, RSA, AL	Dec 09	Jan 11	2064	6	yes		

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

\* Sole source/Firm Fixed Price

\*\* Aviation and Missile Command, Redstone Arsenal, AL

<b>FY 08 / 09 BUDGET PRODUCTION SCHEDULE</b>	P-1 ITEM NOMENCLATURE MLRS REDUCED RANGE PRACTICE ROCKETS (RRPR) (C65405)	Date: May 2009
--	--	-------------------

COST ELEMENTS						Fiscal Year 08												Fiscal Year 09												Later
MFR	FY	S E R V	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Calendar Year 08												Calendar Year 09												
						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	

Reduced Range Practice Rocket (LCRRPR)																															
1	FY 06	A	900	360	540	90	90	90	90	90	90																				0
1	FY 07	A	3282	0	3282									156	168	210	348	348	348	348	348	348	348	348	312					0	
1	FY 09	A	4014	0	4014																									4014	
1	FY 10	A	2064	0	2064																									2064	
1	FY 07	MC	2430	0	2430																									0	
1	FY 09	MC	732	0	732																									732	
1	FY 10	MC	720	60	660																									660	

United Arab Emirate																															
1	FY 07	FMS	180	120	60																										30

Bahrain																															
1	FY 10	FMS	204	0	204																										204
					13986	90	120	90	90	90	90	348	348	348	348	348	348	348	348	348	348	348	348	348	348	348	348	144		7704	

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 D+	MFR	ADMIN LEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS	
		MIN	1-8-5	MAX			Prior 1 Oct	After 1 Oct				
				1								
1	Lockheed Martin, Dallas, Texas	42	480	960	12	1	Initial	8	2	11	13	Production of LCRRPRs varies as this program shares a production line with GMLRS. There are no production gaps during months that RRPRs are not being produced as GMLRS Rocket production continues.
							Reorder	0	2	11	13	
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					

<b>FY 10 / 11 BUDGET PRODUCTION SCHEDULE</b>												P-1 ITEM NOMENCLATURE MLRS REDUCED RANGE PRACTICE ROCKETS (RRPR) (C65405)												Date: May 2009	
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	----------------	--

COST ELEMENTS						Fiscal Year 10															Fiscal Year 11															Later
MFR	FY	SERV	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	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							
Reduced Range Practice Rocket (LCRRPR)																																				
1	FY 06	A	900	900																									0							
1	FY 07	A	3282	3282																									0							
1	FY 09	A	4014	0	4014			330	330	330	336	336	336	336	336	336	336												0							
1	FY 10	A	2064	0	2064				A												174	174	174	174	174	174	174	174	174	162	162					
1	FY 07	MC	2430	2430																									0							
1	FY 09	MC	732	0	732			60	60	60	60	60	60	60	60	66	66												0							
1	FY 10	MC	720	60	660				A												54	54	54	54	54	54	54	54	54	60	60					
United Arab Emirate																																				
1	FY 07	FMS	180	150	30			30																						0						
Bahrain																																				
1	FY 10	FMS	204	0	204																									0						
Total																																				
						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	ADMIN LEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS		
		MIN	1-8-5	MAX			Prior 1 Oct	After 1 Oct					
		1	Initial	Reorder			8	2				11	13
1	Lockheed Martin, Dallas, Texas	42	480	960	12	1	Initial	Reorder	8	2	11	13	Production of RRPRs varies as this program shares a production line with GMLRS. There are no production gaps during months that RRPRs are not being produced as GMLRS Rocket production continues.
							Initial	Reorder					
							Initial	Reorder					
							Initial	Reorder					
							Initial	Reorder					
							Initial	Reorder					
							Initial	Reorder					
							Initial	Reorder					

<b>FY 12 / 13 BUDGET PRODUCTION SCHEDULE</b>												P-1 ITEM NOMENCLATURE MLRS REDUCED RANGE PRACTICE ROCKETS (RRPR) (C65405)								Date: May 2009	
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	-------------------	--

COST ELEMENTS					Fiscal Year 12												Fiscal Year 13												Later	
MFR	FY	SERV	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Calendar Year 12												Calendar Year 13												
						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 (LCRRPR)																													
1	FY 06	A	900	900																									0
1	FY 07	A	3282	3282																									0
1	FY 09	A	4014	4014																									0
1	FY 10	A	2064	1902	162	162																							0
1	FY 07	MC	2430	2430																									0
1	FY 09	MC	732	732																									0
1	FY 10	MC	720	660	60	60																							0

United Arab Emirate																													
1	FY 07	FMS	180	180																									0

Bahrain																													
1	FY 10	FMS	204	204																									0

Total					222	222																							
					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	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, Dallas, Texas	42	480	960	12	1	Initial	8	2	11	13	Production of RRPRs varies as this program shares a production line with GMLRS. There are no production gaps during months that RRPRs are not being produced as GMLRS Rocket production continues.
							Reorder	0	2	11	13	
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					

<b>Exhibit P-40, Budget Item Justification Sheet</b>						Date: May 2009
Appropriation / Budget Activity / Serial No: Missile Procurement, Army / 2 / Other missiles				P-1 Item Nomenclature High Mobility Artillery Rocket System (HIMARS) (C02901)		
Program Elements for Code B Items:		Code:	Other Related Program Elements: C03000 HIMARS, C03001 HIMARS Training Devices & 0603778A090 HIMARS RDTE			
	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty	171	57	57	46	44	375
Gross Cost	759.6	225.1	245.3	209.1	279.5	1718.6
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	759.6	225.1	245.3	209.1	279.5	1718.6
Initial Spares	25.4	12.6	11.9	8.9	14.5	73.3
Total Proc Cost	785.0	237.7	257.2	218.0	294.0	1791.9
Flyaway U/C						
Weapon System Proc U/C	4.4	3.9	4.3	4.5	6.4	23.6
<b>Description:</b> The M142 High Mobility Artillery Rocket System (HIMARS) fully supports more deployable, affordable and lethal, Brigade Combat Teams, Fires Brigade, Modular Forces, and Joint Expeditionary Forces. The HIMARS launcher is a C-130 transportable, wheeled, indirect fire, rocket/missile launcher capable of firing all rockets and missiles in the current and future Multiple Launch Rocket System (MLRS) Family of Munitions (MFOM) and Army Tactical Missile System (ATACMS) Family of Munitions (AFOM). The HIMARS launcher has extensive commonality with the MLRS M270A1 tracked launcher and consists of a Fire Control System, a carrier (FMTV XM1140 automotive chassis) and a launcher-loader module (LLM) that performs all operations necessary to complete a fire mission. The MFOM and AFOM are 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 out to 300 kilometers. HIMARS when firing ATACMS and GMLRS is capable of the precise attack of targets in both open and complex/urban terrain, with low collateral damage. HIMARS satisfies the Army's digitization requirements by interfacing with the Advanced Field Artillery Tactical Data System (AFATDS) fire support command and control system. HIMARS is interoperable with existing MLRS units in terms of communications and reloading capabilities. HIMARS is an all-weather, day/night, indirect fire system used in support of light, early and forced entry expeditionary operations using a more deployable, lethal, survivable and tactically mobile long range artillery system. The HIMARS is deployable worldwide and will operate in a wide range of climatic conditions. It is certified by the Air Force for fixed-wing air transport in a fully combat loaded, combat ready configuration. HIMARS, as part of the Fires Brigade, will provide fires that shape, shield and isolate the battle space. Using both precision GMLRS and ATACMS Unitary munitions, HIMARS provides close support fires for Troops in Contact (TIC) in both open and urban terrain. The HIMARS provides Joint Expeditionary 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 can be quickly tailored for centralized or decentralized execution throughout the depth and breadth of the battle space in support of distributed forces. The program also includes training devices for tactical training, classroom training, and handling exercises. HIMARS has been deployed to both Operation Iraqi Freedom and Operation Enduring Freedom with great success. HIMARS is also a key component of the Marine Corps Future Fighting Effort.						
<b>Justification:</b> FY2010 procures 46 HIMARS launchers and software, trainers, initial spares, field support and associated support items of equipment. HIMARS meets the Army's modernization goal for the 21st century, and was selected by Army strategic planners as one of the Army's core systems of the Fires Brigade. The approved Army Acquisition Objective is 888 and the Army Procurement Objective is 375.						

<b>Exhibit P-5, Weapon MSLS Cost Analysis</b>		Appropriation/Budget Activity/Serial No: Missile Procurement, Army / 2 / Other missiles			P-1 Line Item Nomenclature: High Mobility Artillery Rocket System (HIMARS) (C02901)			Weapon System Type:		Date: May 2009	
<b>MSLS Cost Elements</b>		ID CD	<b>FY 08</b>			<b>FY 09</b>			<b>FY 10</b>		
			Total Cost \$000	Qty Units	Unit Cost \$000	Total Cost \$000	Qty Units	Unit Cost \$000	Total Cost \$000	Qty Units	Unit Cost \$000
<b>GROUND EQUIPMENT HARDWARE</b>											
Launcher (SSN C02901)			152808	57	2681	154421	57	2709	131354	46	2856
Carrier (Government Furnished Property)			17556	57	308	21268	57	373	21436	46	466
Engineering Services, IES			11929			16661			11225		
Fielding			9621			13832			8073		
<b>SUBTOTAL</b>			<b>191914</b>			<b>206182</b>			<b>172088</b>		
<b>PROCUREMENT SUPPORT</b>											
Project Management Admin			10432			11413			10674		
Production Engineering			12399			14319			14149		
Government Testing			3613			4616			3094		
<b>SUBTOTAL</b>			<b>26444</b>			<b>30348</b>			<b>27917</b>		
<b>SUPPORT EQUIPMENT</b>											
Peculiar Support Equipment			1682			2047			2401		
<b>SUBTOTAL</b>			<b>1682</b>			<b>2047</b>			<b>2401</b>		
<b>Training Devices (C03001)</b>											
Tactical Trainer			4241			5866			5857		
Simulator			852			872			798		
<b>Subtotal</b>			<b>5093</b>			<b>6738</b>			<b>6655</b>		
<b>Gross P-1 End Cost</b>			<b>225133</b>			<b>245315</b>			<b>209061</b>		
<b>Other Non P-1 Costs</b>											
Initial Spares											
<b>Subtotal</b>											
<b>Total:</b>			<b>225133</b>			<b>245315</b>			<b>209061</b>		



## Exhibit P-5a, Budget Procurement History and Planning

Date:  
May 2009

Appropriation/Budget Activity/Serial No: Missile Procurement, Army/ 2/ Other missiles			Weapon System Type:		P-1 Line Item Nomenclature: High Mobility Artillery Rocket System (HIMARS) (C02901)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Units	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
<b>Launcher (SSN C02901)</b>										
FY 2008	Lockheed Martin Dallas Texas	SS/FFP*	AMCOM, RSA, AL**	Dec 07	Mar 09	57	2681	Yes		Mar 07
FY 2009	Lockheed Martin Dallas Texas	SS/FFP*	AMCOM, RSA, AL**	Dec 08	Jun 10	57	2709	Yes		Mar 08
FY 2010	Lockheed Martin Dallas Texas	SS/FFP*	AMCOM, RSA, AL**	Dec 09	May 11	46	2856	Yes		Mar 09

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

\* SS/FFP - Sole Source/Firm Fixed Price

\*\* AMCOM, RSA, Alabama (AL) - Aviation and Missile Command, Redstone Arsenal, AL

Note: Unit cost shown above reflects launcher costs only and does not reflect the cost of carriers which are provided to LMMFC as Government Furnished Equipment (GFE).

<b>FY 08 / 09 BUDGET PRODUCTION SCHEDULE</b>	P-1 ITEM NOMENCLATURE High Mobility Artillery Rocket System (HIMARS) (C02901)	Date: May 2009
--	--	-------------------

COST ELEMENTS						Fiscal Year 08													Fiscal Year 09													Later
M F R	FY	S E R V	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Calendar Year 08													Calendar Year 09													
						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 (SSN C02901)																																
1	FY 06	A	38	21	17	3	3	3	4	4																		0				
1	FY 07	A	44	0	44						3	3	3	3	4	4	4	4	4	4	4	4						0				
1	FY 08	A	57	0	57			A														3	5	4	6	7	7	7	18			
1	FY 09	A	57	0	57														A									57				
1	FY 10	A	46	0	46																							46				
Marine Corp																																
1	FY 06	MC	18	10	8	2	2	2	1	1																		0				
1	FY 07	MC	16	0	16						2	2	2	2	1	1	1	1	1	1	1	1	1					0				
1	FY 09	MC	7	0	7																A							7				
United Arab Emirate																																
1	FY 08	FMS	20	0	20			A																				20				
Singapore																																
1	FY 08	FMS	18	0	18			A																				18				
Total																													166			
						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			Reached D+	MFR	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, Dallas Texas	2	7	12		1	Initial	8	3	16	19	MC = Marine Corps FY09: Tooling increased the 1-8-5 production rate from 5 to 7. FY 10: 11 month delivery due to reduction in quantity.
							Reorder	0	3	15	18	
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					

<b>FY 10 / 11 BUDGET PRODUCTION SCHEDULE</b>	P-1 ITEM NOMENCLATURE High Mobility Artillery Rocket System (HIMARS) (C02901)	Date: May 2009
--	--	-------------------

COST ELEMENTS					Fiscal Year 10													Fiscal Year 11													Later	
M F R	FY	S E R V	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	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			
Launcher (SSN C02901)																																
1	FY 06	A	38	38																								0				
1	FY 07	A	44	44																								0				
1	FY 08	A	57	39	18	7	7	4																				0				
1	FY 09	A	57	0	57								4	7	7	5	5	6	5	4	4	5	5					0				
1	FY 10	A	46	0	46			A																		5	5	4	4	4	24	
Marine Corp																																
1	FY 06	MC	18	18																									0			
1	FY 07	MC	16	16																									0			
1	FY 09	MC	7	0	7								2			2	1				1	1							0			
United Arab Emirate																																
1	FY 08	FMS	20	0	20			3	7	4																			0			
Singapore																																
1	FY 08	FMS	18	0	18					3	7	7	1																0			
Total					166	7	7	7	7	7	7	7	6	7	7	7	6	6	5	5	5	5	5	5	5	5	5	4	4	4	24	
					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			Reached D+	MFR	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, Dallas Texas	2	7	12		1	Initial	8	3	16	19	MC = Marine Corps Tooling increased the 1-8-5 production rate from 5 to 7. FY 10: 11 month delivery due to reduction in quantity.
							Reorder	0	3	15	18	
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					

<b>FY 12 / 13 BUDGET PRODUCTION SCHEDULE</b>	P-1 ITEM NOMENCLATURE High Mobility Artillery Rocket System (HIMARS) (C02901)	Date: May 2009
--	--	-------------------

COST ELEMENTS					Fiscal Year 12												Fiscal Year 13												Later	
M F R	FY	S E R V	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Calendar Year 12												Calendar Year 13												
						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 (SSN C02901)																														
1	FY 06	A	38	38																									0	
1	FY 07	A	44	44																									0	
1	FY 08	A	57	57																									0	
1	FY 09	A	57	57																									0	
1	FY 10	A	46	22	24	4	4	4	4	4	4																		0	
Marine Corp																														
1	FY 06	MC	18	18																									0	
1	FY 07	MC	16	16																									0	
1	FY 09	MC	7	7																									0	
United Arab Emirate																														
1	FY 08	FMS	20	20																									0	
Singapore																														
1	FY 08	FMS	18	18																									0	
Total						24	4	4	4	4	4																			
					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			Reached D+	MFR	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, Dallas Texas	2	7	12		1	Initial	8	3	16	19	MC = Marine Corps Tooling increased the 1-8-5 production rate from 5 to 7. FY 10: 11 month delivery due to reduction in quantity.
							Reorder	0	3	15	18	
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					

<b>Exhibit P-40, Budget Item Justification Sheet</b>						Date: May 2009
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: ATACMS PIP-RDTE Army 0203802A-788 and ATACMS MODS-Procurement Army C98800			
	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty	1171	84				1255
Gross Cost	1146.0	84.8				1230.8
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	1146.0	84.8				1230.8
Initial Spares						
Total Proc Cost	1146.0	84.8				1230.8
Flyaway U/C						
Weapon System Proc U/C	1.0	1.0				2.0
<b>Description:</b> Army TACMS Unitary missiles are the weapon of choice for SOCOM engagement of time-sensitive, high value targets where collateral damage is a primary consideration. The Army Tactical Missile Systems (ATACMS) is the U.S. Army's primary 24/7 all weather surface-to-surface artillery precision missile used by current and future Joint Force Commands to shape the battlefield with long-range fires against hard and soft stationary targets in open, complex, and urban environments. ATACMS continues to support the Overseas Contingency Operation as 517 ATACMS precision missile variants have been spent in support of OEF/OIF, where 60 were launched from the Multiple Launch Rocket Systems (MLRS), M142, and M270A1 launchers in direct support. ATACMS Block 1A Quick-Reactionary Unitary (QRU) missile variant replaces the anti-personnel/anti-material submunitions in Block 1A missiles and integrates a proven government-furnished unitary warhead (470-pound Standoff Land Attack Missile-Expanded Response/HARPOON) and fuze into the warhead section. The missile provides the Joint Force Command with a 24/7 all-weather 270 kilometer long-range fires capability to attack high-payoffs, time-sensitive targets without placing aircraft and crews at risk. The Global Positioning System's (GPS) accuracy, the unitary warhead, and reduced lethal radii minimize collateral damage to make this missile suitable for attack of hard and soft targets in complex and urban terrain, and within close proximity to friendly forces.						
<b>Justification:</b> ATACMS currently does not have FY10 base funding.  ATACMS currently does not have FY10 OCO Procurement dollars.						

<b>Exhibit P-40, Budget Item Justification Sheet</b>						Date: May 2009
Appropriation / Budget Activity / Serial No: Missile Procurement, Army / 2 / Other missiles				P-1 Item Nomenclature ATACMS BLK IA (C98501)		
Program Elements for Code B Items:		Code:	Other Related Program Elements:			
	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty	1263	84				1347
Gross Cost	1451.3	84.8				1536.0
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	1451.3	84.8				1536.0
Initial Spares						
Total Proc Cost	1451.3	84.8				1536.0
Flyaway U/C						
Weapon System Proc U/C	1.1	1.0				2.2
<b>Description:</b> Army TACMS Unitary missiles are the weapon of choice for SOCOM engagement of time-sensitive, high value targets where collateral damage is a primary consideration. The Army Tactical Missile Systems (ATACMS) is the U.S. Army's primary 24/7 all-weather surface-to-surface artillery precision missile used by current and future Joint Force Commands to shape the battlefield with long-range fires against hard and soft stationary targets in open, complex, and urban environments. ATACMS continues to support the Overseas Contingency Operation as 517 ATACMS precision missile variants have been spent in support of OEF/OIF, where 60 were launched from the Multiple Launch Rocket System (MLRS), M142, and M270A1 launchers in direct support. ATACMS Block 1A Quick-Reactionary Unitary (QRU) missile variant replaces the anti-personnel/anti-material submunitions in Block 1A missiles and integrates a proven government-furnished unitary warhead (470-pound Standoff Land Attack Missile-Expanded Response/HARPOON) and fuze into the warhead section. The missile provides the Joint Force Command with a 24/7 all-weather 270 kilometer long-range fires capability to attack high-payoffs, time-sensitive targets without placing aircraft and crews at risk. The Global Positioning System's (GPS) accuracy, the unitary warhead, and reduced lethal radii minimize collateral damage to make this missile suitable for attack of hard and soft targets in complex and urban terrain, and within close proximity to friendly forces.						
<b>Justification:</b> ATACMS currently does not have FY10 Base Funding.						

<b>Exhibit P-5, Weapon MSLS Cost Analysis</b>		Appropriation/Budget Activity/Serial No: Missile Procurement, Army / 2 / Other missiles			P-1 Line Item Nomenclature: ATACMS BLK IA (C98501)			Weapon System Type:		Date: May 2009	
<b>MSLS Cost Elements</b>		ID CD	<b>FY 08</b>			<b>FY 09</b>			<b>FY 10</b>		
			Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
<b>Missile Hardware - Recurring</b>											
Prime Contract			60480	84	720						
Plant Closure Activities			20000								
Engineering Services			220								
<b>Subtotal Missile Hardware</b>			<b>80700</b>								
<b>Procurement Support</b>											
Project Management			1945								
Production Engineering Support			1762								
Test and Evaluation			373								
<b>Subtotal Procurement Support</b>			<b>4080</b>								
<b>Total Missile Flyaway</b>			<b>84780</b>								
<b>Total:</b>			<b>84780</b>								

## Exhibit P-5a, Budget Procurement History and Planning

Date:  
May 2009

Appropriation/Budget Activity/Serial No: Missile Procurement, Army/ 2/ Other missiles			Weapon System Type:		P-1 Line Item Nomenclature: ATACMS BLK IA (C98501)						
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	
Missile Hardware - Recurring FY 2008	Lockheed Martin Dallas, Texas	SS/FFP*	AMCOM, RSA, AL**	Jul 08	Sep 10	84	720	Yes		APR 08	

REMARKS: \* Sole Source/Firm Fixed Price Contract  
\*\* Aviation and Missile Command, Redstone Arsenal, AL



<b>FY 08 / 09 BUDGET PRODUCTION SCHEDULE</b>	P-1 ITEM NOMENCLATURE ATACMS BLK IA (C98501)	Date: May 2009
--	---	-------------------

COST ELEMENTS						Fiscal Year 08												Fiscal Year 09												Later
M F R	FY	S E R V	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Calendar Year 08												Calendar Year 09												
						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	
ATACMS Block 1A Quick Reaction Unitary (QRU)																														
1	FY 06	A	50	20	30	5	5	5	5	5	5																	0		
1	FY 07	A	44	0	44														6	9	8							21		
ATACMS UAE																														
1	FY 07	A	202	0	202			A											1		4	11	10	8	11	10	12	12	123	
ATACMS Block 1A QRU Supplemental																														
1	FY 06	A	50	0	50						7	7	7	7	7	7	8											0		
1	FY 08	A	63	0	63								A															63		
Navy																														
1	FY 08	NA	1	0	1																							0		
Total																														
					390	5	5	5	5	5	7	7	7	7	7	8			7	9	12	12	10	8	11	10	12	12	207	
						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			Reached D+	MFR	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, Dallas, Texas	7	38	48	15	1	Initial	0	1	14	15	The production/delivery schedule has been coordinated with the prime contractor to mitigate schedule gaps at no additional cost to the army.
							Reorder	0	1	14	15	
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					

<b>FY 10 / 11 BUDGET PRODUCTION SCHEDULE</b>														P-1 ITEM NOMENCLATURE ATACMS BLK IA (C98501)										Date: May 2009	
--	--	--	--	--	--	--	--	--	--	--	--	--	--	---	--	--	--	--	--	--	--	--	--	-------------------	--

COST ELEMENTS					Fiscal Year 10														Fiscal Year 11										Later							
M F R	FY	S E R V	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	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						
ATACMS Block 1A Quick Reaction Unitary (QRU)																																				
1	FY 06	A	50	50																																0
1	FY 07	A	44	23	21												11	10																	0	
ATACMS UAE																																				
1	FY 07	A	202	79	123	12	13	12	12	13	12	12	13	12	12																				0	
ATACMS Block 1A QRU Supplemental																																				
1	FY 06	A	50	50																															0	
1	FY 08	A	63	0	63												1	11	11	10	10	10	10											0		
Navy																																				
1	FY 08	NA	1	1																															0	
Total																																				
					207	12	13	12	12	13	12	12	13	12	12	11	11	11	11	10	10	10	10													
						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				Reached D+	MFR	ADMIN LEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
		MIN	1-8-5	MAX	1			Initial	Reorder			
1	Lockheed Martin, Dallas, Texas	7	38	48	15	1	0	1	14	15		

<b>FY 12 / 13 BUDGET PRODUCTION SCHEDULE</b>	P-1 ITEM NOMENCLATURE ATACMS BLK IA (C98501)	Date: May 2009
--	---	-------------------

COST ELEMENTS					Fiscal Year 12												Fiscal Year 13												Later	
M F R	FY	S E R V	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Calendar Year 12												Calendar Year 13												
						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
ATACMS Block 1A Quick Reaction Unitary (QRU)																														
1	FY 06	A	50	50																									0	
1	FY 07	A	44	44																									0	
ATACMS UAE																														
1	FY 07	A	202	202																									0	
ATACMS Block 1A QRU Supplemental																														
1	FY 06	A	50	50																									0	
1	FY 08	A	63	63																									0	
Navy																														
1	FY 08	NA	1	1																									0	
Total																														

M F R	Name - Location	PRODUCTION RATES			Reached D+	MFR	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, Dallas, Texas	7	38	48	15	1	Initial	0	1	14	15	
							Reorder	0	1	14	15	
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					

<b>Exhibit P-40, Budget Item Justification Sheet</b>						Date: May 2009
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			
	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	1338.5	515.2	515.4	44.8	911.3	3325.2
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	1338.5	515.2	515.4	44.8	911.3	3325.2
Initial Spares	5119.3	9.0	10.8	10.8	3975.9	9125.8
Total Proc Cost	6457.8	524.2	526.2	55.5	4887.2	12451.0
Flyaway U/C						
Weapon System Proc U/C						
<b>Description:</b> The Patriot weapon system growth program implements modifications to the weapon system and maintains Integrated Logistics Support. Required modifications are identified through various means, including the following: Material changes identified in the Patriot Product Improvement Program; corrections identified in the field to include Operation Iraqi Freedom; obsolescence issues; emerging technologies; software improvements and communication upgrades.						
<b>Justification:</b> FY10 Base funding in the amount of \$44.775 million supports the modifications for Reliability, Availability, and Maintainability Modifications (RAM Mods), Tactical Command System/Battery Command Post (TCS/BCP), and Recapitalization.						

Exhibit P-40M, Budget Item Justification Sheet						Date:
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	2008 & PR	FY 2009	FY 2010	TC	Total
RLCEU - Pure Fleet/Grow The Army						
1-92-03-1233		216.5	27.3	0.0	0.0	243.8
RAM MODS						
1-98-03-1249		705.5	86.8	25.1	724.4	1541.8
Recapitalization						
1-01-01-1252		209.1	9.1	13.6	87.9	319.7
Radar Phase III/CDI Phase III - Pure Fleet/GTA						
1-89-03-1231		435.8	85.0	0.0	0.0	520.8
TCS/BCP - Pure Fleet/Grow the Army						
1-97-03-1246		70.3	15.0	0.0	0.0	85.3
TCS/BCP						
1-01-01-1251		55.4	6.1	6.1	99.0	166.6
Command Launch System - Pure Fleet/Grow the Army						
0-00-00-0000		63.8	127.0	0.0	0.0	190.8
Patriot Spares - Pure Fleet/Grow the Army						
0-00-00-0000		50.7	159.1	0.0	0.0	209.8
Test Equipment Upgrade - Pure Fleet/Grow the Army						
0-00-00-0000		46.6	0.0	0.0	0.0	46.6
Totals		1853.7	515.4	44.8	911.3	3325.2

**INDIVIDUAL MODIFICATION** Date: May 2009

MODIFICATION TITLE: RLCEU - Pure Fleet/Grow The Army [MOD 1] 1-92-03-1233

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 Band IV Ultra High Frequency (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	FY07	FY08	FY09
CRG	22	4	5	6	4	12	4
ECS	39	6	8	8	4	12	4
ICC	12	1		1	1	3	1

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

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):

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 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	119																			
Outputs	112																			

  

	FY 2014				FY 2015				FY 2016				FY 2017				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		157
Outputs																		157

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 3 months PRODUCTION LEADTIME: 24 months

Contract Dates: FY 2010 - FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - FY 2011 - FY 2012 -

**INDIVIDUAL MODIFICATION**

Date: May 2009

MODIFICATION TITLE (cont): RLCEU - Pure Fleet/Grow The Army [MOD 1] 1-92-03-1233

FINANCIAL PLAN: (\$ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	<b>RDT&amp;E</b>									
<b>Procurement</b>										
Kit Quantity	148	206.3	9	27.2					157	233.5
Installation Kits										
Installation Kits, Nonrecurring										
Equipment										
Equipment, Nonrecurring										
Engineering Change Orders										
Data										
Training Equipment										
Support Equipment										
Other										
Interim Contractor Support										
<b>Installation of Hardware</b>										
FY 2007 & Prior Equip -- Kits	121	10.0							121	10.0
FY 2008 -- Kits	27	0.2							27	0.2
FY 2009 Equip -- Kits			9	0.1					9	0.1
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
TC Equip- Kits										
Total Installment	148	10.2	9	0.1	0	0.0	0	0.0	157	10.3
Total Procurement Cost		216.5		27.3		0.0		0.0		243.8

**INDIVIDUAL MODIFICATION**

Date: May 2009

MODIFICATION TITLE: RAM MODS [MOD 2] 1-98-03-1249

MODELS OF SYSTEM AFFECTED: All GSE

**DESCRIPTION / JUSTIFICATION:**

These modifications provide resolution to field failures which are identified through component analysis, field data collection, obsolescence issues and emerging technologies which are prioritized based on readiness and Operations and Support (O&S) impacts. This effort includes the engineering, acquisition, qualification testing, installation, technical support and training associated with the modification and is essential to stabilize the system at the highest readiness posture available and reduction of O&S.

**DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):**

Major milestones not applicable.

**Installation Schedule**

	Pr Yr Totals	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	4194	173	173	283	283	283	284	66	66	65	65										
Outputs	4020	174	173	173	283	283	283	284	66	66	65	65									

  

	FY 2014				FY 2015				FY 2016				FY 2017				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																	8002	13937
Outputs																	8002	13937

**METHOD OF IMPLEMENTATION:**

**ADMINISTRATIVE LEADTIME:**

6 months

**PRODUCTION LEADTIME:**

6 months

Contract Dates:

FY 2010 - Dec 09

FY 2011 -

FY 2012 -

Delivery Dates:

FY 2010 - Jun 10

FY 2011 -

FY 2012 -



**INDIVIDUAL MODIFICATION**

Date: May 2009

MODIFICATION TITLE (cont): RAM MODS [MOD 2] 1-98-03-1249

FINANCIAL PLAN: (\$ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	<b>RDT&amp;E</b>									
<b>Procurement</b>										
Kit Quantity	4540	674.0	1133	68.0	262	17.3	7697	535.9	13632	1295.2
Installation Kits										
Installation Kits, Nonrecurring										
Equipment										
Equipment, Nonrecurring										
Engineering Change Orders										
Data										
Training Equipment		2.5								2.5
Support Equipment										
Other		9.4		11.2		5.1		99.1		124.8
Interim Contractor Support		1.6		0.8		0.8		15.2		18.4
<b>Installation of Hardware</b>										
FY 2007 & Prior Equip -- Kits	3846	13.8							3846	13.8
FY 2008 -- Kits	694	4.2							694	4.2
FY 2009 Equip -- Kits			1133	6.8					1133	6.8
FY 2010 Equip -- Kits					262	1.9			262	1.9
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
TC Equip- Kits							7697	74.2	7697	74.2
Total Installment	4540	18.0	1133	6.8	262	1.9	7697	74.2	13632	100.9
Total Procurement Cost		705.5		86.8		25.1		724.4		1541.8

**INDIVIDUAL MODIFICATION**

Date: May 2009

MODIFICATION TITLE: Recapitalization [MOD 3] 1-01-01-1252

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

**DESCRIPTION / JUSTIFICATION:**

These modifications include communication upgrades, Family of Medium Tactical Vehicles (FMTV), training upgrades, and Depot Maintenance Plant Equipment (DMPE) and are synchronized with the recapitalization program.

**DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):**

Major milestones not applicable.

**Installation Schedule**

Pr Yr Totals	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	5	1				1				1										
Outputs	5			1				1				1								

  

1	FY 2014			FY 2015				FY 2016				FY 2017				To Complete	Totals
	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																8	16
Outputs																8	16

**METHOD OF IMPLEMENTATION:**

**ADMINISTRATIVE LEADTIME:**

3 months

**PRODUCTION LEADTIME:**

12 months

Contract Dates:

FY 2010 - Mar 10

FY 2011 -

FY 2012 -

Delivery Dates:

FY 2010 - Mar 11

FY 2011 -

FY 2012 -

**INDIVIDUAL MODIFICATION**

Date: May 2009

MODIFICATION TITLE (cont): Recapitalization [MOD 3] 1-01-01-1252

FINANCIAL PLAN: (\$ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	<b>RDT&amp;E</b>									
<b>Procurement</b>										
Kit Quantity	6	189.9	1	6.4	1	10.4	3	73.7	11	280.4
Installation Kits										
Installation Kits, Nonrecurring										
Equipment										
Equipment, Nonrecurring										
Engineering Change Orders										
Data										
Training Equipment										
Support Equipment										
Other				1.9		2.0		6.0		9.9
Interim Contractor Support										
<b>Installation of Hardware</b>										
FY 2007 & Prior Equip -- Kits	6	19.2							6	19.2
FY 2008 -- Kits			1	0.8					1	0.8
FY 2009 Equip -- Kits					1	1.2			1	1.2
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
TC Equip- Kits							3	8.2	3	8.2
Total Installment	6	19.2	1	0.8	1	1.2	3	8.2	11	29.4
Total Procurement Cost		209.1		9.1		13.6		87.9		319.7

<b>INDIVIDUAL MODIFICATION</b>															Date: May 2009																																																																																							
MODIFICATION TITLE: Radar Phase III/CDI Phase III - Pure Fleet/GTA [MOD 4] 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 MILESTONE(S):																																																																																																						
Planned                      Accomplished																																																																																																						
Preliminary Design Review (PDR)					2QFY92					2QFY92																																																																																												
Critical Design Review (CDR)					3QFY93					3QFY93																																																																																												
Contractor Test and Evaluation (CTE)					4QFY99					1QFY00																																																																																												
Development Test and Evaluation (DTE)					1QFY00					1QFY00																																																																																												
Initial Operational Test and Evaluation (IOTE)					2QFY02					2QFY02																																																																																												
Installation Schedule																																																																																																						
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Pr Yr Totals</th> <th colspan="4">FY 2009</th> <th colspan="4">FY 2010</th> <th colspan="4">FY 2011</th> <th colspan="4">FY 2012</th> <th colspan="4">FY 2013</th> </tr> <tr> <th>1</th><th>2</th><th>3</th><th>4</th> <th>1</th><th>2</th><th>3</th><th>4</th> <th>1</th><th>2</th><th>3</th><th>4</th> <th>1</th><th>2</th><th>3</th><th>4</th> <th>1</th><th>2</th><th>3</th><th>4</th> </tr> </thead> <tbody> <tr> <td>Inputs</td> <td>10</td><td></td><td>1</td><td>3</td> <td>3</td><td>3</td><td>3</td><td>3</td> <td>3</td><td>1</td><td></td><td></td> <td></td><td></td><td></td><td></td> <td></td><td></td><td></td><td></td> </tr> <tr> <td>Outputs</td> <td>10</td><td></td><td></td><td></td> <td></td><td>1</td><td>3</td><td>3</td> <td>3</td><td>3</td><td>3</td><td>3</td> <td>1</td><td></td><td></td><td></td> <td></td><td></td><td></td><td></td> </tr> </tbody> </table>																				Pr Yr Totals	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Inputs	10		1	3	3	3	3	3	3	1											Outputs	10					1	3	3	3	3	3	3	1							
Pr Yr Totals	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013																																																																																					
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4																																																																																		
Inputs	10		1	3	3	3	3	3	3	1																																																																																												
Outputs	10					1	3	3	3	3	3	3	1																																																																																									
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2"></th> <th colspan="4">FY 2014</th> <th colspan="4">FY 2015</th> <th colspan="4">FY 2016</th> <th colspan="4">FY 2017</th> <th rowspan="2">To Complete</th> <th rowspan="2">Totals</th> </tr> <tr> <th>1</th><th>2</th><th>3</th><th>4</th> <th>1</th><th>2</th><th>3</th><th>4</th> <th>1</th><th>2</th><th>3</th><th>4</th> <th>1</th><th>2</th><th>3</th><th>4</th> </tr> </thead> <tbody> <tr> <td>Inputs</td> <td></td><td></td><td></td><td></td> <td></td><td></td><td></td><td></td> <td></td><td></td><td></td><td></td> <td></td><td></td><td></td><td></td> <td></td><td></td><td></td><td>30</td> </tr> <tr> <td>Outputs</td> <td></td><td></td><td></td><td></td> <td></td><td></td><td></td><td></td> <td></td><td></td><td></td><td></td> <td></td><td></td><td></td><td></td> <td></td><td></td><td></td><td>30</td> </tr> </tbody> </table>																					FY 2014				FY 2015				FY 2016				FY 2017				To Complete	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Inputs																				30	Outputs																				30						
	FY 2014				FY 2015				FY 2016				FY 2017				To Complete	Totals																																																																																				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4																																																																																						
Inputs																				30																																																																																		
Outputs																				30																																																																																		
METHOD OF IMPLEMENTATION:																																																																																																						
ADMINISTRATIVE LEADTIME: 5 months										PRODUCTION LEADTIME: 24 months																																																																																												
Contract Dates: FY 2010 -					FY 2011 -					FY 2012 -																																																																																												
Delivery Dates: FY 2010 -					FY 2011 -					FY 2012 -																																																																																												

**INDIVIDUAL MODIFICATION**

Date: May 2009

MODIFICATION TITLE (cont): Radar Phase III/CDI Phase III - Pure Fleet/GTA [MOD 4] 1-89-03-1231

FINANCIAL PLAN: (\$ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	<b>RDT&amp;E</b>									
<b>Procurement</b>										
Kit Quantity	26	385.6	4	77.0					30	462.6
Installation Kits										
Installation Kits, Nonrecurring										
Equipment										
Equipment, Nonrecurring										
Engineering Change Orders										
Data										
Training Equipment										
Support Equipment										
Other										
Interim Contractor Support										
<b>Installation of Hardware</b>										
FY 2007 & Prior Equip -- Kits	14	26.2							14	26.2
FY 2008 -- Kits	12	24.0							12	24.0
FY 2009 Equip -- Kits			4	8.0					4	8.0
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
TC Equip- Kits										
Total Installment	26	50.2	4	8.0	0	0.0	0	0.0	30	58.2
Total Procurement Cost		435.8		85.0		0.0		0.0		520.8

**INDIVIDUAL MODIFICATION**

Date: May 2009

MODIFICATION TITLE: TCS/BCP - Pure Fleet/Grow the Army [MOD 5] 1-97-03-1246

MODELS OF SYSTEM AFFECTED: TCS/BCP

**DESCRIPTION / JUSTIFICATION:**

This modification integrates the hardware and software required at Battery (BCP) and Battalion (TCS) to provide Force Operations functionality. This includes automated defense design, weapon system initialization, situation awareness and Battle Management Command, Control, Communications, Computers and Intelligence voice and data interoperability. This mod also provides powered and conditioned space for Battalion and Battery commanders.

**DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):**

Major milestones are not applicable.

**Installation Schedule**

Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals	88				2	3			2	3										
Inputs																				
Outputs						2	3			2	3									

  

	FY 2014				FY 2015				FY 2016				FY 2017				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		98
Outputs																		98

**METHOD OF IMPLEMENTATION:**

ADMINISTRATIVE LEADTIME:

6 months

PRODUCTION LEADTIME: 6 months

Contract Dates:

FY 2010 -

FY 2011 -

FY 2012 -

Delivery Dates:

FY 2010 -

FY 2011 -

FY 2012 -

**INDIVIDUAL MODIFICATION**

Date: May 2009

MODIFICATION TITLE (cont): TCS/BCP - Pure Fleet/Grow the Army [MOD 5] 1-97-03-1246

FINANCIAL PLAN: (\$ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	<b>RDT&amp;E</b>									
<b>Procurement</b>										
Kit Quantity	93	60.3	5	14.1					98	74.4
Installation Kits										
Installation Kits, Nonrecurring										
Equipment										
Equipment, Nonrecurring										
Engineering Change Orders										
Data										
Training Equipment										
Support Equipment										
Other		4.0								4.0
Interim Contractor Support										
<b>Installation of Hardware</b>										
FY 2007 & Prior Equip -- Kits	88	5.1							88	5.1
FY 2008 -- Kits	5	0.9							5	0.9
FY 2009 Equip -- Kits			5	0.9					5	0.9
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
TC Equip- Kits										
Total Installment	93	6.0	5	0.9	0	0.0	0	0.0	98	6.9
Total Procurement Cost		70.3		15.0		0.0		0.0		85.3

**INDIVIDUAL MODIFICATION**

Date: May 2009

MODIFICATION TITLE: TCS/BCP [MOD 6] 1-01-01-1251

MODELS OF SYSTEM AFFECTED: TCS/BCP

**DESCRIPTION / JUSTIFICATION:**

Provides for implementation and improvements of the Tactical Information Broadcast Service (TIBS) updates and Integrated Broadcast Service (IBS) hardware and software at the PATRIOT Battalion. This includes integration of the Joint Tactical Terminal (JTT) and integration of the IBS. Efforts in FY08 and beyond are software integration and interim contractor support.

**DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):**

Major milestones are not applicable.

**Installation Schedule**

Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs	27																			
Outputs	27																			

  

FY 2014	FY 2015				FY 2016				FY 2017				To Complete	Totals			
	1	2	3	4	1	2	3	4	1	2	3	4					
Inputs																	27
Outputs																	27

**METHOD OF IMPLEMENTATION:**

**ADMINISTRATIVE LEADTIME:**

3 months

**PRODUCTION LEADTIME:**

12 months

Contract Dates:

FY 2010 - Mar 10

FY 2011 - Mar 11

FY 2012 - Mar 12

Delivery Dates:

FY 2010 -

FY 2011 -

FY 2012 -



**INDIVIDUAL MODIFICATION**

Date: May 2009

MODIFICATION TITLE (cont): TCS/BCP [MOD 6] 1-01-01-1251

FINANCIAL PLAN: (\$ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	<b>RDT&amp;E</b>									
<b>Procurement</b>										
Kit Quantity	27	29.0							27	29.0
Installation Kits										
Installation Kits, Nonrecurring										
Equipment										
Equipment, Nonrecurring										
Engineering Change Orders										
Data										
Training Equipment										
Support Equipment										
Other (Software)		5.0		2.9		3.0		39.6		50.5
Interim Contractor Support		15.3		3.2		3.1		59.4		81.0
<b>Installation of Hardware</b>										
FY 2007 & Prior Equip -- Kits	27	6.1							27	6.1
FY 2008 -- Kits										
FY 2009 Equip -- Kits										
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
TC Equip- Kits										
Total Installment	27	6.1	0	0.0	0	0.0	0	0.0	27	6.1
Total Procurement Cost		55.4		6.1		6.1		99.0		166.6

**INDIVIDUAL MODIFICATION**

Date: May 2009

MODIFICATION TITLE: Command Launch System - Pure Fleet/Grow the Army [MOD 7] 0-00-00-0000

MODELS OF SYSTEM AFFECTED: Patriot Launchers

**DESCRIPTION / JUSTIFICATION:**

The Command Launch System includes the Enhanced Launcher Electronics System (ELES) and the Fire Solution Computer (FSC). The ELES update the existing PAC-2 missile launcher station, allowing it to fire the PAC-3 missile and increase overall load-out from 4 (PAC-2 launcher) to 16 interceptors per launch station. The FSC upgrades the Engagement Control System to interface with the PAC-3 Launcher Station. ELES are also procured in Patriot PAC-3 (C49200) and MSE (C53101).

**DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):**

**Installation Schedule**

Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals			4	5	5	6	9	9	9	6										
Inputs			4	5	5	6	9	9	9	6										
Outputs				4	5	5	6	9	9	9	6									

  

Pr Yr	FY 2014				FY 2015				FY 2016				FY 2017				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		53
Outputs																		53

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

0 months

PRODUCTION LEADTIME: 24 months

Contract Dates: FY 2010 -

FY 2011 -

FY 2012 -

Delivery Dates: FY 2010 -

FY 2011 -

FY 2012 -

**INDIVIDUAL MODIFICATION**

Date: May 2009

MODIFICATION TITLE (cont): Command Launch System - Pure Fleet/Grow the Army [MOD 7] 0-00-00-0000

FINANCIAL PLAN: (\$ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	<b>RDT&amp;E</b>									
<b>Procurement</b>										
Kit Quantity	17	62.1	36	112.9					53	175.0
Installation Kits										
Installation Kits, Nonrecurring										
Equipment										
Equipment, Nonrecurring										
Engineering Change Orders										
Data										
Training Equipment										
Support Equipment										
Other				10.5						10.5
Interim Contractor Support										
<b>Installation of Hardware</b>										
FY 2007 & Prior Equip -- Kits	17	1.7							17	1.7
FY 2008 -- Kits			36	3.6					36	3.6
FY 2009 Equip -- Kits										
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
TC Equip- Kits										
<b>Total Installment</b>	17	1.7	36	3.6	0	0.0	0	0.0	53	5.3
<b>Total Procurement Cost</b>		63.8		127.0		0.0		0.0		190.8

**INDIVIDUAL MODIFICATION**

Date: May 2009

MODIFICATION TITLE: Patriot Spares - Pure Fleet/Grow the Army [MOD 8] 0-00-00-0000

MODELS OF SYSTEM AFFECTED: Configuration 2 and Configuration 3 Patriot Ground Support Equipment

DESCRIPTION / JUSTIFICATION:  
Buys spares for Pure Fleet and Grow the Army battalions.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):  
Major milestones are not applicable.

Installation Schedule

Pr Yr Totals	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs				1	1		1	1												
Outputs				1	1		1	1												

  

Pr Yr Totals	FY 2014				FY 2015				FY 2016				FY 2017				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		4
Outputs																		4

METHOD OF IMPLEMENTATION:

ADMINISTRATIVE LEADTIME:

0 months

PRODUCTION LEADTIME: 0 months

Contract Dates:

FY 2010 -

FY 2011 -

FY 2012 -

Delivery Dates:

FY 2010 -

FY 2011 -

FY 2012 -

**INDIVIDUAL MODIFICATION**

Date: May 2009

MODIFICATION TITLE (cont): Patriot Spares - Pure Fleet/Grow the Army [MOD 8] 0-00-00-0000

FINANCIAL PLAN: (\$ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	<b>RDT&amp;E</b>									
<b>Procurement</b>										
Kit Quantity										
Installation Kits										
Installation Kits, Nonrecurring										
Equipment		50.7		159.1						209.8
Equipment, Nonrecurring										
Engineering Change Orders										
Data										
Training Equipment										
Support Equipment										
Other										
Interim Contractor Support										
<b>Installation of Hardware</b>										
FY 2007 & Prior Equip -- Kits										
FY 2008 -- Kits										
FY 2009 Equip -- Kits										
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
TC Equip- Kits										
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		50.7		159.1		0.0		0.0		209.8

**INDIVIDUAL MODIFICATION**

Date: May 2009

MODIFICATION TITLE: Test Equipment Upgrade - Pure Fleet/Grow the Army [MOD 9] 0-00-00-0000

MODELS OF SYSTEM AFFECTED: Command Launch Systems, RLCEU, REP3/CDI3

DESCRIPTION / JUSTIFICATION:  
 The test equipment upgrades are necessary to resolve test obsolescence issues, reduce kit lead time and increase throughput capacity associated with Pure Fleet production requirements. The test equipment upgrades provide the capability for modernized testing of modules that compose Pure Fleet kits (ex. ELES, RLCEU, Radar Enhancement Phase 3/Classification, Discrimination, Identification Phase 3 (REP3/CDI3), etc.) and provide improved testing capability for PATRIOT end items, such as Radar Sets.

DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):  
 Major milestones not applicable.

Installation Schedule

Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs																				
Outputs																				

  

Pr Yr	FY 2014				FY 2015				FY 2016				FY 2017				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		
Outputs																		

METHOD OF IMPLEMENTATION: ADMINISTRATIVE LEADTIME: 0 months PRODUCTION LEADTIME: 0 months  
 Contract Dates: FY 2010 - FY 2011 - FY 2012 -  
 Delivery Dates: FY 2010 - FY 2011 - FY 2012 -

**INDIVIDUAL MODIFICATION**

Date: May 2009

MODIFICATION TITLE (cont): Test Equipment Upgrade - Pure Fleet/Grow the Army [MOD 9] 0-00-00-0000

FINANCIAL PLAN: (\$ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	<b>RDT&amp;E</b>									
<b>Procurement</b>										
Kit Quantity										
Installation Kits										
Installation Kits, Nonrecurring										
Equipment										
Equipment, Nonrecurring										
Engineering Change Orders										
Data										
Training Equipment										
Support Equipment										
Other		46.6								46.6
Interim Contractor Support										
<b>Installation of Hardware</b>										
FY 2007 & Prior Equip -- Kits										
FY 2008 -- Kits										
FY 2009 Equip -- Kits										
FY 2010 Equip -- Kits										
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
TC Equip- Kits										
Total Installment	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total Procurement Cost		46.6		0.0		0.0		0.0		46.6

<b>Exhibit P-40, Budget Item Justification Sheet</b>						Date: May 2009
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:			
	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	659.3	238.0	136.7	7.0		1041.0
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	659.3	238.0	136.7	7.0		1041.0
Initial Spares						
Total Proc Cost	659.3	238.0	136.7	7.0		1041.0
Flyaway U/C						
Weapon System Proc U/C						
<b>Description:</b> The Improved Target Acquisition System (ITAS) is a combat proven system that provides long-range, lethal anti-armor and precision assault fires capability for Active Component and Army National Guard Infantry Brigade Combat Teams (IBCT) and Stryker Brigade Combat Teams (SBCT) across the spectrum of contemporary operational environments. ITAS is a replacement for the Light Infantry's TOW 2 weapon system, and it provides the capability to defeat armored vehicles, bunkers, and buildings at extended ranges in all battlefield conditions. Far Target Locator (cut into production in FY 2006) adds a GPS based position and attitude determination subsystem to ITAS, enabling the system to generate a 10 digit grid coordinate of a target location. ITAS is integrated into the Stryker Anti-Tank Guided Missile (ATGM) vehicle of the SBCT anti-tank company. ITAS provides a surrogate precision assault capability for the SBCT infantry battalions until the Mobile Gun System (MGS) becomes available. ITAS's superior surveillance capability also enables the soldier to shape the battlefield by detecting targets at long range and either engaging with TOW missiles or other weapon systems to destroy those targets. ITAS is replacing all of the United States Marine Corps (USMC) ground TOW systems, and it has been sold to FMS customers. Canada and Portugal have purchased ITAS for their forces. ITAS continues to be the weapon of choice in precision combat engagements in Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF).						
<b>Justification:</b> FY10 Base funding in the amount of \$6,983K will procure Project Management, Fielding, and Data.						
Note 1: ITAS quantity for FY09 is 58 systems. The remaining money was approved for Far Target Location Retrofit on 740 systems and Common Processor upgrade on 380 systems. This creates a common configuration and capability for the entire fleet.						
Note 2: FY09 is the last year of procuring ITAS.						



<b>Exhibit P-40M, Budget Item Justification Sheet</b>	Date: May 2009
---	----------------

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	2008 & PR	FY 2009	FY 2010	TC	Total
ITAS (IMPROVED TARGET ACQUISITION SYSTEM)						
MC-1-89-03-3028	OPERATIONAL	897.3	136.7	7.0	0.0	1041.0
<b>Totals</b>		<b>897.3</b>	<b>136.7</b>	<b>7.0</b>	<b>0.0</b>	<b>1041.0</b>

**INDIVIDUAL MODIFICATION**

Date: May 2009

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

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

**DESCRIPTION / JUSTIFICATION:**

The Improved Target Acquisition System (ITAS) is a combat proven system that provides long-range, lethal anti-armor and precision assault fires capability for Active Component and Army National Guard Infantry Brigade Combat Teams (IBCT) and Stryker Brigade Combat Teams (SBCT) across the spectrum of contemporary operational environments. ITAS is a replacement for the Light Infantry's TOW 2 weapon system, and it provides the capability to defeat armored vehicles, bunkers, and buildings at extended ranges in all battlefield conditions. Far Target Locator (cut into production in FY 2006) adds a GPS based position and attitude determination subsystem to ITAS, enabling the system to generate a 10 digit grid coordinate of a target location. ITAS is integrated into the Stryker Anti-Tank Guided Missile (ATGM) vehicle of the SBCT anti-tank company. ITAS provides a surrogate precision assault capability for the SBCT infantry battalions until the Mobile Gun System (MGS) becomes available. ITAS's superior surveillance capability enables the soldier to shape the battlefield by detecting targets at long range and either engaging with TOW missiles or other weapon systems to destroy those targets. ITAS is replacing all of the United States Marine Corps (USMC) ground TOW systems, and it has been sold to FMS customers. Canada and Portugal have purchased ITAS for their forces. ITAS continues to be the weapon of choice in precision combat engagements in Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF).

**DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):**

**Installation Schedule**

	Pr Yr Totals	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	1239	138	93	50	32																
Outputs	863	42	41	39	54	52	36	44	114	137	72	39	19								

  

	FY 2014				FY 2015				FY 2016				FY 2017				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		1552
Outputs																		1552

**METHOD OF IMPLEMENTATION:**

**ADMINISTRATIVE LEADTIME:**

4 months

**PRODUCTION LEADTIME:** 23 months

Contract Dates: FY 2010 - NA

FY 2011 - NA

FY 2012 - NA

Delivery Dates: FY 2010 - NA

FY 2011 - NA

FY 2012 - NA

**INDIVIDUAL MODIFICATION**

Date: May 2009

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

FINANCIAL PLAN: (\$ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	<b>RDTE</b>									
<b>Procurement</b>										
Kit Quantity	1494		58						1552	
Equipment		733.8		106.7						840.5
Fielding		29.9		1.0		2.0				32.9
Project Management		40.7		15.1		4.9				60.7
Data		1.5		0.1		0.1				1.7
Training Equipment		46.9		6.6						53.5
Production Line Restart		3.7								3.7
Initial Spares		40.8		7.2						48.0
<b>Installation of Hardware</b>										
Prior Years, Equip, Kits	863		176		65				1104	
FY08 Equip, Kits					181		209		390	
FY09 Equip, Kits							58		58	
Total Installment	863	0.0	176	0.0	246	0.0	267	0.0	1552	0.0
Total Procurement Cost		897.3		136.7		7.0		0.0		1041.0

<b>Exhibit P-40, Budget Item Justification Sheet</b>						Date: May 2009
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: C67501, C65900, 0603778A093			
	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	338.0	4.8	1.9	22.4	210.8	577.9
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	338.0	4.8	1.9	22.4	210.8	577.9
Initial Spares	20.2	1.0	1.0	1.0	29.9	53.3
Total Proc Cost	358.2	5.8	2.9	23.5	240.7	631.2
Flyaway U/C						
Weapon System Proc U/C						
<p><b>Description:</b>  The M270A1 upgraded Multiple Launch Rocket System (MLRS) launcher provides critical missile precision strike operational shaping fires and counterfire and close support destructive and suppressive fires. The M270A1 upgraded MLRS launcher consists of a M993A1 carrier, a derivative of the Bradley Fighting Vehicle (BFV) carrier, and the M269A1 Launcher Loader Module (LLM). The system is capable of firing the MLRS Family of Munitions (MFOM) to include the Guided Multiple Launcher Rocket System (GMLRS), and the Army Tactical Missile System (ATACMS) Family of Munitions (AFOM), including precision munitions, to a range of 300 kilometers. The M270A1 is capable of firing either 12 MFOM rockets or 2 AFOM missiles from a single launcher. Additional material changes will provide operational flexibility and capability against an expanded target set.</p> <p><b>Justification:</b>  FY10 Base funding in the amount of \$3.662 million will procure Obsolescence Mitigation/Engineering Change Proposal Integration, M993A1 Carrier Upgrades, Enhanced Control and Command (C2), and other hardware and software required in support of launcher upgrades.  FY10 OCO funding in the amount of \$18.772 million will procure Driver's Vision Enhancements (DVE), and Enhanced Control and Command (C2).</p>						

<b>Exhibit P-40M, Budget Item Justification Sheet</b>						Date: May 2009
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: C67501, C65900, 0603778A093
Description		Fiscal Years				
OSIP No.	Classification	2008 & PR	FY 2009	FY 2010	TC	Total
Inactive Mods						
Prior Year MCs	Oper/Safety/Reliab	291.7	0.0	0.0	0.0	291.7
Global Positioning System (GPS) Upgrades						
1-04-02-0568	Operational	0.3	0.1	0.0	0.0	0.4
Obsolescence Mitigation/ECP Reliability Intg						
1-99-03-Obsec	Oper/Reliab	31.3	0.3	1.0	184.0	216.6
M993A1 Carrier Upgrades						
1-04-02-0567	Reliability	5.1	0.3	1.4	0.0	6.8
Auxiliary Power Unit/Environmental Control Unit						
1-02-02-0552	Operational	14.4	1.2	0.0	0.0	15.6
Enhanced Command & Control (C2)						
1-06-02-0572	Operational	0.0	0.0	13.2	14.3	27.5
Up Armor						
1-08-02-0573	Crew Survivability	0.0	0.0	0.0	12.0	12.0
Driver's Vision Enhancement (DVE)						
1-09-02-0575	Operational	0.0	0.0	6.8	0.5	7.3
Totals		342.8	1.9	22.4	210.8	578.0

**INDIVIDUAL MODIFICATION**

Date: May 2009

MODIFICATION TITLE: Enhanced Command & Control (C2) [MOD 6] 1-06-02-0572

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

**DESCRIPTION / JUSTIFICATION:**

The current on-board fire control system for the M270A1 Launcher lacks the necessary Command & Control (C2) functions to meet the emerging threat found within the theater of operations for Operation Iraqi Freedom (OIF)/Operation Enduring Freedom (OEF). The new proposed requirement demands some tactical fire direction and the ability for one launcher to control other launchers, increased operational flexibility with the ability to reduce the fire support footprint, and reduce the sensor-to-shooter timeline. This increased capability will eliminate the immediate requirement for Field Artillery C2 nodes, allow timely precision strikes, and be capable of integrating with Joint assets. This enhancement will consist of adding High Frequency (HF) and Satellite Communications (SATCOM) radios, antennas, and a new laptop with display.

**DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):**

Enhanced C2s capability of long range communications and situational awareness has been developed and integrated on both the M270A1 and HIMARS launch platforms. This capability is currently being evaluated by the user under a safety release. Qualification testing of this initial capability will begin in 4QTR09. Tactics, Techniques, and Procedures and Concept of Operations are currently being developed at Ft. Sill, OK.

**Installation Schedule**

Pr Yr Totals	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs									31	31	31	32								
Outputs										38	38	49								

  

	FY 2014				FY 2015				FY 2016				FY 2017				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: Depot ADMINISTRATIVE LEADTIME: 3 months PRODUCTION LEADTIME: 9 months

Contract Dates: FY 2010 - Jan 10 FY 2011 - FY 2012 -

Delivery Dates: FY 2010 - Oct 10 FY 2011 - FY 2012 -

**INDIVIDUAL MODIFICATION**

Date: May 2009

MODIFICATION TITLE (cont): Enhanced Command & Control (C2) [MOD 6] 1-06-02-0572

FINANCIAL PLAN: (\$ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	<b>RDT&amp;E</b>									
<b>Procurement</b>										
Kit Quantity										
Installation Kits										
Installation Kits, Nonrecurring										
Equipment					125	13.2	100	10.6	225	23.8
Equipment, Nonrecurring										
Engineering Change Orders										
Data										
Training Equipment										
Support Equipment										
Other										
Interim Contractor Support										
<b>Installation of Hardware</b>										
FY 2007 & Prior Equip -- Kits										
FY 2008 -- Kits										
FY 2009 Equip -- Kits										
FY 2010 Equip -- Kits							125	2.0	125	2.0
FY 2011 Equip -- Kits							59	1.0	59	1.0
FY 2012 Equip -- Kits							41	0.7	41	0.7
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
TC Equip- Kits										
Total Installment	0	0.0	0	0.0	0	0.0	225	3.7	225	3.7
Total Procurement Cost		0.0		0.0		13.2		14.3		27.5

**INDIVIDUAL MODIFICATION**

Date: May 2009

MODIFICATION TITLE: Driver's Vision Enhancement (DVE) [MOD 8] 1-09-02-0575

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

**DESCRIPTION / JUSTIFICATION:**

The Drivers Vision Enhancement (DVE) modification utilizes a vehicle mounted thermal vehicle sensor and driver's display that significantly improves the crews survivability and situational awareness. The DVE displays thermal contrast among objects and can deliver accurate images through dust, smoke, fog, or darkness. Troops equipped with DVE can easily detect personel, vehicles, road hazards, and threat activity.

**DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):**

Preliminary integration of the DVE system has been conducted on both the M142 HIMARS and the M270A1 MLRS. This preliminary integration effort confirmed the feasibility and utility of fully integrating DVEs into both platforms to dramatically enhance crew survivability and situational awareness. The DVE is a non developmental item and final installation plans will be completed in 4QFY09.

**Installation Schedule**

Pr Yr	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
<b>Totals</b>									28	28	29	29								
<b>Inputs</b>																				
<b>Outputs</b>									38	38	38									

  

	FY 2014				FY 2015				FY 2016				FY 2017				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
<b>Inputs</b>																		114
<b>Outputs</b>																		114

**METHOD OF IMPLEMENTATION:**

**ADMINISTRATIVE LEADTIME:**

3 months

**PRODUCTION LEADTIME:** 9 months

Contract Dates:

FY 2010 - Jan 10

FY 2011 -

FY 2012 -

Delivery Dates:

FY 2010 - Oct 10

FY 2011 -

FY 2012 -



**INDIVIDUAL MODIFICATION**

Date: May 2009

MODIFICATION TITLE (cont): Driver's Vision Enhancement (DVE) [MOD 8] 1-09-02-0575

FINANCIAL PLAN: (\$ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	<b>RDT&amp;E</b>									
<b>Procurement</b>										
Kit Quantity										
Installation Kits										
Installation Kits, Nonrecurring										
Equipment					114	6.8			114	6.8
Equipment, Nonrecurring										
Engineering Change Orders										
Data										
Training Equipment										
Support Equipment										
Other										
Interim Contractor Support										
<b>Installation of Hardware</b>										
FY 2008 & Prior Equip -- Kits										
FY 2009 -- Kits										
FY 2010 Equip -- Kits							114	0.5	114	0.5
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
FY 2015 Equip -- Kits										
TC Equip- Kits										
Total Installment	0	0.0	0	0.0	0	0.0	114	0.5	114	0.5
Total Procurement Cost		0.0		0.0		6.8		0.5		7.3

<b>Exhibit P-40, Budget Item Justification Sheet</b>						Date: May 2009
Appropriation / Budget Activity / Serial No: Missile Procurement, Army / 3 / Modification of missiles				P-1 Item Nomenclature HIMARS MODIFICATIONS (C67501)		
Program Elements for Code B Items:		Code:	Other Related Program Elements: C02901, 0603778A090, 0603778A093, C67500			
	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	37.3	10.5	16.4	71.0	274.1	409.2
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	37.3	10.5	16.4	71.0	274.1	409.2
Initial Spares	0.0	1.6	1.1	1.8	60.4	64.9
Total Proc Cost	37.3	12.1	17.5	72.8	334.5	474.1
Flyaway U/C						
Weapon System Proc U/C						
<b>Description:</b> The M142 High Mobility Artillery Rocket System (HIMARS), is a C-130 Transportable launcher mounted on a Family of Medium Tactical Vehicles (FMTV) chassis. The HIMARS is capable of firing either six Multiple Rocket Launcher System (MLRS) Family of Munitions (MFOM) rockets or one Army Tactical Missile System (ATACMS) Family of Munitions (AFOM) missile to a range of 300 kilometers. Modification kits will be procured for the HIMARS Launcher and associated training and ground support equipment. These modifications are vital to the Forces and will provide a increase in crew protection via an Increased Crew Protection (ICP) cab, decrease Operations and Support (O and S) costs, reduce logistical impacts, resolve safety issues, and mitigate obsolescence. Additional material changes will provide operational flexibility, and capability against an expanded target set.						
<b>Justification:</b> FY10 Base funding in the amount of \$38.690 million will procure the hardware, software, and integration of the Universal Fire Control System, Reliability/Obsolescence Mitigation/Safety, Increased Crew Protection (ICP), and Enhanced Command and Control (C2). FY10 OCO funding in the amount of \$32.319 million will procure Increased Crew Protection and Enhanced Command and Control (C2).						

<b>Exhibit P-40M, Budget Item Justification Sheet</b>						Date: May 2009
Appropriation / Budget Activity / Serial No: Missile Procurement, Army / 3 / Modification of missiles			P-1 Item Nomenclature HIMARS MODIFICATIONS (C67501)			
Program Elements for Code B Items:				Code:	Other Related Program Elements: C02901, 0603778A090, 0603778A093, C67500	
Description		Fiscal Years				
OSIP No.	Classification	2008 & PR	FY 2009	FY 2010	TC	Total
Enhanced Command and Control (C2)						
1-06-02-0571	Operational	0.0	0.0	19.3	15.0	34.3
Universal Fire Control System						
1-05-02-0568	Operational	24.1	3.7	6.3	0.1	34.2
Increased Crew Protection (ICP) Cab						
1-05-02-0569	Crew Survivability	9.2	11.0	42.5	25.5	88.1
Reliability/Obsolescence Mitigation						
1-03-02-0556	Oper/Reliab/Safety	10.9	1.6	2.9	233.5	248.9
PNU/GPA Upgrades						
1-04-02-0569	Operational	0.3	0.1	0.0	0.0	0.4
Add on Armor (AoA)						
1-05-02-0570	Crew Survivability	3.3	0.0	0.0	0.0	3.3
Totals		47.8	16.4	70.9	274.1	409.2

**INDIVIDUAL MODIFICATION**

Date: May 2009

MODIFICATION TITLE: Enhanced Command and Control (C2) [MOD 1] 1-06-02-0571

MODELS OF SYSTEM AFFECTED: High Mobility Artillery Rocket System (HIMARS)

**DESCRIPTION / JUSTIFICATION:**

The current on-board fire control system for the M142 HIMARS Launcher lacks the necessary Command & Control (C2) functions to meet the emerging threat found within the theater of operations for Operation Iraqi Freedom (OIF)/Operation Enduring Freedom (OEF). The new proposed requirement demands some tactical fire direction and the ability for one launcher to control other launchers, increased operational flexibility with the ability to reduce the fire support footprint, and reduce the sensor-to-shooter timeline. This increased capability will eliminate the immediate requirement for Field Artillery C2 nodes, allow timely precision strikes, and will be capable of integrating with Joint assets. This enhancement will consist of adding High Frequency (HF) and Satellite Communications (SATCOM) radios, antennas, and a new laptop with display.

**DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):**

Enhanced C2s capability of long range communications and situational awareness has been developed and integrated on both the M270A1 and HIMARS launch platforms. This capability is currently being evaluated by the user under a safety release. Qualification testing of this initial capability will begin in 4QTR09. Tactics, Techniques, and Procedures and Concept of Operations are currently being developed at Ft. Sill, OK.

**Installation Schedule**

Pr Yr Totals	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs									61	61	61	61								
Outputs									38	57	76	73								

  

	FY 2014				FY 2015				FY 2016				FY 2017				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		244
Outputs																		244

METHOD OF IMPLEMENTATION: Depot      ADMINISTRATIVE LEADTIME: 3 months      PRODUCTION LEADTIME: 9 months  
 Contract Dates: FY 2010 - Jan 10      FY 2011 -      FY 2012 -  
 Delivery Dates: FY 2010 - Oct 10      FY 2011 -      FY 2012 -

**INDIVIDUAL MODIFICATION**

Date: May 2009

MODIFICATION TITLE (cont): Enhanced Command and Control (C2) [MOD 1] 1-06-02-0571

FINANCIAL PLAN: (\$ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	<b>RDT&amp;E</b>									
<b>Procurement</b>										
Kit Quantity										
Installation Kits										
Installation Kits, Nonrecurring										
Equipment					244	19.3	131	9.0	375	28.3
Equipment, Nonrecurring										
Engineering Change Orders										
Data										
Training Equipment										
Support Equipment										
Other										
Interim Contractor Support										
<b>Installation of Hardware</b>										
FY 2007 & Prior Equip -- Kits										
FY 2008 -- Kits										
FY 2009 Equip -- Kits										
FY 2010 Equip -- Kits							244	3.9	244	3.9
FY 2011 Equip -- Kits							112	1.8	112	1.8
FY 2012 Equip -- Kits							19	0.3	19	0.3
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
TC Equip- Kits										
Total Installment	0	0.0	0	0.0	0	0.0	375	6.0	375	6.0
Total Procurement Cost		0.0		0.0		19.3		15.0		34.3

**INDIVIDUAL MODIFICATION**

Date: May 2009

MODIFICATION TITLE: Universal Fire Control System [MOD 2] 1-05-02-0568

MODELS OF SYSTEM AFFECTED: High Mobility Artillery Rocket System (HIMARS)

**DESCRIPTION / JUSTIFICATION:**

The Universal Fire Control System is an upgrade providing improvements to the current M142 HIMARS Launcher's Improved Fire Control System. This program is required to mitigate HIMARS FRP 2 (Full Rate Production) obsolescence issues with the Power Personal Computer 2 Executive Processor (PPC2EP) Circuit Card Assembly (CCA) and the 10 Base 2 system interface. This modification will reduce the quantity of executive processor (EP) circuit cards, eliminate an unused MIL-STD-1553 system bus interface, and eliminate other components such as the Tactical Processor Unit (TPU), Mass Storage Unit (MSU), and the Programmable Communications Controller (PCC) circuit card. The addition of a 10/100 Base T system interface provides future growth for obsolescence mitigation and operational concerns. Replacing the PPC2EP CCA with the PPC7ECP (Power personal Computer 7 Executive Processor) CCA, the fire control system will mitigate obsolescence to both future productions and fielded launchers and will reduce the number of CCA required to support the fleet. By decreasing the Line Replaceable Units (LRU) and Circuit Card Assemblies (CCA) there will be reduced Operational and Support costs, reduced electrical power requirements and increased vehicle space and stowage availability. The procurement effort is planned for the acquisition of a total of 121 kits for the M142 HIMARS Launchers covering launchers bought from Low Rate Initial Production (LRIP) Years 1-3 and Full Rate Production (FRP) Year 1.

**DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):**

A contract modification was signed in 2QFY05, which authorized engineering development of the Universal Fire Control System. The Preliminary Design Review (PDR) took place in 3QFY05 and the Critical Design Review (CDR) occurred in 4QFY05. Line Replaceable Unit (LRU) qualification tests were conducted in FY07. Functional Configuration Audits are complete and system level tests and were conducted in 2QFY08. The Universal Fire Control System was cut into Full Rate Production (FRP2) in FY08.

**Installation Schedule**

Pr Yr Totals	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
Inputs	20	10	10	10	10	7	7	7	7	8	8	8	9								
Outputs	20			19	21		19	9				19	14								

  

	FY 2014				FY 2015				FY 2016				FY 2017				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		121
Outputs																		121

**METHOD OF IMPLEMENTATION:** Depot                      **ADMINISTRATIVE LEADTIME:** 3 months                      **PRODUCTION LEADTIME:** 13 months  
**Contract Dates:** FY 2010 - Nov 10                      FY 2011 -                      FY 2012 -  
**Delivery Dates:** FY 2010 - Dec 11                      FY 2011 -                      FY 2012 -

**INDIVIDUAL MODIFICATION**

Date: May 2009

MODIFICATION TITLE (cont): Universal Fire Control System [MOD 2] 1-05-02-0568

FINANCIAL PLAN: (\$ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	<b>RDT&amp;E</b>									
<b>Procurement</b>										
Kit Quantity	60	1.4	28	0.1	33	0.1			121	1.6
Installation Kits										
Installation Kits, Nonrecurring										
Equipment	32	6.0	16	3.2	39	5.8			87	15.0
Equipment, Nonrecurring	34	16.4							34	16.4
Engineering Change Orders										
Data										
Training Equipment										
Support Equipment	17	0.3	6	0.4	9	0.4			32	1.1
Other										
Interim Contractor Support										
<b>Installation of Hardware</b>										
FY 2007 & Prior Equip -- Kits	20								20	
FY 2008 -- Kits			40						40	
FY 2009 Equip -- Kits					28				28	
FY 2010 Equip -- Kits							33	0.1	33	0.1
FY 2011 Equip -- Kits										
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
TC Equip- Kits										
Total Installment	20	0.0	40	0.0	28	0.0	33	0.1	121	0.1
Total Procurement Cost		24.1		3.7		6.3		0.1		34.2

**INDIVIDUAL MODIFICATION**

Date: May 2009

MODIFICATION TITLE: Increased Crew Protection (ICP) Cab [MOD 3] 1-05-02-0569

MODELS OF SYSTEM AFFECTED: High Mobility Artillery Rocket System (HIMARS)

**DESCRIPTION / JUSTIFICATION:**

The current M142 HIMARS launcher cab does not meet the requirements as defined in the HIMARS Operational Requirements Document (ORD). The HIMARS vehicle and cab is a derivative of the Family of Medium Tactical Vehicles (FMTV) and the FMTV initial design required no ballistic protection to its vehicles. Based on the results of Operation Iraqi Freedom (OIF)/Operation Enduring Freedom (OEF) the need for the cab to be protected against specified threats was validated. In addition to common threats to tactical wheel vehicles, protection against the launcher blast and foreign object debris is also required. Without this modification the HIMARS crew will lack adequate crew protection during combat and the system will fail to meet the requirements of the ORD.

**DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONE(S):**

Development of the ICP Cab began 1QFY06 and was initiated with engineering trade-off analyses to determine the best technical approach over the ballistic protection needs and the mobility/vehicle weight restrictions of the M142 Launcher / M1140 FMTV Carrier. The System Requirements Review (SRR) In-Process Review (IPR) occurred in 4QFY06 and the Preliminary Design Review (PDR) took place in 1QFY07. The Critical Design Review (CDR) occurred in 3QFY07. Full Development for this program will complete in FY09. The ICP cab design has completed all required system level testing. The production incorporation of the ICP cab is planned for FY09.

**Installation Schedule**

Pr Yr Totals	FY 2009				FY 2010				FY 2011				FY 2012				FY 2013			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	5	5	5	4	6	6	6	6	30	30	31	31								
Outputs				19				24	19	19	38	46								

  

	FY 2014				FY 2015				FY 2016				FY 2017				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		165
Outputs																		165

**METHOD OF IMPLEMENTATION:** Depot      **ADMINISTRATIVE LEADTIME:** 3 months      **PRODUCTION LEADTIME:** 9 months  
 Contract Dates: FY 2010 - Jan 10      FY 2011 -      FY 2012 -  
 Delivery Dates: FY 2010 - Oct 10      FY 2011 -      FY 2012 -



**INDIVIDUAL MODIFICATION**

Date: May 2009

MODIFICATION TITLE (cont): Increased Crew Protection (ICP) Cab [MOD 3] 1-05-02-0569

FINANCIAL PLAN: (\$ in Millions)

	FY 2008 and Prior		2009		2010		TC		Total	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	<b>RDT&amp;E</b>									
<b>Procurement</b>										
Kit Quantity										
Installation Kits										
Installation Kits, Nonrecurring										
Equipment	19	9.2	24	11.0	122	42.1	64	22.5	229	84.8
Equipment, Nonrecurring										
Engineering Change Orders										
Data										
Training Equipment										
Support Equipment										
Other										
Interim Contractor Support										
<b>Installation of Hardware</b>										
FY 2007 & Prior Equip -- Kits			19						19	
FY 2008 -- Kits										
FY 2009 Equip -- Kits					24	0.4			24	0.4
FY 2010 Equip -- Kits							122	1.9	122	1.9
FY 2011 Equip -- Kits							64	1.0	64	1.0
FY 2012 Equip -- Kits										
FY 2013 Equip -- Kits										
FY 2014 Equip -- Kits										
TC Equip- Kits										
Total Installment	0	0.0	19	0.0	24	0.4	186	3.0	229	3.3
Total Procurement Cost		9.2		11.0		42.5		25.5		88.1

<b>Exhibit P-40, Budget Item Justification Sheet</b>						Date: May 2009
Appropriation / Budget Activity / Serial No: Missile Procurement, Army / 3 / Modification of missiles				P-1 Item Nomenclature HELLFIRE Modifications (C71500)		
Program Elements for Code B Items:		Code:	Other Related Program Elements:			
	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	20.6			0.0		20.6
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	20.6			0.0		20.6
Initial Spares						
Total Proc Cost	20.6			0.0		20.6
Flyaway U/C						
Weapon System Proc U/C						
<b>Description:</b> The HELLFIRE family of air-to-ground missiles provides precision kill capability against heavy, advanced armor and individual hard point targets. Laser HELLFIRE uses semi-active laser terminal guidance and is the primary anti-tank armament of the AH 64 Apache, OH-58 Kiowa Warrior, and special operations helicopters. Longbow HELLFIRE is a missile system that provides the Army with a fire-and-forget, anti-armor capability for the Apache Longbow and future helicopters. The fire-and-forget Longbow HELLFIRE system greatly increases aircraft survivability and dramatically improves target acquisition and engagement capabilities in adverse weather when the battlefield is obscured (smoke, fog, dust), and when the threat is using countermeasures. The HELLFIRE modifications will convert the existing missile variants from the current configuration to a new variant to support the warfighters immediate operational requirements. These modifications could include, but would not be limited to, retro fits, warhead conversions, software modifications, modifications to systems performance and alternative platforms.						
<b>Justification:</b> Note: There is .01 million of funds in FY 10, supporting Hellfire Modifications and keeping the budget line open.						

<b>Exhibit P-40M, Budget Item Justification Sheet</b>	Date: May 2009
---	----------------

Appropriation / Budget Activity / Serial No: Missile Procurement, Army / 3 / Modification of missiles	P-1 Item Nomenclature HELLFIRE Modifications (C71500)
--	--

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

Description		Fiscal Years				
OSIP No.	Classification	2008 & PR	FY 2009	FY 2010	TC	Total
Unmanned Aerial Systems (UAS) Conversions						
0-00-00-0000	Added Capability	4.4	0.0	0.0	0.0	4.4
Rocket Motor Refit						
0-00-00-0000	Operational	12.6	0.0	0.0	0.0	12.6
Totals		17.0	0.0	0.0	0.0	17.0

<b>Exhibit P-40, Budget Item Justification Sheet</b>						Date: May 2009
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 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	2920.5	24.2	24.8	22.3	227.9	3219.7
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	2920.5	24.2	24.8	22.3	227.9	3219.7
Initial Spares						
Total Proc Cost	2920.5	24.2	24.8	22.3	227.9	3219.7
Flyaway U/C						
Weapon System Proc U/C						
<b>Description:</b> Provides for the procurement of spares to support initial fielding of new or modified end items.						
<b>Justification:</b> 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 2010 funds will procure Patriot Mods, MLRS Mods, and HIMARS/HIMARS Mods initial spares.						
FY 10 \$In Millions  HIMARS \$ 8.943 HIMARS Mods 1.807 MLRS Mods 1.021 Patriot Mods 10.567 Total \$22.338						

<b>Exhibit P-40, Budget Item Justification Sheet</b>						Date: May 2009
Appropriation / Budget Activity / Serial No: Missile Procurement, Army / 5 / Support equipment and facilities				P-1 Item Nomenclature AIR DEFENSE TARGETS (C93000)		
Program Elements for Code B Items:		Code:	Other Related Program Elements:			
	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	413.4	4.2	6.4	4.2	Continuing	Continuing
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	413.4	4.2	6.4	4.2	Continuing	Continuing
Initial Spares	1.3					1.3
Total Proc Cost	414.7	4.2	6.4	4.2	Continuing	Continuing
Flyaway U/C						
Weapon System Proc U/C					Continuing	Continuing
<b>Description:</b> The Air Defense Artillery (ADA) Targets program provides target hardware, scoring ancillary equipment, payload equipment and ground support equipment for worldwide active Army and National Guard Air Defense Artillery training. This training consists of DA Pamphlet 350-38 (Standards in Training Commission) required gunnery tables and aerial target tracking, training and scoring.						
<b>Justification:</b> FY2010 base dollars of \$4.188 million procures Air Defense Artillery Targetry and ancillary hardware consisting of scoring devices, aerial payloads and ground support equipment in support of DA PAM 350-38, Standards in Training Commission (STRAC) derived required gunnery tables, aerial target tracking (Captive Flight Trainer (CFT) and Tracking Head Trainer (THT)) training as well as targets for Missile Live Fire training when missiles are allocated IAW the Missile Distribution Plan (MIDP). These targets support the U.S. Army Avenger systems worldwide. Training requirements are generated by Department of the Army Major Field Commands, Training Centers, Division Level Commands and real world mission rehearsals. These field requirements have been reviewed and validated against ongoing force restructuring and are consistent with the approved training doctrine. These targets are necessary to meet Army Regulation 220-1 (Unit Status Reporting) training requirements, training strategies and gunnery standards, and are essential to qualify soldiers in support of unit readiness.						

<b>Exhibit P-5, Weapon MSLS Cost Analysis</b>		Appropriation/Budget Activity/Serial No: Missile Procurement, Army / 5 / Support equipment and facilities			P-1 Line Item Nomenclature: AIR DEFENSE TARGETS (C93000)			Weapon System Type:		Date: May 2009	
<b>MSLS Cost Elements</b>		ID CD	<b>FY 08</b>			<b>FY 09</b>			<b>FY 10</b>		
			Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
			\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000
<b>HARDWARE</b>											
Remotely Piloted Vehicle Target (RPVT)		A	1371	281	5	1573	300	5	1560	260	6
Scoring (Sensors)		A				1125	250	5	375	75	5
Ground Station		A				660	6	110			
RPVT Beyond Visual Range (BVR) Payload		A	94	9	10	62	6	10	220	20	11
Scoring (Airborne Kit)		A				1287	93	14	450	30	15
<b>HARDWARE COSTS</b>			<b>1465</b>			<b>4707</b>			<b>2605</b>		
<b>SUPPORT</b>											
Program Management Support			2498			1284			1283		
Logistics/Field Svc Support			276			290			300		
Hardware Qualification Test						142					
<b>SUPPORT COSTS</b>			<b>2774</b>			<b>1716</b>			<b>1583</b>		
<b>Total:</b>			<b>4239</b>			<b>6423</b>			<b>4188</b>		

## Exhibit P-5a, Budget Procurement History and Planning

Date:  
May 2009

Appropriation/Budget Activity/Serial No: Missile Procurement, Army/ 5/ Support equipment and facilities	Weapon System Type:	P-1 Line Item Nomenclature: AIR DEFENSE TARGETS (C93000)								
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Units	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
<b>Remotely Piloted Vehicle Target (RPVT)</b>										
FY 2008	Griffon Aerospace Madison, AL	C/FFP	AMCOM	Oct 07	May 08	281	5	YES		
FY 2009	TBS TBS	C/FFP	AMCOM	May 09	Aug 09	300	5	YES		Aug 08
FY 2010	TBS TBS	C/FFP	AMCOM	Mar 10	Jun 10	260	6	YES		
<b>Scoring (Sensors)</b>										
FY 2009	TBS TBS	C/FFP	AMCOM	May 09	Jul 09	250	5	YES		Aug 08
FY 2010	TBS TBS	C/FFP	AMCOM	Mar 10	Jun 10	75	5	YES		
<b>Ground Station</b>										
FY 2009	TBS TBS	C/FFP	AMCOM	May 09	Jul 09	6	110	YES		Aug 08
<b>RPVT Beyond Visual Range (BVR) Payload</b>										
FY 2008	Griffon Aerospace Madison, AL	C/FFP	AMCOM	Dec 07	May 08	9	10	YES		
FY 2009	TBS TBS	C/FFP	AMCOM	May 09	Jul 09	6	10	YES		Aug 08
FY 2010	TBS TBS	C/FFP	AMCOM	Mar 10	Jun 10	20	11	YES		
<b>Scoring (Airborne Kit)</b>										
FY 2009	TBS TBS	C/FFP	AMCOM	May 09	Aug 09	93	14	YES		Aug 08
FY 2010	TBS TBS	C/FFP	AMCOM	Mar 10	Jun 10	30	15	YES		

REMARKS:

<b>Exhibit P-40, Budget Item Justification Sheet</b>						Date: May 2009
Appropriation / Budget Activity / Serial No: Missile Procurement, Army / 5 / Support equipment and facilities				P-1 Item Nomenclature ITEMS LESS THAN \$5.0M (MISSILES) (CL2000)		
Program Elements for Code B Items:		Code:	Other Related Program Elements:			
	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	42.6	0.0	0.0	1.2		43.8
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	42.6	0.0	0.0	1.2		43.8
Initial Spares						
Total Proc Cost	42.6	0.0	0.0	1.2		43.8
Flyaway U/C						
Weapon System Proc U/C						
<b>Description:</b> Provides for the procurement of various tools and shop sets to support the Army's missile systems worldwide. There is ten thousand dollars in each of the years, FY 2008 and FY 2009.						
<b>Justification:</b> Funding will procure tools and shop sets to support Patriot, TOW, Multiple Launch Rocket System (MLRS), High Mobility Artillery Rocket System (HIMARS), Avenger, and Calibration.						



<b>Exhibit P-5, Weapon MSLS Cost Analysis</b>	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: May 2009
---	--	---	---------------------	-------------------

MSLS Cost Elements	ID	FY 08			FY 09			FY 10		
	CD	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
<b>Various Systems:</b>										
Shop Sets / Tools		10			10			1178		
<b>Total:</b>		<b>10</b>			<b>10</b>			<b>1178</b>		

<b>Exhibit P-40, Budget Item Justification Sheet</b>						Date: May 2009
Appropriation / Budget Activity / Serial No: Missile Procurement, Army / 5 / Support equipment and facilities				P-1 Item Nomenclature PRODUCTION BASE SUPPORT (CA0100)		
Program Elements for Code B Items:		Code:	Other Related Program Elements:			
	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	347.7	4.0	4.1	4.4		360.2
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	347.7	4.0	4.1	4.4		360.2
Initial Spares						
Total Proc Cost	347.7	4.0	4.1	4.4		360.2
Flyaway U/C						
Weapon System Proc U/C						
<b>Description:</b> 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.						
<b>Justification:</b> FY 2010 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.						

<b>Exhibit P-40, Budget Item Justification Sheet</b>						Date: May 2009
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:			
	Prior Years	FY 2008	FY 2009	FY 2010	To Complete	Total Prog
Proc Qty						
Gross Cost	347.7	4.0	4.1	4.4	Continuing	Continuing
Less PY Adv Proc						
Plus CY Adv Proc						
Net Proc P1	347.7	4.0	4.1	4.4	Continuing	Continuing
Initial Spares						
Total Proc Cost	347.7	4.0	4.1	4.4	Continuing	Continuing
Flyaway U/C						
Weapon System Proc U/C					Continuing	Continuing
<b>Description:</b>						
<p>This program provides funding to the Army Test and Evaluation Command (ATEC), Developmental Test Command (DTC) to establish, modernize, expand or replace test 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. Programmed funding will be used to upgrade or replace production test instrumentation and equipment at the Redstone Technical Test Center (RTTC), Huntsville, AL and White Sands Missile Range (WSMR), NM.</p> <p>Iowa Army Ammunition Plant: This program provides funding for Iowa Army Ammunition Plant's (AAP's) continuing modernization of production capability for missile end items.</p>						
<b>Justification:</b>						
<p>ATEC: At RTTC, FY 2010 procures instrumentation to establish a state-of-the-art digital temperature to control and monitor temperature during shock, impact, and vibration testing of small missile systems; high speed digital data recorders, wideband receivers, and high speed thermal array recorders to receive, record, and display digital telemetry data streams with embedded missile seeker video for missile flight performance tests; replacement environmental chamber controllers that are outdated and unsupported; replacement signal conditioning equipment and fiber optics for rocket motor static firing tests; and optical components such as lens and mirrors, temperature sources, Blackbodies, integrating spheres, rotary table, motion controller, customized software analysis tools and instrumentation to upgrade the current night vision sensor (NVS) test infrastructure. At WSMR, FY 2010 procures new equipment for the Warheads Test Branch to remotely control and monitor hazardous testing on live ordnance and record test data from a safe distance; and multiple types of sensors that collect, record and analyze the physical environments on and near the Launcher during weapon firing events and provide specific test parameters such as temperature, pressure, noise, and vibration during missile pre-launch monitoring. 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. Benefits of this project include increased test efficiencies and decreased costs and risks to Army Program Managers.</p> <p>Iowa AAP: FY 2010 procurement supports supports the installation of two computer numeric control (CNC) drill machines for drilling the body and retaining ring prior to assembly and install a system of five heat exchangers for warhead presses in building 4B-22. This effort will also replace the existing hydraulic system in the 4B-22 warhead pressing area and reconstruct the existing lighting protection systems on the active explosive, Line 1, in accordance with Army regulations. In addition, this project will replace the existing compressor in Building 1-02 and procure and install</p>						

<b>Exhibit P-40, Budget Item Justification Sheet</b>		Date: May 2009
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:
two 200-horsepower rotary screw compressors.		

<b>Exhibit P-40C, Budget Item Justification Sheet</b>	Date: May 2009
---	----------------

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:
------------------------------------	-------	---------------------------------

**Title:**

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

U.S. Army Test and Evaluation Command (ATEC): Fiscal Years 2010 funding supports the equipment used for testing of production missile systems and components. This test instrumentation is used to collect and analyze data on missile safety, reliability and performance.

Iowa AAP: Fiscal Years 2010 procurement supports the production capability for missile end items.

PIF FOR OTHER (MISSILE APPROPRIATION - CA4002) (\$M)

LOCATION	PROJECT	FY08	FY09	FY10
Redstone Tech Test Center, Huntsville, AL; White Sands Missile Range, NM	N/A	1.975	2.015	2.155
Iowa AAP, Middletown, IA	6XX5333	2.052	2.091	2.283
<b>TOTAL</b>		<b>4.027</b>	<b>4.106</b>	<b>4.447</b>

**Exhibit P-40C, Budget Item Justification Sheet**

Date: May 2009

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:

<u>Location</u>	<u>Project Title</u>	<u>Project</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>
<u>Production Support</u>					
Iowa Army Ammunition Plant	Production Support Equipment Replacement	6XX5333	2052	2091	2283
	<b>Subtotal - Production</b>		<b>2,052</b>	<b>2,091</b>	<b>2,283</b>
<u>Environmental</u>					
	<b>Subtotal - Environmental</b>		<b>0</b>	<b>0</b>	<b>0</b>
	<b>Total Industrial Facilities</b>		<b>2,052</b>	<b>2,091</b>	<b>2,283</b>

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis ( <i>Dollars in Thousands</i> )							1. Date: May 2009			
2. Project Title/Type Production Support Equipment Replacement				3. End Item Supported Model Missile Warheads						
4. Project Number: 6XX5333		5. Annual Capacity Before (1-8-5) N/A			6. Annual Capacity After (1-8-5): N/A					
Element of Cost	FY 08	FY 09	FY 10	H. Facility						
<b>A. Construction Cost</b>	253		34	1. Name: <u>Iowa Army Ammunition Plant</u>						
<b>B. Equipment Cost*</b> (Individual equipment cost should be specified for all equipment costing more than \$0.5 Million)	1277	1719	1846	2. Location: <u>Middletown, Iowa</u>						
1.				3. Type (GOGO, GOCO, COCO): <u>GOCO</u>						
2.				<b>I. Related Projects</b>						
3.				Project Number	Title	FY & Appn	Value (\$ Mil)	Facing	Start Date	Compl Date
<b>Subtotal Costs</b>	1277	1719	1846							
<b>C. Equipment Installation Cost</b>	453	355	382							
<b>D. Contractor Support Cost</b>	38	17	21							
<b>E. Corps of Engineers Support Cost</b>										
<b>F. Other In-House Support Cost</b>	31									
<b>Total Facility Project Cost</b>	2052	2091	2283							
<b>G. Other Costs</b>				<b>J. Principal Milestones</b>					<b>Month &amp; Year</b>	
1. Facility Prove-out Cost				1. Concept Design Complete:					<u>Not Applicable</u>	
2. Material Construction Appn.				2. Final Design Complete:					<u>Aug 2010</u>	
				3. Initial/Final Project Award:					<u>Mar 2010/Mar 2011</u>	
				4. Construction Complete:					<u>Aug 2012</u>	
				5. Equipment Installation Complete:					<u>Oct 2012</u>	
				6. Prove Out Begins:					<u>Not Applicable</u>	
				7. Prove Out Complete:					<u>Not Applicable</u>	
<b>Narrative Explanation:</b>										
FY 2010 procurement supports the installation of two computer numeric control (CNC) drill machines (for drilling the body and retaining ring prior to assembly) and the installation of a system of five heat exchangers for warhead presses in building 4B-22. This effort will also replace the existing hydraulic system in the 4B-22 warhead pressing area and reconstruct the existing lighting protection systems on the active explosive, Line 1, in accordance with Army regulations. In addition, this project will replace the existing compressor in Building 1-02 and procure and install two 200-horsepower rotary screw compressors.										
FY 2011 procurement supports the replacment of existing coordinate measure machine (CMM) in building 4B-22. Acquisition of a replacement CMM will continue to provide this installation with measuring capabilities. This effort will procure and install a horizontal CNC lathe for machining pressed explosive warhead billets. In addition, it will rehabilitate the vertical test fire frame work at Firing Site 6 (FS-6) and replace the existing electrical conduit from the stand to the firing bunker. This effort will procure and install a 5-gallon vertical high shear mixer in building 3-16-2, as well as procure and install a 100-ton, double-acting, hydraulic billet press in building 1-19-5.										