

DEPARTMENT OF THE ARMY

Procurement Programs



Committee Staff Procurement Backup Book
Fiscal Year (FY) 2004/2005 Biennial Budget Estimate Submission

WEAPONS AND TRACKED COMBAT VEHICLES, ARMY

APPROPRIATION

February 2003

PROCUREMENT OF WEAPONS AND TRACKED COMBAT VEHICLES, ARMY

APPROPRIATION LANGUAGE

For construction, procurement, production, and modification of weapons and tracked combat vehicles, equipment, including ordnance, spare parts, and accessories therefor; specialized equipment and training devices; expansion of public and private plants, including the land necessary therefor, for the foregoing purposes, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to approval of title; and procurement and installation of equipment, appliances, and machine tools in public and private plants; reserve plant and Government and contractor-owned equipment layaway; and other expenses necessary for the foregoing purposes, \$1,640,704,000, to remain available for obligation until September 30, 2006.

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APPROPRIATION SUMMARY

APPROPRIATION

DOLLARS IN THOUSANDS

	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>PAGE</u>
Procurement of W&TCV, Army	2,167,937	2,228,408	1,640,704	2,015,532	3
TOTAL PROCUREMENT PROGRAM	2,167,937	2,228,408	1,640,704	2,015,532	

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APPROPRIATION Procurement of W&TCV, Army ACTIVITY		DOLLARS IN THOUSANDS				PAGE
		<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	
01	Tracked combat vehicles	2,063,518	2,099,071	1,537,872	1,872,594	4
02	Weapons and other combat vehicles	76,386	104,330	84,802	128,901	6
03	Spare and repair parts	28,033	25,007	18,030	14,037	8
APPROPRIATION TOTALS		2,167,937	2,228,408	1,640,704	2,015,532	

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APPROPRIATION Procurement of W&TCV, Army ACTIVITY 01 Tracked combat vehicles

DOLLARS IN THOUSANDS

LINE NO	ITEM NOMENCLATURE	ID	FY 2002		FY 2003		FY 2004		FY 2005	
			QTY	COST	QTY	COST	QTY	COST	QTY	COST
<i>TRACKED COMBAT VEHICLES</i>										
1	ABRAMS TRNG DEV MOD (GA5208)			5,466		5,411		6,252		3,652
2	BRADLEY BASE SUSTAINMENT (G80718)	B		(396,890)		(447,603)		(113,302)		(71,790)
	Less: Advance Procurement (PY)			<u>(-12,320)</u>		<u>(-10,184)</u>				
				384,570		437,419		113,302		71,790
3	BRADLEY BASE SUSTAINMENT (G80718)									
	Advance Procurement (CY)			2,681						
4	BRADLEY FVS TRAINING DEVICES (MOD) (GZ2500)	A		11,281		8,388		3,397		2,402
5	ABRAMS TANK TRAINING DEVICES (GB1300)	A		11,646		11,858				3,633
6	STRYKER (G85100)		300	653,315	302	774,776	301	955,027	340	969,773
7	Future Combat Systems: (FCS) (G86100)									225,289
	<i>SUB-ACTIVITY TOTAL</i>			<u>1,068,959</u>		<u>1,237,852</u>		<u>1,077,978</u>		<u>1,276,539</u>
<i>MODIFICATION OF TRACKED COMBAT VEHICLES</i>										
8	CARRIER, MOD (GB1930)	A		47,661		38,742				
9	FIST VEHICLE (MOD) (GZ2300)			6,688		6,848		16,756		
10	MOD OF IN-SVC EQUIP, FIST VEHICLE (GZ2320)					680		676		672
11	BFVS SERIES (MOD) (GZ2400)	A		59,011		59,023		23,126		46,381
12	HOWITZER, MED SP FT 155MM M109A6 (MOD) (GA0400)	A		5,294		17,069		36,092		19,050
13	FAASV PIP TO FLEET (GA8010)	A		9,169		2,894		10,981		7,312
14	IMPROVED RECOVERY VEHICLE (M88 MOD) (GA0570)	A	21	60,116		49,465				
15	HEAVY ASSAULT BRIDGE (HAB) SYS (MOD) (GZ3250)			7,484						

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APPROPRIATION Procurement of W&TCV, Army

ACTIVITY 01 Tracked combat vehicles

DOLLARS IN THOUSANDS

LINE NO	ITEM NOMENCLATURE	ID	FY 2002		FY 2003		FY 2004		FY 2005		
			QTY	COST	QTY	COST	QTY	COST	QTY	COST	
16	ARMORED VEH LAUNCH BRIDGE (AVLB) (MOD) (GZ3000)	A		3,968		9,853					
17	M1 ABRAMS TANK (MOD) (GA0700)	A		80,619		176,198		268,644		499,643	
18	M1A1D RETROFIT (GA0720)	A		11,481					67	12,207	
19	SYSTEM ENHANCEMENT PGM: SEP M1A2 (GA0730)	B	25	98,627	31	120,633					
20	ABRAMS UPGRADE PROGRAM (GA0750) Less: Advance Procurement (PY)	A		(649,144) (-256,547)		(580,529) (-210,591)		(92,942)			
				392,597		369,938		92,942			
21	ABRAMS UPGRADE PROGRAM (GA0750) Advance Procurement (CY)			194,438							
	<i>SUB-ACTIVITY TOTAL</i>			977,153		851,343		449,217		585,265	
	<i>SUPPORT EQUIPMENT AND FACILITIES</i>										
22	ITEMS LESS THAN \$5.0M (TCV-WTCV) (GL3100)			7,569		144		489		487	
23	PRODUCTION BASE SUPPORT (TCV-WTCV) (GA0050)			9,837		9,732		10,188		10,303	
	<i>SUB-ACTIVITY TOTAL</i>			17,406		9,876		10,677		10,790	
	ACTIVITY TOTAL			2,063,518		2,099,071		1,537,872		1,872,594	

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APPROPRIATION Procurement of W&TCV, Army ACTIVITY 02 Weapons and other combat vehicles

DOLLARS IN THOUSANDS

LINE NO	ITEM NOMENCLATURE	ID	FY 2002		FY 2003		FY 2004		FY 2005	
			QTY	COST	QTY	COST	QTY	COST	QTY	COST
<i>WEAPONS AND OTHER COMBAT VEHICLES</i>										
24	ARMOR MACHINE GUN, 7.62MM M240 SERIES (G13000)	A	716	7,919	1,780	16,846	1,480	16,559	1,960	24,050
25	MACHINE GUN, 5.56MM (SAW) (G12900)	A			750	2,979				
26	GRENADE LAUNCHER, AUTO, 40MM, MK19-3 (G13400)	A	1,510	28,322	626	16,383				
27	Mortar Systems (G02200)			3,267	52	9,656	59	10,102	26	4,579
28	M16 RIFLE (G14900)	A	3,060	1,950	5,564	3,052				
29	XM107, CAL. 50, SNIPER RIFLE (G01500)			150	2,118	600	8,763	600	8,753	600
30	5.56 CARBINE M4 (G14904)	A	2,386	2,365	8,999	9,001	8,635	8,978	8,362	9,124
31	HOWITZER LT WT 155MM (T) (G01700)			1,091				4,998	28	51,097
	<i>SUB-ACTIVITY TOTAL</i>			<u>47,032</u>		<u>66,680</u>		<u>49,390</u>		<u>97,551</u>
<i>MODIFICATION OF WEAPONS AND OTHER COMBAT VEHICLES</i>										
32	MARK-19 MODIFICATIONS (GB3000)			1,034		2,697		3,845		4,047
33	M4 CARBINE MODS (GB3007)	A				9,111		6,660		7,399
34	SQUAD AUTOMATIC WEAPON (MOD) (GZ1290)			4,372		4,049		5,096		805
35	Medium Machine Guns (MODS) (GZ1300)	A		736				2,970		3,009
36	HOWITZER, TOWED, 155MM, M198 (MODS) (GA0430)			2,844			13	882	13	781
37	M119 MODIFICATIONS (GC0401)	A		4,853		4,770				
38	M16 RIFLE MODS (GZ2800)	A		2,085				2,369		2,351
39	MODIFICATIONS LESS THAN \$5.0M (WOCV-WTCV) (GC0925)			1,243		803		2,220		2,201

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APPROPRIATION Procurement of W&TCV, Army

ACTIVITY 02 Weapons and other combat vehicles

DOLLARS IN THOUSANDS

LINE NO	ITEM NOMENCLATURE	ID	FY 2002		FY 2003		FY 2004		FY 2005	
			QTY	COST	QTY	COST	QTY	COST	QTY	COST
	<i>SUB-ACTIVITY TOTAL</i>			17,167		21,430		24,042		20,593
	<i>SUPPORT EQUIPMENT AND FACILITIES</i>									
40	ITEMS LESS THAN \$5.0M (WOCV-WTCV) (GL3200)			1,266		1,244		489		487
41	PRODUCTION BASE SUPPORT (WOCV-WTCV) (GC0050)			7,115		5,734		7,089		6,636
42	INDUSTRIAL PREPAREDNESS (GC0075)			3,351		7,321		2,675		2,635
43	SMALL ARMS (SOLDIER ENH PROG) (GC0076)			299		1,921		1,117		999
44	CLOSED ACCOUNT ADJUSTMENTS (GC9500)			156						
	<i>SUB-ACTIVITY TOTAL</i>			12,187		16,220		11,370		10,757
	ACTIVITY TOTAL			76,386		104,330		84,802		128,901

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APPROPRIATION Procurement of W&TCV, Army

ACTIVITY 03 Spare and repair parts

DOLLARS IN THOUSANDS

LINE NO	ITEM NOMENCLATURE	ID	FY 2002		FY 2003		FY 2004		FY 2005	
			QTY	COST	QTY	COST	QTY	COST	QTY	COST
	<i>SPARES AND REPAIR PARTS</i>									
45	SPARES AND REPAIR PARTS (WTCV) (GE0150)			28,033		25,007		18,030		14,037
	<i>SUB-ACTIVITY TOTAL</i>			<u>28,033</u>		<u>25,007</u>		<u>18,030</u>		<u>14,037</u>
	ACTIVITY TOTAL			<u>28,033</u>		<u>25,007</u>		<u>18,030</u>		<u>14,037</u>
	APPROPRIATION TOTAL			<u>2,167,937</u>		<u>2,228,408</u>		<u>1,640,704</u>		<u>2,015,532</u>

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2	G80718	BRADLEY BASE SUSTAINMENT	3
4	GZ2500	BRADLEY FVS TRAINING DEVICES (MOD)	16
5	GB1300	ABRAMS TANK TRAINING DEVICES	18
6	G85100	STRYKER	22
7	G86100	Future Combat Systems: (FCS)	31
8	GB1930	CARRIER, MOD	35
9	GZ2300	FIST VEHICLE (MOD)	37
11	GZ2400	BFVS SERIES (MOD)	42
12	GA0400	HOWITZER, MED SP FT 155MM M109A6 (MOD)	46
13	GA8010	FAASV PIP TO FLEET	50
14	GA0570	IMPROVED RECOVERY VEHICLE (M88 MOD)	54
15	GZ3250	HEAVY ASSAULT BRIDGE (HAB) SYS (MOD)	58
16	GZ3000	ARMORED VEH LAUNCH BRIDGE (AVLB) (MOD)	59
17	GA0700	M1 ABRAMS TANK (MOD)	61
18	GA0720	M1A1D RETROFIT	83
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20	GA0750	ABRAMS UPGRADE PROGRAM	94
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22	GL3100	ITEMS LESS THAN \$5.0M (TCV-WTCV)	101
23	GA0050	PRODUCTION BASE SUPPORT (TCV-WTCV)	102

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BLIN	SSN	Nomenclature	Page
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26	G13400	GRENADE LAUNCHER, AUTO, 40MM, MK19-3	111
27	G02200	Mortar Systems	115
29	G01500	XM107, CAL. 50, SNIPER RIFLE	120
30	G14904	5.56 CARBINE M4	126
31	G01700	HOWITZER LT WT 155MM (T)	132
33	GB3007	M4 CARBINE MODS	139
34	GZ1290	SQUAD AUTOMATIC WEAPON (MOD)	143
41	GC0050	PRODUCTION BASE SUPPORT (WOCV-WTCV)	145
42	GC0075	INDUSTRIAL PREPAREDNESS	150
45	GE0150	SPARES AND REPAIR PARTS (WTCV)	151

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: Procurement of W&TCV, Army /1/Tracked combat vehicles	P-1 Item Nomenclature ABRAMS TRNG DEV MOD (GA5208)
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Program Elements for Code B Items:	Code:	Other Related Program Elements:
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	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	34.6	5.3	5.5	5.4	6.3	3.7	3.8	1.1	1.1	1.1		67.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	34.6	5.3	5.5	5.4	6.3	3.7	3.8	1.1	1.1	1.1		67.6
Initial Spares												
Total Proc Cost	34.6	5.3	5.5	5.4	6.3	3.7	3.8	1.1	1.1	1.1		67.6
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

This program accomplishes modifications to Abrams Training Devices required as a result of changes to the Abrams tanks or tank training requirements. These changes are hardware and software modifications to existing equipment needed to keep simulators abreast of developments in the Fielded Abrams Tank fleet. These system modifications support the Legacy transition path of the Transformation Campaign Plan (TCP).

Justification:

FY04/05 procures M1A2 SEP (System Enhancement Program) upgrade kits to 19 Conduct of Fire Trainers (COFT's), 8 Advanced Gunnery Training Systems (AGTS's), and software upgrades for all Maintenance Training Systems (MTS's). This program meets needs validated by the Abrams tank user community. Degradation of tank training will occur if these modifications are delayed or deleted. The Conduct of Fire Trainer (COFT) Modifications are converting obsolete M60A3 trainers to M1A1 tank family trainers and are for National Guard units only. The other trainers detailed herein are for units at FORSCOM, USAREUR, TRADOC and Army Reserve units. All of these modifications represent significantly less costly alternatives to new procurements of similar equipment.

Since over 4000 tank crewmen and maintenance personnel train on these simulators each year, there are significant savings in fuel as well as tank wear and tear.

Exhibit P-40M, Budget Item Justification Sheet

Date:

February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army /1/Tracked combat vehicles

P-1 Item Nomenclature
ABRAMS TRNG DEV MOD (GA5208)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

Description		Fiscal Years									
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
Conduct of Fire Trnr (COFT) & M1A1D Conv.											
1-97-05-4526	Operational	13.7	2.9	3.6	1.5	3.8	1.1	1.1	1.1	0.0	28.8
M1A2 AGTS / Sep Modification											
1-97-05-4527	Operational	1.9	2.4	2.5	2.2	0.0	0.0	0.0	0.0	0.0	9.0
CCTT SEP Modification											
1-97-05-4529	Operational	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7
MTS SEP Modification											
1-97-05-4530	Operational	7.7	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	8.0
Tank Driver Trainer											
1-97-05-4528	Operational	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
Prior Year Closed Modifications											
0-00-00-0000		17.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.7
Totals		45.2	5.4	6.3	3.7	3.8	1.1	1.1	1.1	0.0	67.7

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: Procurement of W&TCV, Army /1/Tracked combat vehicles	P-1 Item Nomenclature BRADLEY BASE SUSTAINMENT (G80718)
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Program Elements for Code B Items:	Code: L	Other Related Program Elements:
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	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty		157	142	171								470
Gross Cost	1811.4	422.8	396.9	447.6	113.3	71.8	0.1	12.1	6.0			3282.0
Less PY Adv Proc			12.3	10.2								22.5
Plus CY Adv Proc		19.8	2.7									22.5
Net Proc (P-1)	1811.4	442.6	387.3	437.4	113.3	71.8	0.1	12.1	6.0			3282.0
Initial Spares	23.6	11.4	8.8	13.1	12.6	8.7						78.2
Total Proc Cost	1835.0	454.0	396.0	450.5	125.9	80.5	0.1	12.1	6.0			3360.2
Flyaway U/C												
Wpn Sys Proc U/C		2.8	2.7	2.6								

Description:

The Bradley Base Sustainment Program initiated a program to upgrade first generation Bradleys (A0) into the A2 configuration and bridge the production gap until the introduction of the A3 upgrade vehicles. FY97-00 provided four years of A3 LRIP vehicles. FY01 marked the first full rate production year of the A3 configuration and the first year of a three year multiyear contract. The upgraded A3 Bradley Fighting Vehicle will facilitate enhanced command and control, provide greater lethality, survivability, mobility, and sustainability required to defeat current and future threat forces while remaining operationally compatible with the main battle tank. The system supports the Legacy transition path of the Transformation Campaign Plan.

Justification:

FY04/05 funds the annualized cost associated with the deliveries and fielding of the FY02/03 production contracts. Due to administrative and production lead times, vehicles procured in FY02/03 will be fielded through the FY05 timeframe. Additionally, FY04/05 procures fielding of the various Bradley vehicles.

Quantities in prior years are a mix of A0 to A2's; A0 to A2 Linebackers and A2 to A3's; a mix of A0 to A2ODS's and A2 to A3's in FY99-FY01; all A2 to A3's in FY02-03.

Exhibit P-5, Weapon WTCV Cost Analysis		Appropriation/Budget Activity/Serial No. Procurement of W&TCV, Army / 1 / Tracked combat vehicles			P-1 Line Item Nomenclature: BRADLEY BASE SUSTAINMENT (G80718)			Weapon System Type:			Date: February 2003		
WTCV Cost Elements		FY 02			FY 03			FY 04			FY 05		
ID CD		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
BRADLEY BASE SUSTAINMENT (A2)		2681			53625			3484			237		
BRADLEY BASE SUSTAINMENT (A3)		393345	142	2770	396920	138	2876	122458			80220		
Total		396026			450545			125942			80457		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army /1/Tracked combat vehicles

P-1 Item Nomenclature
BRADLEY BASE SUSTAINMENT (M2A2/) (G80716)

Program Elements for Code B Items:

Code:
L

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	703	48		33								784
Gross Cost	949.0	64.8	2.7	53.6	3.5	0.2	0.1	12.1	6.0			1092.1
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	949.0	64.8	2.7	53.6	3.5	0.2	0.1	12.1	6.0			1092.1
Initial Spares												
Total Proc Cost	949.0	64.8	2.7	53.6	3.5	0.2	0.1	12.1	6.0			1092.1
Flyaway U/C												
Wpn Sys Proc U/C		1.3		1.6								

Description:

The Bradley Base Sustainment Program initiated a program to upgrade first generation Bradleys (A0) into the A2 configuration and bridge the production gap until the introduction of the A3 upgrade vehicles. Quantities in prior years are a mix of A0 to A2ODS's, A0 to A2 Linebackers. Quantities are A0 to A2ODS's in FY99-01.

The system supports the Legacy transition path of the Transformation Campaign Plan.

Justification:

F04/05 funds fielding of the various Bradley vehicles.

Exhibit P-5, Weapon WTCV Cost Analysis		Appropriation/Budget Activity/Serial No. Procurement of W&TCV, Army / 1 / Tracked combat vehicles			P-1 Line Item Nomenclature: BRADLEY BASE SUSTAINMENT (M2A2/) (G80716)			Weapon System Type:			Date: February 2003			
WTCV Cost Elements		ID	FY 02			FY 03			FY 04			FY 05		
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000
National Guard														
Vehicle					26571	33	805							
Other GFE (New)					4622	33	141							
Other GFE (Reman)					1520	33	47							
Contractor Engineering					13251									
National Guard Fielding					4118									
National Guard Program					50082									
BFVS Fielding			2681		3543			3484				237		
Total			2681		53625			3484				237		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No: Procurement of W&TCV, Army / 1 / Tracked combat vehicles		Weapon System Type:			P-1 Line Item Nomenclature: BRADLEY BASE SUSTAINMENT (M2A2) (G80716)					
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
Vehicle FY 2003	UDLP York PA	SS/FFP	TACOM	MAR-03	AUG-04	33	805	YES		

REMARKS:

FY 05 / 06 BUDGET PRODUCTION SCHEDULE							P-1 Item Nomenclature: BRADLEY BASE SUSTAINMENT (M2A2/) (G80716)													Date: February 2003												
COST ELEMENTS	MFR	FY	SERV	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 05													Fiscal Year 06												LATER
							Calendar Year 05													Calendar Year 06												
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
Vehicle																																
	1	FY 00	A	60	60	0																										
	1	FY 01	A	48	48	0																										
	1	FY 02	NG	33	33	0																										
	1	FY 03	A	33	22	11	11																									
Total				174	163	11	11																									

MFR	NAME/LOCATION	PRODUCTION RATES			REACHED D+	MFR Number	ADMINLEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	
		MIN.	1-8-5	MAX.			Prior 1 Oct	After 1 Oct			
1	UDLP, York PA	8.00	15.00	25.00	6	1	INITIAL REORDER	0 0	7 0	15 0	22 0
							INITIAL REORDER				
							INITIAL REORDER				
							INITIAL REORDER				
							INITIAL REORDER				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: Procurement of W&TCV, Army /1/Tracked combat vehicles	P-1 Item Nomenclature BRADLEY BASE SUSTAINMENT (M2A3) (G80717)
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Program Elements for Code B Items:	Code: L	Other Related Program Elements:
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	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	206	109	142	138								595
Gross Cost	862.3	358.0	394.2	394.0	109.8	71.6						2189.9
Less PY Adv Proc			12.3	10.2								22.5
Plus CY Adv Proc		19.8	2.7									22.5
Net Proc (P-1)	862.3	377.8	384.6	383.8	109.8	71.6						2189.9
Initial Spares	23.6	11.4	8.8	13.1	12.6	8.7						78.2
Total Proc Cost	885.9	389.2	393.3	396.9	122.5	80.2						2268.1
Flyaway U/C												
Wpn Sys Proc U/C		3.5	2.7	2.8								

Description:

The Bradley Base Sustainment Program initiated a program to upgrade first generation Bradleys (A0) into the A2 configuration and bridge the production gap until the introduction of the A3 upgrade vehicles. FY97-00 provided the four years of A3 Low Rate Initial Production (LRIP) vehicles. FY01 marked the first full rate production year of the A3 configuration and was the first year of a three year multiyear contract. The upgraded A3 Bradley Fighting Vehicle will facilitate enhanced command and control, provide greater lethality, survivability, mobility, and sustainability required to defeat current and future threat forces while remaining operationally compatible with the main battle tank. The system supports the Legacy transition path of the Transformation Campaign Plan.

Justification:

FY04/05 funds the annualized cost associated with the deliveries and fielding of the FY02/03 production contracts. Due to administrative and production lead times, vehicles procured in FY02/03 will be fielded through the FY05 timeframe. The A3 upgrade program will provide digital communications and target acquisition upgrades required to fight as a member of the combined arms team. These vehicles will be remanufactured in the prime contractor's plant to preserve the critical skills and vendor base to allow for future modernization.

A three year multi-year contract was signed for FY's 01-03.

Exhibit P-40C, Budget Item Justification Sheet

Date:

February 2003

Appropriation/Budget Activity/Serial No:

Procurement of W&TCV, Army /1/Tracked combat vehicles

P-1 Item Nomenclature

BRADLEY BASE SUSTAINMENT (M2A3) (G80717)

Program Elements for Code B Items:

Code:

L

Other Related Program Elements:

A3 Advanced Procurement Detail (in Mils):

FY	2001	2002	2003
FY2001 for FY2002	12.320		
FY2001 for FY2003	7.503		
FY2002		(12.320)	
FY2002 for FY2003		2.681	
FY2003			(10.184)

Exhibit P-5, Weapon WTCV Cost Analysis		Appropriation/Budget Activity/Serial No. Procurement of W&TCV, Army / 1 / Tracked combat vehicles			P-1 Line Item Nomenclature: BRADLEY BASE SUSTAINMENT (M2A3) (G80717)			Weapon System Type:			Date: February 2003		
WTCV Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
HARDWARE													
Vehicle		215817	142	1520	209516	138	1518						
Improved Bradley Acq Subsystem (IBAS)		46244	142	326	43711	138	317						
Forward Looking Infrared (FLIR)		45824	142	323	35411	138	257						
Other GFE		15478	142	109	22204	138	161						
Pre Mod Depot Maint		1439	142	10	1538	138	11						
Sub total		324802			312380								
Other Production Cost													
Engineering - Government		19107			19697			19381				16726	
Engineering - Contractor		21403			21362			21751				22161	
Project Management Administration		2752			2814			2807				2850	
Reimbursable Matrix Support		4536			3813			3805				3863	
Test and Eval (Prod Verification Test)		5972			3060			2175				1595	
Closure Costs								39201				10780	
Sub total		53770			50746			89120				57975	
Peculiar Support Equipment		8602			10760			7436				1416	
Fielding		7035			10492			13262				12162	
Assemble 10 ODS Vehicles					9600								
Sub Total		15637			30852			20698				13578	
GROSS P-1 END COST		394209			393978			109818				71553	
LESS: PRIOR YEAR ADV PROC		12320			10184								
NET P-1 FULL FUNDING COST		381889			383794			109818				71553	
PLUS: P-1 CY ADV PROC		2681											
OTHER NON P-1 COSTS													
INITIAL SPARES		8775			13126			12640				8667	
MODS													
TOTAL		11456			13126			12640				8667	
Total		393345			396920			122458				80220	

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No: Procurement of W&TCV, Army / 1 / Tracked combat vehicles		Weapon System Type:			P-1 Line Item Nomenclature: BRADLEY BASE SUSTAINMENT (M2A3) (G80717)					
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
Vehicle										
FY 2002	UDLP YORK PA	MY/FFP	TACOM	MAR 02	JUL 03	142	1520	YES		
FY 2003	UDLP YORK PA	MY/FFP	TACOM	MAR 03	JUN 04	138	1518	YES		
Improved Bradley Acq Subsystem (IBAS)										
FY 2001	RTIS/DRS DALLAS TX/ CAL	MY/FFP	AMCOM	MAY 01	FEB 02	138	1518	YES		
FY 2002	RTIS/DRS DALLAS TX/ CAL	MY/FFP	AMCOM	JAN 02	FEB 03	142	326	YES		
FY 2003	RTIS/DRS DALLAS TX/ CAL	MY/FFP	AMCOM	JAN 03	FEB 04	138	317	YES		
Forward Looking Infrared (FLIR)										
FY 2001	RTIS/DRS DALLAS TX/CAL	MY/FFP	CECOM	JAN 01	DEC 01	138	317	YES		
FY 2002	RTIS/DRS DALLAS TX/CAL	MY/FFP	CECOM	JAN 02	DEC 02	142	323	YES		
FY 2003	RTIS/DRS DALLAS TX/CAL	MY/FFP	CECOM	JAN 03	DEC 03	138	257	YES		

REMARKS: Multi year procurements (FY 01-03) for Vehicle and IBAS
Multi year procurement (FY 02-03) for FLIR

FY 03 / 04 BUDGET PRODUCTION SCHEDULE							P-1 Item Nomenclature: BRADLEY BASE SUSTAINMENT (M2A3) (G80717)																Date: February 2003																	
COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 03													Fiscal Year 04							LATER													
							Calendar Year 03													Calendar Year 04																				
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY		JUN	JUL	AUG	SEP									
Vehicle																																								
	1	FY 00	A	80	80	0																																		0
	1	FY 01	A	109	37	72	9	5	3	4	5	21	13		12																								0	
	1	FY 02	A	142	0	142									3	16	21	21	19	14	8	15	4					14	7								0			
	1	FY 03	A	138	0	138																												12	13	17	16	80		
Total				469	117	352	9	5	3	4	5	21	13		15	16	21	21	19	14	8	15	4				14	7	12	13	17	16				80				
MFR	NAME/LOCATION	PRODUCTION RATES			REACHED	MFR Number	ADMINLEAD TIME		MFR	TOTAL	REMARKS																													
		MIN.	1-8-5	MAX.	D+		Prior 1 Oct	After 1 Oct	After 1 Oct	After 1 Oct	Vehicle contract requires vehicle deliveries to be in battalion sets.																													
1	UDLP, YORK PA	8.00	15.00	25.00	0	1	INITIAL	0	7	15	22																													
							REORDER	0	0	0	0																													
							INITIAL																																	
							REORDER																																	
							INITIAL																																	
							REORDER																																	
							INITIAL																																	
							REORDER																																	

FY 05 / 06 BUDGET PRODUCTION SCHEDULE	P-1 Item Nomenclature: BRADLEY BASE SUSTAINMENT (M2A3) (G80717)	Date: February 2003
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COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 05												Fiscal Year 06												LATER		
							Calendar Year 05												Calendar Year 06														
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
Vehicle																																	
	1	FY 00	A	80	80	0																											
	1	FY 01	A	109	109	0																											
	1	FY 02	A	142	142	0																											
	1	FY 03	A	138	58	80	14	12	7	8	6	9	8	8	8																		
Total				469	389	80	14	12	7	8	6	9	8	8	8																		

MFR	NAME/LOCATION	PRODUCTION RATES			REACHED D+	MFR Number	ADMINLEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS	
		MIN.	1-8-5	MAX.			Prior 1 Oct	After 1 Oct				
1	UDLP, YORK PA	8.00	15.00	25.00	0	1	INITIAL	0	7	15	22	
							REORDER	0	0	0	0	
							INITIAL					
							REORDER					
							INITIAL					
							REORDER					
							INITIAL					
							REORDER					

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army /1/Tracked combat vehicles

P-1 Item Nomenclature
BRADLEY FVS TRAINING DEVICES (MOD) (GZ2500)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	28.1	18.6	11.3	8.4	3.4	2.4	5.6	4.6	4.4	4.1		90.8
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	28.1	18.6	11.3	8.4	3.4	2.4	5.6	4.6	4.4	4.1		90.8
Initial Spares												
Total Proc Cost	28.1	18.6	11.3	8.4	3.4	2.4	5.6	4.6	4.4	4.1		90.8
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

This program provides upgrades to the BFVS Training Devices, which are required every time the vehicle software changes. Current vehicle plans call for periodic software updates. These changes will effect the functionality of the Bradley Advanced Training System (BATS) and the M2A3 Maintenance Trainers.

The system supports the Legacy transition path of the Transformation Campaign Plan.

Justification:

FY04/05 procures 20 additional Close Combat Tactical Trainer (CCTT) kits for the Bradley A3. The CCTT Simulator is a modular training device designed to support multiple configurations of the BFVS. It is imperative that the CCTT simulation systems keep pace with the Army's modernization initiatives. Funding will procure M2A3 modification kits for the CCTT M2A2 simulators. These kits will allow training on the M2A2ODS and M2A3. This will bring the total CCTT kits procured to 63. FY04/05 also procures software upgrades including incorporation of the latest vehicle and FBCB2 software packages into Bradley Training Devices.

This program meets the requirements as stated in the Bradley Operational Requirements Document. A degradation of training will take place if these modifications are delayed or cancelled. Without satisfactory Training Devices, additional vehicles and increased OPTEMPO funding would be required.

Exhibit P-40M, Budget Item Justification Sheet

Date:

February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army /1/Tracked combat vehicles

P-1 Item Nomenclature
BRADLEY FVS TRAINING DEVICES (MOD) (GZ2500)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

Description		Fiscal Years									
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
Close Combat Tactical Trainer											
1-01-05-0010	Operational	20.8	0.2	2.5	0.0	0.0	0.0	0.0	0.0	0.0	23.5
Through Sight Video System (TSV) Mod											
1-99-05-4567	Operational	3.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7
Bradley Advanced Training Systems											
2-02-05-0010	Operational	5.9	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.9
Software Upgrades											
1-96-05-4513	Operational	14.2	1.3	0.9	2.4	5.6	4.6	4.4	4.1	0.0	37.5
Maintenance Trainer Mods											
1-99-05-4568	Operational	0.0	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.7
Prior Year Closed Modifications											
0-00-00-0000		13.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.6
Totals		58.0	8.4	3.4	2.4	5.6	4.6	4.4	4.1	0.0	90.9

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army /1/Tracked combat vehicles

P-1 Item Nomenclature
ABRAMS TANK TRAINING DEVICES (GB1300)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	93.1	10.4	11.6	11.9		3.6	3.7	1.1	1.1	1.1	29.7	167.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	93.1	10.4	11.6	11.9		3.6	3.7	1.1	1.1	1.1	29.7	167.3
Initial Spares												
Total Proc Cost	93.1	10.4	11.6	11.9		3.6	3.7	1.1	1.1	1.1	29.7	167.3
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

The family of M1A2 Training Aids, Devices, Simulators and Simulations (TADSS) will replicate actual tank performance without incurring the much higher costs of operating the tank itself.

- Advance Gunnery Training System (AGTS) - These are precision gunnery trainers, which provide realistic commander and gunner training under varying scenarios. Embedded Training (ET) integrates AGTS functions seamlessly into the M1A2 SEP to provide onboard virtual training.

- Maintenance Trainers - These systems provide training in essential unit and direct support/general support tasks. There are four different trainers: M1A2 Hands-on-Trainer (HOT); Hull Electrical Diagnostic/Troubleshooting (D/T) Trainer; Turret/Fire Control D/T Trainer; and Direct Support Electrical System Test Set Line Replaceable Unit (DSESTS LRU) simulators. The students (approximately 600/yr) will learn about the sub-systems and procedures for troubleshooting and fault isolating the tank system. The intended sites are Ft. Knox and Aberdeen Proving Ground.

- System Enhancement Program (SEP) Integration - This funding provides for integration of SEP improvements into the various training devices impacted by those changes on the tank.

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

Justification:

FY04/05 will procure Advance Gunnery Training Systems, adapter kits permitting various different training devices and simulators to be installed on M1A2 tanks, and software upgrades to keep training device software in sync with the software changes on the M1A2 tanks.

Exhibit P-5, Weapon WTCV Cost Analysis		Appropriation/Budget Activity/Serial No. Procurement of W&TCV, Army / 1 / Tracked com bat vehicles			P-1 Line Item Nomenclature: ABRAMS TANK TRAINING DEVICES (GB1300)			Weapon System Type:			Date: February 2003			
WTCV Cost Elements		ID CD	FY 02			FY 03			FY 04			FY 05		
			TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000
1. ADV. GNRY TRNG. SYS./EMBEDDED TRNG		A												
a. AGTS/ET Software			1713			1524						1112		
b. AGTS/ET Gov't Spt.			197			50						49		
c. AGTS/ET Non Recurring Cost			2585											
AGTS/ET SUBTOTAL			4495			1574						1161		
2. M1A2 MAINT. TRNG. SYS. (MTS)		A												
a. MTS Software														
b. MTS Gov't Spt.														
c. MTS Non Recurring Cost														
MTS SUBTOTAL														
3. A2 NON SYS. INTEGR. KITS (NSI)		A												
a. NSI Software			735			943						1875		
b. NSI Gov't Spt.			50			48						197		
c. NSI Non Recurring Cost														
NSI SUBTOTAL			785			991						2072		
4. M1A2 SOFTWARE UPGR. (SWU)		A												
a. SWU Software			875			882						351		
b. SWU Gov't Spt.			50			49						49		
c. SWU Non Recurring Cost														
SWU SUBTOTAL			925			931						400		
5. M1A2 SEP INTEGR (A2SI)		A												
a. A2SI Software			5041			7654								
b. A2SIGov't Spt.			400			708								
c. A2SI Non Recurring Cost														
A2SI SUBTOTAL			5441			8362								
Total			11646			11858						3633		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army / 1 / Tracked combat vehicles

Weapon System Type:

P-1 Line Item Nomenclature:
ABRAMS TANK TRAINING DEVICES (GB1300)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Units	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
1. ADV. GNRV TRNG. SYS./EMBEDDED TRNG										
FY 2002	Lockheed Martin Orlando, FL	C-FFP	STRICOM	May-02	Apr-04			yes	no	n/a
FY 2003	Oasis Adv Engr, Inc. Auburn, MI	C-FFP	TACOM	May-03	Apr-04			yes	no	n/a
FY 2003	Lockheed Martin Orlando, FL	C-FFP	STRICOM	May-03	Apr-04			yes	no	n/a
FY 2005	Oasis Adv Engr, Inc. Auburn, MI	C-FFP	TACOM	May-05	Apr-06			yes	no	n/a
2. M1A2 MAINT. TRNG. SYS. (MTS)										
FY 2002	Lockheed Martin Orlando, FL	C-FFP	STRICOM	Dec-01	Oct-02			yes	no	n/a
3. A2 NON SYS. INTEGR. KITS (NSI)										
FY 2002	Research Triangle Ins. (RTI) Charlotte, N.C.	C-FFP	STRICOM	Feb-02	May-03			yes	no	n/a
FY 2003	Research Triangle Ins. (RTI) Charlotte, N.C.	C-FFP	STRICOM	Feb-03	May-04			yes	no	n/a
FY 2005	Research Triangle Ins. (RTI) Charlotte, N.C.	C-FFP	STRICOM	Feb-05	May-06			yes	no	n/a
4. M1A2 SOFTWARE UPGR. (SWU)										
FY 2002	various	C-FFP	STRICOM	Mar-02	Mar-03			yes	no	n/a
FY 2003	various	C-FFP	STRICOM	Mar-03	Mar-04			yes	no	n/a
FY 2005	various	C-FFP	STRICOM	Mar-05	Mar-06			yes	no	n/a

REMARKS: A2 NON SYSTEM INTEGRATION KITS (#3 Above) provide system unique kits allowing the installation of non-system training devices such as the Thru Sight Video (TSV), Tank Weapon Gun Simulation System (TWGSS), Precision Range Integrated Maneuver Exercise (PRIME) and Multiple Integrated Laser Engagement System (MILES) into the M1A2 tank.

M1A2 Trainer Software upgrades (# 4 above) is not a Training Device in the normal accepted sense of the term; rather it will fund an annual update of M1A2 Training Device software to keep pace with ongoing changes in the M1A2 SEP tank.

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No: Procurement of W&TCV, Army / 1 / Tracked combat vehicles		Weapon System Type:			P-1 Line Item Nomenclature: ABRAMS TANK TRAINING DEVICES (GB1300)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Units	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
5. M1A2 SEP INTEGR (A2SI) FY 2002 FY 2003	various	C-FFP	STRICOM	Feb-02	Mar-03			yes	no	n/a
	various	C-FFP	STRICOM	Feb-03	Mar-04			yes	no	n/a

REMARKS: A2 NON SYSTEM INTEGRATION KITS (#3 Above) provide system unique kits allowing the installation of non-system training devices such as the Thru Sight Video (TSV), Tank Weapon Gun Simulation System (TWGSS), Precision Range Integrated Maneuver Exercise (PRIME) and Multiple Integrated Laser Engagement System (MILES) into the M1A2 tank.

M1A2 Trainer Software upgrades (# 4 above) is not a Training Device in the normal accepted sense of the term; rather it will fund an annual update of M1A2 Training Device software to keep pace with ongoing changes in the M1A2 SEP tank.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: Procurement of W&TCV, Army /1/Tracked combat vehicles
 P-1 Item Nomenclature: STRYKER (G85100)

Program Elements for Code B Items: 0603653A
 Code: C03
 Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	7	447	300	302	301	340	330	84				2111
Gross Cost	22.0	920.9	653.3	774.8	955.0	969.8	903.4	779.9	76.4	168.4	761.8	6985.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	22.0	920.9	653.3	774.8	955.0	969.8	903.4	779.9	76.4	168.4	761.8	6985.6
Initial Spares												
Total Proc Cost	22.0	920.9	653.3	774.8	955.0	969.8	903.4	779.9	76.4	168.4	761.8	6985.6
Flyaway U/C												
Wpn Sys Proc U/C		2.1	2.2	2.7	3.3	2.9	2.8	9.5				

Description:

The Brigade Combat Team (BCT), equipped with Stryker Vehicles, is a full spectrum combat force. It has utility in all operational environments. It will be employed as part of a division. It can be used across the spectrum of military operations. The Brigade Combat Team deploys rapidly and conducts effective combat operations immediately on arrival to prevent, contain, stabilize, or resolve a conflict through shaping and decisive operations. Configurations of Stryker Vehicles are:

Infantry Carrier: The Infantry Carrier Vehicle (ICV) provides protected transport and supporting fires for the infantry squad during dismounted assault. The ICV carries an infantry squad with individual equipment.

Reconnaissance Vehicle: The Reconnaissance Vehicle (RV) provides force situational awareness, gathering and transmitting real time intelligence while moving throughout the battlefield in close, complex, and urban terrain.

Mobile Gun System: The Mobile Gun System (MGS) supports dismounted infantry and engages the enemy in close combat in order to clear opposition and permit rapid movement allowing the force to maintain the initiative, occupy and/or secure key objectives, and defeat strong points.

Mortar Carrier: The Mortar Carrier (MC) will support infantry units with screening obscurants, suppressive forces and on-call supporting fires. 120mm and 81mm mortar carrier variants provide complimentary capabilities with responsive, accurate and lethal indirect fire support to the dismounted infantry assault.

Commander's Vehicle: The Commander's Vehicle (CV) provides the brigade with the means to receive information and data, analyze, prepare and transmit data, and control the forces/functions carrying out combat missions.

Fire Support Vehicle: The Fire Support Vehicle (FSV) provides automated enhanced surveillance, target acquisition, target identification, target tracking, target designation, position location, and communications functionality. Targets will be transmitted instantly to the fire support system and shooter.

Engineer Squad Vehicle: The Engineer Squad Vehicle (ESV) provides maneuver/mobility support capabilities, which include obstacle clearing, in-stride breaching of surface mines, proofing of subsurface mines, and smoke generation for local protection.

Medical Evacuation Vehicle: The Medical Evacuation Vehicle (MEV) is the Battalion Aid Station for brigade units, providing treatment for serious injury and advanced trauma cases.

Exhibit P-40C, Budget Item Justification Sheet

Date:

February 2003

Appropriation/Budget Activity/Serial No:

Procurement of W&TCV, Army /1/Tracked combat vehicles

P-1 Item Nomenclature

STRYKER (G85100)

Program Elements for Code B Items:

0603653A

Code:

C03

Other Related Program Elements:

Antitank Guided Missile Vehicle: The Antitank Guided Missile Vehicle (ATGM) is the brigade's primary tank killing system. The ATGM reinforces the brigade's infantry battalion, reinforces the brigade reconnaissance squadron, and provides long-range direct fires.

NBC Reconnaissance Vehicle: The Nuclear, Biological, Chemical Reconnaissance Vehicle (NBCRV) provides on the move and remote near-real-time nuclear, biological and chemical detection and surveillance to supply battlefield visualization of NBC hazards.

This system supports the Interim transition path of the Transformation Campaign Plan (TCP).

Justification:

FY04/05 funds support the procurement of the fourth and fifth of six Brigade Combat Teams (BCT) equipped with Stryker Vehicles. An immediate need exists for Stryker Vehicle equipped, C-130 transportable, Brigade Combat Teams (BCT), capable of deployment to anywhere on the globe in a combat ready configuration. A dynamic asymmetric threat and operational environment demands full spectrum, strategically responsive, agile and dominant land forces. Immediate response by a lethal, versatile, tactically agile joint force capable of operational maneuver once in the Area of Operations is essential to fulfilling the Warfighting needs of the National Command Authority. The Stryker-equipped BCT is this force. The use of a common platform/common chassis design reduces requirements for repair parts and logistics support in the area of operations.

Production Ready IAV's and Fire Support Vehicles:

Production Verification Test: Apr 02 - Aug 03

Live Fire Test & Evaluation: Jun 02 - Jul 03

Initial Operational Test & Evaluation: Feb 03 - Aug 03

NBC Reconnaissance Vehicle:

Live Fire Test & Evaluation: Jan 05 - Jul 05

Production Verification Test: Dec 04 - Jul 05

Production Qualification Test: May 03 - Dec 04

Initial Operational Test & Evaluation: May 05 - Jun 05

Mobile Gun System:

Production Qualification Test: Mar 03 - Mar 04

Live Fire Test & Evaluation: Jul 04 - Mar 05

Production Verification Test: Jul 04 - Mar 05

Initial Operational Test & Evaluation: Jan 05 - Mar 05

Exhibit P-5, Weapon WTCV Cost Analysis		Appropriation/Budget Activity/Serial No. Procurement of W&TCV, Army / 1 / Tracked combat vehicles			P-1 Line Item Nomenclature: STRYKER (G85100)			Weapon System Type:			Date: February 2003		
WTCV Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000
Stryker Vehicles													
-Infantry Carrier Vehicle (ICV)		171843	120	1432	171691	118	1456	20605	14	1472	200955	132	1522
-ICV Block Improvements					19851			2473			23316		
-Reconnaissance Vehicle (RV)		75141	57	1318	69103	51	1355	161735	115	1406	74537	51	1462
-RV Block Improvements					8926			21132			9372		
-Anti-Tank Guided Missile Vehicle (ATGM)		85091	36	2364									
-ATGM Block Improvements													
-Mortar Carrier (MC)		55050	36	1529	52186	36	1450	43741	25	1750	58424	38	1537
-MC Block Improvements					6822			4975			7561		
-Fire Support Vehicle (FSV)		19429	12	1620	19145	14	1368	37717	27	1397	20412	14	1458
-FSV Block Improvements					2350			4758			2468		
-Engineer Squad Vehicle (ESV)		25302	10	2530	26067	10	2607	45047	17	2650	27469	10	2747
-ESV Block Improvements					213			380			224		
-Commander's Vehicle (CV)		24950	14	1782	39850	22	1811	44011	28	1572	42025	22	1910
-CV Block Improvements					3608			4822			3788		
-Medical Evacuation Vehicle (MEV)		21422	15	1428	23123	18	1285	24714	19	1301	24488	18	1360
-MEV Block Improvements					384			425			403		
-NBC Reconnaissance Vehicle (NBCRV)								35356	17	2080			
-NBCRV Block Improvements								380					
-Mobile Gun System (MGS)					120786	33	3660	131225	39	3365	202576	55	3683
-MGS Block Improvements					5552			6889			9716		
Interim Armored Vehicles Total		478228			569657			590385			707734		
Government Furnished Equipment/ASIOE		8238			9766			29523			11904		
- Long Range Adv Scout Surveillance FSV					18217			40860			18273		
- Long Range Adv Scout Surveillance RV								9593			5016		
- M707 Striker MEP					2626			5766			3116		
Engineering Change Proposal (ECP)		9094			9190			14998			16047		
Basic Issue Items (BII)		2266			2413			2440			2801		
Production Verification Test													
- Government PVT		17891			37334			18171			16674		
- Contractor Support to PVT		30800			22400			12800			6400		
Comparison Evaluation		4177											
Refurbishment of Test Vehicles								18348			10885		
Program Management Support (Govt)		33259			34714			37391			37985		
System Fielding Support		42716			33492			25264			24720		
Block Improvement Retrofit (Bde 1 & 2)								70068			26998		
Initial Spares		3809			819			1963			16424		
Training Devices		17250			23752			36848			23565		

Exhibit P-5, Weapon WTCV Cost Analysis		Appropriation/Budget Activity/Serial No. Procurement of W&TCV, Army / 1 / Tracked combat vehicles			P-1 Line Item Nomenclature: STRYKER (G85100)			Weapon System Type:			Date: February 2003			
WTCV Cost Elements		ID CD	FY 02			FY 03			FY 04			FY 05		
			TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000
System Technical Support (STS)								32793				33411		
Post Deployment Software Support (PDSS)								3420				3420		
Integrated Data Environment			4005			4000		4000				4000		
Award Fee						6000								
Unscheduled Modifications														
Pre-Planned Product Improvements (P3I)														
Facilitization			1582			396		396				400		
Total			653315			774776		955027				969773		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army / 1 / Tracked combat vehicles

Weapon System Type:

P-1 Line Item Nomenclature:
STRYKER (G85100)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Stryker Vehicles										
FY 2002	GM GDLS Defense Group L.L.C. Shelby Township, MI	C/FFP(5-2)	TACOM	Mar 02	Feb 03	242	1615	NA	NA	
FY 2002	GM GDLS Defense Group L.L.C. Shelby Township, MI	C/FFP(5-2)	TACOM	Jun 02	May 03	58	1508	NA	NA	
FY 2003	GM GDLS Defense Group L.L.C. Shelby Township, MI	C/FFP(5-3)	TACOM	Mar 03	Feb 04	269	1455	NA	NA	
FY 2003	GM GDLS Defense Group L.L.C. Shelby Township, MI	C/FFP(5-3)	TACOM	Aug 03	Jun 04	33	3660	NA	NA	
FY 2004	GM GDLS Defense Group L.L.C. Shelby Township, MI	C/FFP(5-4)	TACOM	Jan 04	Dec 04	39	3365	NA	NA	
FY 2004	GM GDLS Defense Group L.L.C. Shelby Township, MI	C/FFP(5-4)	TACOM	Jan 04	Nov 04	262	1576	NA	NA	
FY 2005	GM GDLS Defense Group L.L.C. Shelby Township, MI	C/FFP(5-5)	TACOM	Nov 04	Oct 05	285	1573	NA	NA	
FY 2005	GM GDLS Defense Group L.L.C. Shelby Township, MI	C/FFP(5-5)	TACOM	Jul 05	Jun 06	55	3683	NA	NA	
- Long Range Adv Scout Surveillance FSV										
FY 2004	Raytheon Company McKinney, TX	C/FPM(5-5)	CECOM	Dec 03	Feb 05	27	410	Yes	NA	
FY 2005	Raytheon Company McKinney, TX	OPTION	CECOM	Dec 04	Feb 06	14	410	Yes	NA	
- Long Range Adv Scout Surveillance RV										
FY 2002	Raytheon Company McKinney, TX	C/FPM(5-3)	CECOM	Feb 02	Feb 03	53	405	Yes	NA	
FY 2002	Raytheon Company McKinney, TX	C/FPM(5-4)	CECOM	Feb 03	Feb 04	6	369	Yes	NA	

REMARKS: Unit cost for Stryker Vehicles is an average of all IAV configurations procured on delivery orders issued during the respective fiscal year. Does not include Block Improvement costs.

- FY03 average unit cost for quantity of 33 reflects procurement of MGS vehicles.
- FY04 average unit cost increased due to vehicle mix of ICR brigade requiring high quantity of RVs, as well as procurement of NCRCVs and high quantity of MGS vehicles.
- FY04 average unit cost for quantity of 39 reflects procurement of MGS vehicles.
- FY05 average unit cost for quantity of 55 reflects procurement of MGS vehicles.

LRAS3 and Laser Designator Modules (Fire Support Sensor System (FS3)) will replace Lightweight Laser Designator/Rangefinder for FSVs beginning BDE 4.

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No: Procurement of W&TCV, Army / 1 / Tracked combat vehicles		Weapon System Type:			P-1 Line Item Nomenclature: STRYKER (G85100)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
FY 2003	Raytheon Company McKinney, TX	C/FPM(5-4)	CECOM	Feb 03	Feb 04	51	369	Yes	NA	
FY 2004	Raytheon Company McKinney, TX	C/FPM(5-5)	CECOM	Dec 03	Feb 05	115	386	Yes	NA	
FY 2005	Raytheon Company McKinney, TX	OPTION	CECOM	Dec 04	Feb 06	51	386	Yes	NA	
- M707 Striker MEP										
FY 2003	Systems & Electronics, Inc. Sanford, FL	SS/FFP	TACOM	Jan 03	Feb 04	14	177	Yes	NA	
FY 2004	Systems & Electronics, Inc. Sanford, FL	OPTION	TACOM	Jan 04	Feb 05	27	198	Yes	NA	
FY 2005	Systems & Electronics, Inc. Sanford, FL	SS/FFP	TACOM	Jan 05	Feb 06	14	208	Yes	NA	

REMARKS: Unit cost for Stryker Vehicles is an average of all IAV configurations procured on delivery orders issued during the respective fiscal year. Does not include Block Improvement costs.

- FY03 average unit cost for quantity of 33 reflects procurement of MGS vehicles.
- FY04 average unit cost increased due to vehicle mix of ICR brigade requiring high quantity of RVs, as well as procurement of NCRCVs and high quantity of MGS vehicles.
- FY04 average unit cost for quantity of 39 reflects procurement of MGS vehicles.
- FY05 average unit cost for quantity of 55 reflects procurement of MGS vehicles.

LRAS3 and Laser Designator Modules (Fire Support Sensor System (FS3)) will replace Lightweight Laser Designator/Rangefinder for FSVs beginning BDE 4.

FY 07 / 08 BUDGET PRODUCTION SCHEDULE										P-1 Item Nomenclature: STRYKER (G85100)								Date: February 2003																	
COST ELEMENTS	M F R	FY	S E R V	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 07														Fiscal Year 08												L A T E R		
							Calendar Year 07														Calendar Year 08														
							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					
Stryker Vehicles																																			
	1	FY 00	A	4	4	0																												0	
	1	FY 00	A	3	3	0																												0	
	1	FY 01	A	35	35	0																												0	
	1	FY 01	A	47	47	0																												0	
	1	FY 01	A	365	365	0																												0	
	1	FY 02	A	242	242	0																												0	
	1	FY 02	A	58	58	0																												0	
	1	FY 03	A	269	269	0																													0
	1	FY 03	A	33	33	0																													0
	1	FY 04	A	39	39	0																													0
	1	FY 04	A	262	262	0																													0
	1	FY 05	A	285	285	0																													0
	1	FY 05	A	55	55	0																													0
	1	FY 06	A	330	0	330	32	34	34	27	27	26	25	26	25	24	24	26																0	
	1	FY 07	A	84	0	84		A											21	21	11						9	11	11					0	
Total																																			
							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	MIN.	1-8-5	MAX.	REACHED D+	MFR Number	ADMINLEAD TIME				MFR	TOTAL	REMARKS																						
							Prior 1 Oct	After 1 Oct		After 1 Oct	After 1 Oct																								
1	GM GDLS Defense Group L.L.C., Shelby Township, MI	1.00	56.00	63.00	0	1	INITIAL		6	1	11	12																							
							REORDER		0	3	11	14																							
							INITIAL																												
							REORDER																												
							INITIAL																												
							REORDER																												
							INITIAL																												
							REORDER																												

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: Procurement of W&TCV, Army /1/Tracked combat vehicles
 P-1 Item Nomenclature: Future Combat Systems: (FCS) (G86100)

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

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty									1	1		2
Gross Cost						225.3	829.2	1638.0	3562.2	2919.0		9173.7
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)						225.3	829.2	1638.0	3562.2	2919.0		9173.7
Initial Spares												
Total Proc Cost						225.3	829.2	1638.0	3562.2	2919.0		9173.7
Flyaway U/C												
Wpn Sys Proc U/C									3562.2	2919.0		

Description:

Future combat systems are comprised of a family of advanced, networked air and ground based maneuver, maneuver support, and sustainment systems that will include manned and unmanned platforms...networked via a C4ISR architecture, including networked communications, network operations, sensors, battle command systems, and manned and unmanned reconnaissance and surveillance capabilities that will enable improved situational understanding and operations at a level of synchronization heretofore unachievable.

Future combat systems will operate as a system of systems that will network existing systems, systems already under development, and new systems to be developed to meet the needs of the Unit of Action. The network will enable improved intelligence, surveillance, and reconnaissance, battle command, real time sensor-shooter linkages, and increased synergy between echelons and within small units. It will also enable the Unit of Action to connect to Unit of Employment, joint capabilities, and national assets making these capabilities available to the small units of the Unit of Action.

To satisfy the Army's urgent capability requirement and to keep up with the pace of technology, the FCS uses an evolutionary acquisition strategy that ensures insertion of mature technologies and capabilities in manageable pieces over time.

Army transformation is grounded in the operational framework of joint doctrine and the concepts for future joint and combined operations. Transforming to the Objective Force and developing the Future Combat Systems (FCS) is the Army's number one priority. The FCS family of systems is being designed with the joint fight in mind. The system supports the Objective Force Transition Path of the Transformation Campaign Plan (TCP).

Justification:

FY 2005 procures the necessary plant facilitization and long lead items for FCS to support production beginning in FY 2006 and FUE in FY 2008. The pre-production activities will include as a minimum initial production facilities, tooling, fixtures, inspection equipment, special tooling, test equipment, materials and production engineering required to establish the production capability. The FCS program is currently in the Concept and Technology Development phase of the acquisition life cycle as a pre- Major Defense Acquisition Program (MDAP). A decision in FY 2003 will authorize entrance into the System Development and Demonstration (SDD) phase and recognition as an Acquisition Category 1D (ACAT-1D) program. A subsequent decision will authorize the Low Rate Initial Production (LRIP) of a quantity of systems required to support testing. A Full Rate Production decision will follow after successful completion of testing.

Exhibit P-40C, Budget Item Justification Sheet

Date:

February 2003

Appropriation/Budget Activity/Serial No:

Procurement of W&TCV, Army /1/Tracked combat vehicles

P-1 Item Nomenclature

Future Combat Systems: (FCS) (G86100)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

First Unit Equipped (FUE) will be achieved upon receipt of a unit set of equipment that satisfies Initial Operational Test and Evaluation (IOTE) requirements, accompanied by completed training for operators and maintainers, the establishment of a logistics capability sufficient to maintain the unit, and issue of the required support package for the unit. FUE for the unit designated for Initial Operational Test and Evaluation is expected by the end of FY 2008. Initial Operational Capability (IOC) with threshold capable Block 1 equipment to a brigade-sized unit will be completed by the end of 2010.

Exhibit P-5, Weapon WTCV Cost Analysis		Appropriation/Budget Activity/Serial No. Procurement of W&TCV, Army / 1 / Tracked combat vehicles			P-1 Line Item Nomenclature: Future Combat Systems: (FCS) (G86100)			Weapon System Type:			Date: February 2003			
WTCV Cost Elements		ID CD	FY 02			FY 03			FY 04			FY 05		
			TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000
Long Lead Items Facilitization												27034		
												198255		
Total												225289		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army / 1 / Tracked combat vehicles

Weapon System Type:

P-1 Line Item Nomenclature:
Future Combat Systems: (FCS) (G86100)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Units	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Long Lead Items FY 2005	Boeing	FFP	TACOM-Warren	Nov 04						
Facilitization FY 2005	TBD	FFP	TACOM-Warren	Nov 04						

REMARKS:

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army /1/Tracked combat vehicles

P-1 Item Nomenclature
CARRIER, MOD (GB1930)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	865.6	54.2	47.7	38.7								1006.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	865.6	54.2	47.7	38.7								1006.3
Initial Spares												
Total Proc Cost	865.6	54.2	47.7	38.7								1006.3
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

The M113 Family of Vehicles (FOV) consists of over 14,000 vehicles, 16 different variants/platforms in service in U.S. Army units. The M113 FOV is approximately 40% of the tracked combat vehicle fleet in a mechanized infantry or armor heavy division. The family provides transport for troops, anti-tank, fire direction, smoke, mortar, cargo carrier and command & control systems. The fleet is required for the next 20 plus years and must be modified to increase mobility, survivability and to install operational enhancements. Operation Desert Storm highlighted the need to improve the mobility and survivability, chemical protection, driver's night vision, fuel system, and Command Post Auxiliary Power Units for the fleet. This system supports the Legacy transition path of the Transformation Campaign Plan (TCP).

Exhibit P-40M, Budget Item Justification Sheet

Date:

February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army /1/Tracked combat vehicles

P-1 Item Nomenclature
CARRIER, MOD (GB1930)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

Description		Fiscal Years									
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
Prior Year Closed Modifications											
0-00-00-0000		384.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	384.1
Crew Chemical Protection											
1-191-05-4311	Oper Capability	6.9	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.2
Driver's Night Viewer											
1-94-05-4463	Oper Capability	7.6	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.1
Block I											
1-84-05-4026	Oper Capability	568.9	23.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	592.8
T-150 TRACK											
0-00-00-0000	Oper Capability	0.0	14.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.1
Totals		967.5	38.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1006.3

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army /1/Tracked combat vehicles

P-1 Item Nomenclature
FIST VEHICLE (MOD) (GZ2300)

Program Elements for Code B Items:
0203735A

Code:
B

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	82		56	9	9							156
Gross Cost	403.8	31.6	6.7	6.8	16.8							465.7
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	403.8	31.6	6.7	6.8	16.8							465.7
Initial Spares												
Total Proc Cost	403.8	31.6	6.7	6.8	16.8							465.7
Flyaway U/C												
Wpn Sys Proc U/C			0.1	0.8	1.9							

Description:

The Bradley Fire Support Vehicle (BFIST) consists of two variants: M7 BFIST and A3 BFIST. BFIST replaces the aging M981 Fire Support Vehicle for fire support planning, support, and execution for maneuver company commanders. The fire support team is attached to a Mechanized Infantry or Armor company and is primarily responsible for developing and executing fire support plans that enable success on the battlefield. The BFIST allows fire support operations to be performed on the battlefield in vehicles with the same signature, survivability, and mobility as other Bradley's in the maneuver units it supports. The M7 variant integrates a fire support mission equipment package (MEP) onto an Operation Desert Storm (ODS) variant chassis. Procurement of the M7 variant ended in FY00 and resumes in FY04. The A3 BFIST takes advantage of Bradley A3 technology and capability advancements to imbed much of the fire support MEP; what is not imbedded is added as an engineering change proposal (ECP) to the chassis. A3 BFIST procurement occurs in FY03 and supports the 4ID and 1CD. This system supports the Legacy transition path of the Transformation Campaign Plan (TCP).

Justification:

FY04 procures fielding and logistic support for the A3 BFIST and also funds the procurement of nine (9) BFIST M7 ODS chassis and MEP kits. The current fire support vehicle, M981, was unable to maintain the operational tempo of Bradley/Abrams equipped maneuver forces during Operation Desert Storm (ODS).

Exhibit P-5, Weapon WTCV Cost Analysis		Appropriation/Budget Activity/Serial No. Procurement of W&TCV, Army / 1 / Tracked combat vehicles			P-1 Line Item Nomenclature: FIST VEHICLE (MOD) (GZ2300)			Weapon System Type:			Date: February 2003			
WTCV Cost Elements		ID	FY 02			FY 03			FY 04			FY 05		
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Hardware Cost														
1. A3 BFIST Upgrade Kit			2492	56	45	650	9	72	7988	9	888			
2. M7 Vehicle Upgrade Kit									734	9	82			
3. M7 Mission Equipment Package (MEP)														
SUBTOTAL			2492			650			8722					
Non Recurring Production														
4. Engineering Production			3211			1740			1805					
5. Engineering Government			20			300			616					
6. Program Management Administration			410			300			412					
7. Reimbursable Matrix Support						300			822					
8. Fielding			455			658			3429					
9. Test & Evaluation			100			2900			950					
10. Support Equipment														
SUBTOTAL			4196			6198			8034					
Total			6688			6848			16756					

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army / 1 / Tracked combat vehicles

Weapon System Type:

P-1 Line Item Nomenclature:
FIST VEHICLE (MOD) (GZ2300)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
1. A3 BFIST Upgrade Kit										
FY 2002	UDLP, York PA	SS/FFP	USATACOM, Warren, MI	Feb 03	May 03	56	45			
FY 2003	UDLP, York PA	SS/FFP	USATACOM, Warren, MI	Mar-03	Jan 05	9	72			
2. M7 Vehicle Upgrade Kit										
FY 2004	UDLP, York PA	SS/FFP	USATACOM, Warren, MI	Dec-03	Jun-05	9	888			
3. M7 Mission Equipment Package (MEP)										
FY 2004	SEI, Sanford FL	SS/FFP	USATACOM, Warren, MI	Dec-03	Jun-05	9	82			

REMARKS:

FY 03 / 04 BUDGET PRODUCTION SCHEDULE							P-1 Item Nomenclature: FIST VEHICLE (MOD) (GZ2300)														Date: February 2003		
--	--	--	--	--	--	--	---	--	--	--	--	--	--	--	--	--	--	--	--	--	------------------------	--	--

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 03														Fiscal Year 04					L A T E R			
							Calendar Year 03														Calendar Year 04								
							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
1. A3 BFIST Upgrade Kit																													
	1	FY 02	A	56	0	56																							
	1	FY 03	A	9	0	9																							
2. M7 Vehicle Upgrade Kit																													
	1	FY 04	A	9	0	9																							
Total				74		74							4	5	5	5	5	7			12	9	4						

MFR	NAME/LOCATION	PRODUCTION RATES			REACHED D+	MFR Number	ADMINLEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS	
		MIN.	1-8-5	MAX.			Prior 1 Oct	After 1 Oct				
1	UDLP, York PA	1.00	2.00	4.00	0	1	INITIAL	0	11	13	24	
							REORDER	0	2	14	16	
							INITIAL					
							REORDER					
							INITIAL					
							REORDER					
							INITIAL					
							REORDER					
							INITIAL					
							REORDER					

FY 05 / 06 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature:
FIST VEHICLE (MOD) (GZ2300)

Date:
February 2003

COST ELEMENTS	MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 05												Fiscal Year 06												L A T E R									
							Calendar Year 05												Calendar Year 06																					
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP										
1. A3 BFIST Upgrade Kit	1	FY 02	A	56	56	0																																		0
	1	FY 03	A	9	0	9																																	0	
2. M7 Vehicle Upgrade Kit	1	FY 04	A	9	0	9																																	0	
Total				74	56	18																																		

MFR	NAME/LOCATION	MIN.	1-8-5	MAX.	REACHED D+	MFR Number	INITIAL	REORDER	Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
1	UDLP, York PA	1.00	2.00	4.00	0	1	INITIAL	REORDER	0	11	13	24	
							INITIAL	REORDER	0	2	14	16	
							INITIAL	REORDER					
							INITIAL	REORDER					
							INITIAL	REORDER					
							INITIAL	REORDER					

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: Procurement of W&TCV, Army /1/Tracked combat vehicles	P-1 Item Nomenclature BFVS SERIES (MOD) (GZ2400)
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Program Elements for Code B Items:	Code: L	Other Related Program Elements:
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	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	960.2	64.3	59.0	59.0	23.1	46.4	40.9	45.7	46.8	31.3	122.8	1499.5
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	960.2	64.3	59.0	59.0	23.1	46.4	40.9	45.7	46.8	31.3	122.8	1499.5
Initial Spares												
Total Proc Cost	960.2	64.3	59.0	59.0	23.1	46.4	40.9	45.7	46.8	31.3	122.8	1499.5
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

This program provides for the procurement and application of modification kits for the Bradley Fighting Vehicle. The Operation Desert Storm improvements are four Engineer Change Proposals (ECPs) which will correct deficiencies identified in Operation Desert Storm and include: Laser Range Finder, Position Navigation System, Equipment Restow Improvement, and Drivers Vision Enhancement. Operational improvements are the Vehicle Intercommunications System, the Digital Electronic Control Assembly, and Armor Tiles. The A2 ODS Appliqué modification will integrate Bradley Fighting Vehicles with the Army's Appliqué computer system to improve situational awareness. The High Priority Improvement Mod reflects evolutionary improvements to the Bradley A3 vehicle. It includes enhanced Turret Processor Unit, vehicle automated diagnostics, integrated driver's vision system, and improved vehicle core electronics. These modifications will be applied concurrently in "blocks" to reduce application cost and inconvenience to the unit. The Bradley supports the Legacy transition path of the Transformation Campaign Plan (TCP).

Justification:

FY04/05 procures A2 ODS Appliqué and High Priority Improvement modifications. These modifications will continue to meet requirements identified to correct deficiencies in Operation Desert Storm, and to improve the lethality, survivability, mobility and situational awareness of the Bradley Fighting Vehicle. Reduced Bradley Fighting Vehicle capability, survivability, and mobility will occur if these modifications are delayed or reduced.

Exhibit P-40M, Budget Item Justification Sheet

Date:

February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army /1/Tracked combat vehicles

P-1 Item Nomenclature
BFVS SERIES (MOD) (GZ2400)

Program Elements for Code B Items:

Code:
L

Other Related Program Elements:

Description		Fiscal Years									
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
A2 ODS Mods											
1-92-05-4404	Oper. Capability	191.8	27.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	219.5
A2 ODS Appliqué											
1-98-05-4539	Oper. Capability	40.6	3.6	1.8	0.0	0.0	0.0	0.0	0.0	0.0	46.0
Armor tiles											
1-84-05-4038	Oper. Capability	151.6	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	176.6
BFVS High Priority Improvements											
1-98-05-4550	Oper. Capability	28.2	2.7	21.4	46.3	40.9	45.7	46.7	31.3	122.9	386.1
Prior Year Closed Mods											
0-00-00-0000		671.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	671.4
Totals		1083.6	59.0	23.2	46.3	40.9	45.7	46.7	31.3	122.9	1499.6

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: BFVS High Priority Improvements [MOD 4] 1-98-05-4550

MODELS OF SYSTEM AFFECTED: M2A3/M3A3/M2A2 ODS

DESCRIPTION/JUSTIFICATION:

The Bradley Fighting Vehicle Systems are expected to remain in service until at least 2032. These vehicles will represent the primary mechanized infantry force for some time into the foreseeable future. In order to remain viable and retain a strategic hedge against ever-improving threat forces, a block modification is being planned for incorporation on these systems. The production implementation of these improvements will be incorporated on the A3 production line, but vehicles built prior the upgrades will require modification. These improvements include the Improved Driver's Viewer system (IDVS), which includes the Driver's Viewer Enhanced Sensor, Flat Panel Display to replace the instrument panel, Automotive Sensors for embedded Diagnostics, and the Digital Vehicle Distribution Box.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

TPU2 Spec Available Jan 01
 TPU2 Contract Award Jan 01
 Block 1 Spec Available Oct 03
 Block 1 Contract Award Jan 04

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
Totals									45	44	45	45	84	83	84	84	61	61	61	61	75
Inputs									45	44	45	45	84	83	84	84	61	61	61	61	75
Outputs									45	44	45	45	84	83	84	84	61	61	61	61	75

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs	75	75	74	72	72	72	71	41	41	41	41	46	45	46	45			1690
Outputs	75	75	74	72	72	72	71	41	41	41	41	46	45	46	45			1690

METHOD OF IMPLEMENTATION:	Depot Teams	ADMINISTRATIVE LEADTIME:	3 Months	PRODUCTION LEADTIME:	6 Months
Contract Dates:	FY 2004 Jan 04	FY 2005 Jan 05		FY 2006 Jan 06	
Delivery Date:	FY 2004 Jul 04	FY 2005 Jul 05		FY 2006 Jul 06	

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): BFVS High Priority Improvements [MOD 4] 1-98-05-4550

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
	RDT&E	0																			
Procurement	0																				
TPU 2	126	15.2																	126	15.2	
Block 1 Mods					179	19.5	335	37.1	244	27.5	299	34.4	287	33.5	164	19.6	182	22.2	1690	193.8	
Equipment, Nonrecurring	0	13.0		2.7																15.7	
Engineering Change Orders	0																				
Future Mods	0																	86.5		86.5	
Training Equipment	0																				
Support Equipment	0																				
Other	0																				
Interim Contractor Support	0																				
Installation of Hardware	0																				
FY2002 & Prior Equip-- Kits	0																				
FY2003 Equip-- Kits	0																				
FY2004 Equip-- Kits	0				45	1.9	134	5.7												179	7.6
FY2005 Equip-- Kits	0						84	3.5	251	10.8										335	14.3
FY2006 Equip-- Kits	0								61	2.6	183	8.0								244	10.6
FY2007 Equip-- Kits	0										75	3.3	224	10.0						299	13.3
FY2008 Equip-- Kits	0												72	3.2	215	9.8				287	13.0
FY2009 Equip-- Kits	0														41	1.9	305	14.2		346	16.1
TC Equip- Kits	0																				
TC Equip Blk 3 kits																					
Total Installment	0	0.0		0.0	45	1.9	218	9.2	312	13.4	258	11.3	296	13.2	256	11.7	305	14.2	1690	74.9	
Total Procurement Cost		28.2		2.7		21.4		46.3		40.9		45.7		46.7		31.3		122.9		386.1	

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army /1/Tracked combat vehicles

P-1 Item Nomenclature
HOWITZER, MED SP FT 155MM M109A6 (MOD) (GA0400)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	1461.8	8.0	5.3	17.1	36.1	19.1	17.3	28.7	26.5	35.1		1655.0
Less PY Adv Proc	16.3											16.3
Plus CY Adv Proc	16.3											16.3
Net Proc (P-1)	1461.8	8.0	5.3	17.1	36.1	19.1	17.3	28.7	26.5	35.1		1655.0
Initial Spares	9.4											9.4
Total Proc Cost	1471.2	8.0	5.3	17.1	36.1	19.1	17.3	28.7	26.5	35.1		1664.4
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

This program provides for the procurement of approved modifications to the 155MM Self-Propelled Howitzer. The fiscal program identified herein completes production and fielding of the M109A6 Paladin Howitzer and funds selected Paladin System Improvements. This system supports the Legacy transition path of the Transformation Campaign Plan (TCP).

Justification:

FY04/05 procures the following Howitzer Improvement Program system improvements necessary for the vehicle to operate and interface with other systems on the battlefield: Defense Advanced Global Positioning System Receiver (DAGR)Integration; Modular Artillery Charge System (MACS) Storage and Handling; Battery Guard System and Paladin Digital Fire Control System (PDFCS).

Exhibit P-40M, Budget Item Justification Sheet

Date:

February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army /1/Tracked combat vehicles

P-1 Item Nomenclature
HOWITZER, MED SP FT 155MM M109A6 (MOD) (GA0400)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

Description		Fiscal Years									
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
Howitzer Improvement Program											
1-81-05-1002	Unclassified	1471.6	17.1	36.2	19.1	17.2	28.7	26.6	35.2	0.0	1651.7
Chlorofluorocarbon (CFC Elimination)											
1-96-05-1003	Unclassified	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5
Totals		1475.1	17.1	36.2	19.1	17.2	28.7	26.6	35.2	0.0	1655.2

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: Howitzer Improvement Program [MOD 1] 1-81-05-1002

MODELS OF SYSTEM AFFECTED: Howitzer, MED SP 155MM M109 Series (MOD)

DESCRIPTION/JUSTIFICATION:

The M109A6 Paladin, approved for full scale production, was designed to upgrade the M109A2/A3 Howitzer's responsiveness, effectiveness, survivability, and Reliability, Availability, and Maintainability-Durability (RAM-D). This meets the user's urgent need for a product improved system that satisfies the deficiencies cited in these areas by the Mission Element Need Statement (MENS), approved by the Secretary of Defense in December 1980. The production phase of the program involved a combined effort between Letterkenny Army Depot and the contractor. M109A2/A3 Howitzers from CONUS and OCONUS field units were shipped to Letterkenny Army Depot for overhaul and modification. The overhauled/modified chassis were shipped to the contractor for final integration, assembly, and acceptance testing. The acquisition strategy for the FY89/90-92 called for sole source contracts. A FY93-96 competitive multiyear production contract was awarded to UDLP in April 1993. In April 1997, a contract modification was awarded to the existing multiyear production contract for an additional 37 M109A6 Paladins. A FY98 contract option for 36 vehicles was awarded in November 1997 and a FY00 contract was awarded in July 2000 for 7 additional systems. In October 2001, FY00 funding was received for an additional 18 vehicles from proceeds of an FMS sale of M109A2 Howitzers resulting in the FY02 contract option being awarded. Additionally, FY02-FY09 funding is for system improvements necessary for the vehicle to operate and interface with other systems on the battlefield.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

The M109A6 was approved for entry into full scale development in November 1984. At that time, DA decided to modify M109A2/A3 Howitzers to a HIP configuration. It was decided to merge the Howitzer Extended Life Program (HELP) in the HIP where kits from both programs would be applied to the M109A2/A3 Howitzer. The improved 155MM Self-Propelled Howitzer was approved for Type-Classification Low Rate Production (TC-LRP) and designated the M109A6 Howitzer following a Milestone III - A ASARC on 7 February 1990. In March 1993, a Milestone III Pre-ASARC review was chaired by the Assistant Secretary of the Army for Research, Development and Acquisition, and the M109A6 Paladin was approved for Type Classification - Standard and full rate production and deployment. This Milestone III is documented in Acquisition Decision Memorandum dated 9 April 1993. The Paladin production program completed deliveries of the multiyear contract ahead of schedule. Deliveries from the FY00 contract were completed 2nd Qtr FY02. Deliveries from the FY02 contract option are scheduled to be completed 4th Qtr FY03.

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs	975																			
Outputs	957		4	14																

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		975
Outputs																		975

METHOD OF IMPLEMENTATION:	Production	ADMINISTRATIVE LEADTIME:	3 Months	PRODUCTION LEADTIME:	17 Months
Contract Dates:	FY 2004		FY 2005		FY 2006
Delivery Date:	FY 2004		FY 2005		FY 2006

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): Howitzer Improvement Program [MOD 1] 1-81-05-1002

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RDT&E	0																		
Procurement	0																			
Kit Quantity	975																		975	
Equipment	0	815.5		3.7		15.4		11.8		13.4		18.2		25.1		34.0				937.1
Equipment, Nonrecurring	0	245.6		0.2																245.8
Engineering Change Orders	0	116.6																		116.6
Matrix Personnel Support	0	101.5		1.1		1.5		1.1		0.8		0.8		0.5		0.5				107.8
Data/Other	0	18.9		0.6		0.6														20.1
Training Equipment	0	14.1						0.3						0.3						14.7
Vehicular Intercom System	0	11.3																		11.3
Project Mgmt Admin	0	27.3		2.0		2.5		0.7		0.6		1.1		0.5		0.5				35.2
Fielding	0	34.4		0.8		1.5		0.5		0.4		0.8		0.2		0.2				38.8
System Improvements	0	3.9		8.7		14.7		4.7		2.0		7.8								41.8
Installation of Hardware	0																			
FY2002 & Prior Equip-- Kits	975	82.5																		82.5
FY2003 Equip-- Kits	0																			
FY2004 Equip-- Kits	0																			
FY2005 Equip-- Kits	0																			
FY2006 Equip-- Kits	0																			
FY2007 Equip-- Kits	0																			
FY2008 Equip-- Kits	0																			
FY2009 Equip-- Kits	0																			
TC Equip- Kits	0																			
Total Installment	975	82.5		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		82.5
Total Procurement Cost		1471.6		17.1		36.2		19.1		17.2		28.7		26.6		35.2		0.0		1651.7

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army /1/Tracked combat vehicles

P-1 Item Nomenclature
FAASV PIP TO FLEET (GA8010)

Program Elements for Code B Items:

Code:
A

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	101.4	0.0	9.2	2.9	11.0	7.3	5.9					137.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	101.4	0.0	9.2	2.9	11.0	7.3	5.9					137.6
Initial Spares												
Total Proc Cost	101.4	0.0	9.2	2.9	11.0	7.3	5.9					137.6
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

This program provides for the procurement of the Field Artillery Ammunition Support Vehicle (FAASV) Materiel Change and FAASV Halon Replacement modifications (M992A2 Conversion). This system supports the Legacy transition path of the Transformation Campaign Plan (TCP).

Justification:

FY04/05 procures the following FAASV system improvements necessary for the vehicle to operate and interface with other systems on the battlefield: Auxiliary Power Unit (APU); Modular Artillery Charge System (MACS) Stowage and Handling; Crew Halon replacement; Defense Advanced Global Positioning System Receiver (DAGR) integration; and Battery Guard System.

Exhibit P-40M, Budget Item Justification Sheet

Date:

February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army /1/Tracked combat vehicles

P-1 Item Nomenclature
FAASV PIP TO FLEET (GA8010)

Program Elements for Code B Items:

Code:
A

Other Related Program Elements:

Description		Fiscal Years									
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
FAASV Materiel Change (A2 Conversion)											
1-93-05-4457	Unclassified	107.4	2.0	3.9	4.1	5.9	0.0	0.0	0.0	0.0	123.3
FAASV Halon Replacement											
1-94-05-4477	Unclassified	3.1	0.9	7.1	3.2	0.0	0.0	0.0	0.0	0.0	14.3
Totals		110.5	2.9	11.0	7.3	5.9	0.0	0.0	0.0	0.0	137.6

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: FAASV Halon Replacement [MOD 2] 1-94-05-4477

MODELS OF SYSTEM AFFECTED: FAASV M992A2

DESCRIPTION/JUSTIFICATION:

References: DOD Directive 6050.0;DA Policy Letter 200.0.1;AMC Regulation 70-68;Montreal Protocol of 1986 and Presidential Directive.

These references mandate the replacement of Halon charged fire suppression systems to prevent ozone depletion. A common replacement agent engine compartment fire extinguishing system is required on 927 FAASV systems. FY97-99 funds have been appropriated to initiate the conversion process by replacing the fire suppression distribution system in the FAASV engine compartment with one suitable to both Halon and the selected alternate agent. FY03-05 funds have been appropriated to identify and swap out an alternative agent for the Automatic Fire Extinguishing System (AFES).

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

- Preliminary Design Review - 1QFY98
- Critical Design Review - 1QFY98
- Joint Government Contractor Test and Evaluation - 1QFY98
- IPR Production Decision - 4QFY98
- TDP Available - 4QFY98
- First Unit Installed - 2QFY99

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs	927																			
Outputs	927																			

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		927
Outputs																		927

METHOD OF IMPLEMENTATION:

Contract Dates:	FY 2004	ADMINISTRATIVE LEADTIME:	1 Months	PRODUCTION LEADTIME:	3 Months
Delivery Date:	FY 2004				

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): FAASV Halon Replacement [MOD 2] 1-94-05-4477

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RDT&E	0																		
Procurement	0																			
Kit Quantity	927																		927	
Installation Kits A	0	1.0																		1.0
Engineering Support	0	0.2																		0.2
Test	0	0.5	0.9		2.6		3.2													7.2
Installation Kits B	0				3.5															3.5
--	0																			
--	0																			
--	0																			
--	0																			
--	0																			
Installation of Hardware	0																			
FY2002 & Prior Equip-- Kits	927	1.4																		1.4
FY2003 Equip-- Kits	0																			
FY2004 Equip-- Kits	0				1.0															1.0
FY2005 Equip-- Kits	0																			
FY2006 Equip-- Kits	0																			
FY2007 Equip-- Kits	0																			
FY2008 Equip-- Kits	0																			
FY2009 Equip-- Kits	0																			
TC Equip- Kits	0																			
Total Installment	927	1.4		0.0		1.0		0.0		0.0		0.0		0.0		0.0		0.0		2.4
Total Procurement Cost		3.1		0.9		7.1		3.2		0.0		0.0		0.0		0.0		0.0		14.3

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army /1/Tracked combat vehicles

P-1 Item Nomenclature
IMPROVED RECOVERY VEHICLE (M88 MOD) (GA0570)

Program Elements for Code B Items:

Code:
A

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	102	29	21									152
Gross Cost	260.6	76.5	60.1	49.5								446.7
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	260.6	76.5	60.1	49.5								446.7
Initial Spares	3.5			2.1								5.6
Total Proc Cost	264.2	76.5	60.1	51.6								452.3
Flyaway U/C												
Wpn Sys Proc U/C		2.6	2.9									

Description:

The M88A2 (HERCULES - Heavy Equipment Recovery Combat Utility Lift and Evacuation System) is an armored full tracked, diesel-powered, recovery vehicle based on M88A1 chassis and configured with an A-frame boom, three winches and an upgraded spade. The boom has a 35-ton lift capacity and the main winch has a constant pull capacity of 70 tons. The hull is armored for protection against small arms fire, artillery fragments and anti-personnel mines. The vehicle mounts a caliber 50 machine gun for self-protection. The M88A2 HERCULES is capable of performing recovery, evacuation and limited repair of the main battle tank.

FY02 is the final year for the M88A2 due to termination. To fund termination costs, FY03 funding will be utilized to accomplish all activities from FY03 through FY05 when the program will be complete.

This system supports the Legacy transition path of the Transformation Campaign Plan (TCP).

Exhibit P-5, Weapon WTCV Cost Analysis		Appropriation/Budget Activity/Serial No. Procurement of W&TCV, Army / 1 / Tracked combat vehicles			P-1 Line Item Nomenclature: IMPROVED RECOVERY VEHICLE (M88 MOD) (GA0570)			Weapon System Type:			Date: February 2003			
WTCV Cost Elements		ID CD	FY 02			FY 03			FY 04			FY 05		
			TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000
Vehicle Manufacturing - Contractor		A	39313	21	1872									
Vehicle Manufacturing - GFE			1418											
Contractor Engineering			4188			12124								
Engineering Change Orders			1332			392								
Project Management - Core			2354			5200								
Project Management - OGA			1434			1980								
Transportation			108			240								
Fielding (TPF & NET)						3870								
Testing (incl analysis & development)			70			5000								
Depot Maintenance - Premodification			2036			490								
Fleet Cut -in/Retrofit for Modifications			6260			15759								
Track and Cleat Engineering & Testing			250											
Depot Maintenance Work Requirements			1353			2067								
Refurbishment of Facility Vehicles						2343								
Initial Spares						2097								
Total			60116			51562								

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No: Procurement of W&TCV, Army / 1 / Tracked combat vehicles		Weapon System Type:			P-1 Line Item Nomenclature: IMPROVED RECOVERY VEHICLE (M88 MOD) (GA0570)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Units	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Vehicle Manufacturing - Contractor FY 2002	UDLP York, PA	SS-FFP	TACOM	APR 02	JUL 03	21	1872	YES		NOV 01
Vehicle Manufacturing - GFE FY 2002	VARIOUS	RQN/PC	VARIOUS	VARIOUS	VARIOUS			YES		

REMARKS: FY02: Production material with greater than 12 month lead time was awarded in Nov 01 with definitive production contract being awarded in Apr 02.
FY03: No production contract is planned.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: Procurement of W&TCV, Army /1/Tracked combat vehicles
 P-1 Item Nomenclature: HEAVY ASSAULT BRIDGE (HAB) SYS (MOD) (GZ3250)

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

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	34	10										44
Gross Cost	247.5	72.3	7.5									327.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	247.5	72.3	7.5									327.3
Initial Spares	2.8											2.8
Total Proc Cost	250.4	72.3	7.5									330.1
Flyaway U/C												
Wpn Sys Proc U/C		7.2										

Description:

The Wolverine (Heavy Assault Bridge) is a 26 meter (84 feet) Military Load Class 70 bridge mounted on a modified M1A2 SEP Abrams Tank chassis. The bridge spans gaps up to 24 meters on both prepared and unprepared abutments and can be placed on a bearing surface over its entire length. It is launched under armor within five minutes and can be retrieved, from either end, in less than ten minutes. The Wolverine, operated by a crew of two 12B soldiers, achieves situational awareness via Appliqué in support of combined arms operations. Its mission is to provide gap crossing capability for heavy maneuver forces. It supports the Abrams Tank System and the Bradley equipped BCT with similar mobility, survivability, and supportability as the assault force. This system supports the Legacy transition path of the Transformation Campaign Plan (TCP).

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army /1/Tracked combat vehicles

P-1 Item Nomenclature
ARMORED VEH LAUNCH BRIDGE (AVLB) (MOD) (GZ3000)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	148.6		4.0	9.9								162.5
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	148.6		4.0	9.9								162.5
Initial Spares												
Total Proc Cost	148.6		4.0	9.9								162.5
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

The Armored Vehicle Launch Bridge (AVLB) is the legacy assault bridge system supporting gap crossings of heavy forces and consists of a scissors type bridge mounted on an M48/M60 based launcher. AVLBs are primarily assigned to Combat Engineer, Training Units and War Reserve sites.

-Common Chassis Modification: Completes application of seven modifications required to the balance of the AVLB fleet requiring them.

-Hydraulic/Electrical Modification: Current outdated and unreliable hydraulic and electrical systems will be updated from their original 1950s based technology configuration with proven current technology based components. Average age of fleet is 28 years.

This system supports the Legacy transition path of the Transformation Campaign Plan. (TCP).

Exhibit P-40M, Budget Item Justification Sheet

Date:

February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army /1/Tracked combat vehicles

P-1 Item Nomenclature
ARMORED VEH LAUNCH BRIDGE (AVLB) (MOD) (GZ3000)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

Description		Fiscal Years									
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
Hydraulic/Electrical Upgrade											
0-00-00-0000	Oper Capability	2.5	9.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.4
Prior Completed Mods											
0-00-00-0000		146.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	146.2
Battlefield Combat Identification Systems											
0-00-00-0000	Oper Capability	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
AVLB Common Chassis Mod											
1-97-05-4531	Oper Capability	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7
Totals		152.6	9.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	162.5

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army /1/Tracked combat vehicles

P-1 Item Nomenclature
M1 ABRAMS TANK (MOD) (GA0700)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	665.7	55.5	80.6	176.2	268.6	499.6	342.5	364.2	275.8	102.9	460.6	3292.2
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	665.7	55.5	80.6	176.2	268.6	499.6	342.5	364.2	275.8	102.9	460.6	3292.2
Initial Spares												
Total Proc Cost	665.7	55.5	80.6	176.2	268.6	499.6	342.5	364.2	275.8	102.9	460.6	3292.2
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

The M1 Abrams Tank (MOD) program is for applying user-approved modifications to fielded Abrams tanks. Notable survivability improvements include Frontal Armor and Turret Side Armor upgrades as well as the Alternate Auxiliary Power Unit (AAPU). The Abrams LV100 Engine program is the centerpiece of efforts to address the growing problem of parts obsolescence. Key safety improvements include the Driver's Hatch Interlock, the Eyesafe LASER Range Finder (ELRF), and changes to prevent fires originating in the Nuclear, Biological and Chemical (NBC) filter system. The sole environmental improvement is the effort to replace halon, a known ozone-depleting chemical, in the tank's fire extinguishing systems. These modifications collectively support the legacy transition path of the Transformation Campaign Plan (TCP).

Justification:

FY04/05 funding procures numerous components and required safety modifications in support of the M1A1 and M1A2 SEP tank. These modifications correct or alleviate tank operational deficiencies identified during testing, training exercises, or combat in Operation Desert Storm.

Exhibit P-40M, Budget Item Justification Sheet

Date:

February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army /1/Tracked combat vehicles

P-1 Item Nomenclature

M1 ABRAMS TANK (MOD) (GA0700)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

Description		Fiscal Years									
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
Halon Replacement											
1-92-05-4411	Environmental	11.5	0.9	0.8	0.9	0.9	0.9	1.0	1.0	33.7	51.6
Driver's Hatch Interlock (DHI)											
1-97-05-4520	Safety	27.7	2.0	4.1	5.2	5.2	5.4	2.8	0.5	0.0	52.9
Vehicle Intercommunications System (VIS)											
1-92-05-4412	Legislative Compl	48.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.6
Battlefield Combat I.D. System (BCIS)											
1-98-05-4543	Operational	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.2
Precision Lightweight GPS Receiver (PLGR)											
1-92-05-4417	Manprint	2.3	0.9	0.9	0.9	0.9	0.9	0.6	0.0	0.0	7.4
Block G Mods											
1-99-05-4554	Deficiency Correct	56.7	1.8	1.5	1.5	1.5	1.4	1.2	0.9	1.5	68.0
Pulse - Jet System (PJS)											
1-92-05-4475	Operational	49.3	6.1	6.0	6.1	6.3	6.4	0.8	0.0	0.0	81.0
External Auxiliary Power Unit (EAPU)											
1-85-05-4057	Operational	60.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.4
NBC Fire Warning (NBCFW)											
1-97-05-4524	Safety	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.8	7.2
Hand - Held Fire Extinguisher (HHFE)											
1-97-05-4525	Safety	0.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1

Exhibit P-40M, Budget Item Justification Sheet

Date:

February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army /1/Tracked combat vehicles

P-1 Item Nomenclature

M1 ABRAMS TANK (MOD) (GA0700)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

Description		Fiscal Years									
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
Abrams Field Upgrades											
1-97-05-4534	Deficiency Correct	24.2	4.2	1.4	1.1	1.6	2.1	2.3	1.1	8.9	46.9
Frontal Armor											
0000000000	Operational	9.1	19.9	46.2	20.4	54.5	41.8	52.2	0.0	0.0	244.1
Improved Turret Side Armor											
1-99-05-4555	Operational	2.2	0.5	13.7	3.8	3.6	3.6	3.0	0.0	0.0	30.4
Eyesafe Laser Rangefinder (ESLRF)											
1-99-05-4563	Safety	10.6	7.5	7.5	7.6	10.5	13.9	7.9	1.4	0.0	66.9
LV100 Engine Pgm with CEEP											
1-00-05-0014	Operational	0.0	107.7	154.4	414.4	198.7	238.1	146.8	0.0	71.3	1331.4
Electronics Obsolescence											
1-00-05-0015	Operational	46.7	19.9	19.8	20.1	20.5	0.0	0.0	0.0	0.0	127.0
Alternate Auxiliary Power Unit (AAPU)											
1-98-05-4545	Operational	1.5	0.0	0.0	0.9	9.6	19.6	19.0	0.0	0.0	50.6
Support											
0-00-00-0000	Operational	28.2	0.0	0.0	0.0	19.6	19.9	20.3	20.6	2.9	111.5
M1A1D Retrofit											
1-98-05-4542	Operational	24.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.6
M829E3 Ballistic Solution											
1-01-05-0011	Operational	0.0	0.0	2.0	2.4	2.5	2.7	0.6	0.0	0.0	10.2

Exhibit P-40M, Budget Item Justification Sheet

Date:

February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army /1/Tracked combat vehicles

P-1 Item Nomenclature

M1 ABRAMS TANK (MOD) (GA0700)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

Description		Fiscal Years									
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
Facility Closure											
0-00-00-0000	Operational	0.0	0.0	0.0	0.0	0.0	0.0	8.8	69.8	338.5	417.1
N B C Filter Fire Fixes (NBCF3)											
2-03-05-0004	Safety	2.4	2.0	3.8	5.3	5.4	6.7	7.7	6.7	3.0	43.0
Prior Year Closed Mods											
0-00-00-0000		252.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	252.7
Impr. Fire Control Electronics Unit (IFCEU)											
2-03-05-0003	Operational	0.0	0.0	5.7	8.2	0.4	0.0	0.0	0.0	0.0	14.3
Totals		665.7	176.2	268.6	499.6	342.5	364.2	275.8	102.9	460.6	3156.1

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: Driver's Hatch Interlock (DHI) [MOD 2] 1-97-05-4520

MODELS OF SYSTEM AFFECTED: IPM1 = 818, M1A1 = 4327, M1A2 = 435 TOTAL = 5580

DESCRIPTION/JUSTIFICATION:

The Driver's Hatch Interlock (DHI) is a safety modification, which provides an electronic interface between the Driver's Hatch and the Turret Drive (rotation) controls while the driver's hatch is open. It ensures the safety of the driver by stopping the turret from rotating while the driver's hatch is open.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Preliminary Design Review.....PLANNED: 2Q96 ACCOMPLISHED: 1Q93
 Critical Design Review.....PLANNED: 3Q96 ACCOMPLISHED: 3Q94
 Development Test & Evaluation.....PLANNED: 4Q96 ACCOMPLISHED: 4Q96
 IPR Production Decision.....PLANNED: 4q97 ACCOMPLISHED: 4Q97
 ECP Completed.....PLANNED: 1Q98 ACCOMPLISHED: 1Q98
 Tech Data Package Available.....PLANNED: 1Q98 ACCOMPLISHED: 2Q98

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
Totals																					
Inputs	3308	33	33	34	35	123	123	124	125	123	123	124	125	123	123	124	125	123	123	124	125
Outputs	2950	89	89	90	90	33	33	34	35	123	123	124	125	123	123	124	125	123	123	124	125

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs	123	34			123													5580
Outputs	123	123	124	125	123	34												5580

METHOD OF IMPLEMENTATION: Depot/Contr Teams ADMINISTRATIVE LEADTIME: 2 Months PRODUCTION LEADTIME: 4 Months
 Contract Dates: FY 2004 MAR 04 FY 2005 MAR 05 FY 2006 MAR 06
 Delivery Date: FY 2004 SEP 04 FY 2005 SEP 05 FY 2006 SEP 06

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): Driver's Hatch Interlock (DHI) [MOD 2] 1-97-05-4520

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RDT&E	0																		
Procurement	0																			
Kit Quantity	3308		135		495		495		495		495		157						5580	
Installation Kits	0																			
Installation Kits, Nonrecurring	0																			
Equipment		21.0		1.0		3.7		3.8		3.8		3.9		1.3						38.5
Equipment, Nonrecurring	0																			
Engineering Change Orders	0																			
Data	0																			
Training Equipment	0																			
Support Equipment	0																			
Other	0																			
Interim Contractor Support	0																			
Installation of Hardware	0																			
FY2002 & Prior Equip-- Kits	2950	6.7																	2950	6.7
FY2003 Equip-- Kits	0		358	1.0															358	1.0
FY2004 Equip-- Kits	0				135	0.4													135	0.4
FY2005 Equip-- Kits	0						495	1.4											495	1.4
FY2006 Equip-- Kits	0								495	1.4									495	1.4
FY2007 Equip-- Kits	0										495	1.5							495	1.5
FY2008 Equip-- Kits	0												495	1.5					495	1.5
FY2009 Equip-- Kits	0														157	0.5			157	0.5
TC Equip- Kits	0																			
Total Installment	2950	6.7	358	1.0	135	0.4	495	1.4	495	1.4	495	1.5	495	1.5	157	0.5		0.0	5580	14.4
Total Procurement Cost		27.7		2.0		4.1		5.2		5.2		5.4		2.8		0.5		0.0		52.9

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: Pulse - Jet System (PJS) [MOD 7] 1-92-05-4475

MODELS OF SYSTEM AFFECTED: IPM1 = 0, M1A1 = 1001 M1A2 = 588 TOTAL = 1589

DESCRIPTION/JUSTIFICATION:

PJS improves the engine air filtration system used on the Abrams tanks by using air pressure to remove dust from air filters. This reduces operating costs by reducing the need for scheduled maintenance.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Preliminary Design Review.....PLANNED: 2Q92.....ACCOMPLISHED: 2Q92
 Critical Design Review.....PLANNED: 3Q92.....ACCOMPLISHED: 3Q92
 Contractor Test & Eval.....PLANNED: 3Q93.....ACCOMPLISHED: 3Q93
 Development Test & Eval.....PLANNED: 3193.....ACCOMPLISHED: 3Q93
 Initial Operational Test & Eval.....PLANNED: 4Q93.....ACCOMPLISHED: 4Q93
 IPR Production Decision.....PLANNED: 4Q93.....ACCOMPLISHED: 4Q93
 TDP Available.....PLANNED: 2Q96.....ACCOMPLISHED: 2Q96

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
Totals																					
Inputs	964	31	31	31	32	31	31	31	32	31	31	31	32	31	31	31	32	31	31	31	32
Outputs	829	33	33	34	35	31	31	31	32	31	31	31	32	31	31	31	32	31	31	31	32

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																		1589
Outputs	31	31	31	32														1589

METHOD OF IMPLEMENTATION: Contractor Team ADMINISTRATIVE LEADTIME: 4 Months PRODUCTION LEADTIME: 8 Months
 Contract Dates: FY 2004 NA FY 2005 NA FY 2006 NA
 Delivery Date: FY 2004 NA FY 2005 NA FY 2006 NA

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): Pulse - Jet System (PJS) [MOD 7] 1-92-05-4475

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RDT&E	0																		
Procurement	0																			
Kit Quantity	964		125		125		125		125		125								1589	
Installation Kits	0																			
Installation Kits, Nonrecurring	0																			
Equipment	0	45.1		5.3		5.3		5.4		5.5		5.6								72.2
Equipment, Nonrecurring	0																			
Engineering Change Orders	0																			
Testing	0																			
Training Equipment	0																			
Support Equipment	0																			
Other	0																			
Interim Contractor Support	0																			
Installation of Hardware	0																			
FY2002 & Prior Equip-- Kits	829	4.2																	829	4.2
FY2003 Equip-- Kits	0		135	0.8															135	0.8
FY2004 Equip-- Kits	0				125	0.7													125	0.7
FY2005 Equip-- Kits	0						125	0.7											125	0.7
FY2006 Equip-- Kits	0								125	0.8									125	0.8
FY2007 Equip-- Kits	0										125	0.8							125	0.8
FY2008 Equip-- Kits	0												125	0.8					125	0.8
FY2009 Equip-- Kits	0																			
TC Equip- Kits	0																			
Total Installment	829	4.2	135	0.8	125	0.7	125	0.7	125	0.8	125	0.8	125	0.8		0.0		0.0	1589	8.8
Total Procurement Cost		49.3		6.1		6.0		6.1		6.3		6.4		0.8		0.0		0.0		81.0

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: Frontal Armor [MOD 12] 0000000000

MODELS OF SYSTEM AFFECTED: IPM1 = 0, M1A1 = 285 M1A2 = 0 TOTAL: = 285

DESCRIPTION/JUSTIFICATION:

This funding is needed for Department of Energy (DOE) armor production. Note that application costs are included in the procurement cost.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

N/A

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs	0			1	11	11	11	12	26	26	26	26	33	34	34	34				
Outputs	0							1	11	11	11	12	26	26	26	26	33	34	34	34

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
Inputs																					285
Outputs																					285

METHOD OF IMPLEMENTATION: OGA ADMINISTRATIVE LEADTIME: 4 Months PRODUCTION LEADTIME: 10 Months
 Contract Dates: FY 2004 JUL 03 FY 2005 JUL 04 FY 2006 JUL 05
 Delivery Date: FY 2004 SEP 04 FY 2005 SEP 04 FY 2006 SEP05

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): Frontal Armor [MOD 12] 0000000000

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RDT&E	0																		
Procurement	0																			
Kit Quantity	0																			
Installation Kits	0																			
Installation Kits, Nonrecurring	0																			
Equipment	0		1		45		104		135											285
Equipment, Nonrecurring	0																			
Engineering Change Orders	0																			
Data	0																			
Training Equipment	0																			
Support Equipment	0																			
Other	0	9.1		19.9		46.2		20.4		54.5		41.8		52.2						244.1
Interim Contractor Support	0																			
Installation of Hardware	0																			
FY2002 & Prior Equip-- Kits	0																			
FY2003 Equip-- Kits	0																			
FY2004 Equip-- Kits	0																			
FY2005 Equip-- Kits	0																			
FY2006 Equip-- Kits	0																			
FY2007 Equip-- Kits	0																			
FY2008 Equip-- Kits	0																			
FY2009 Equip-- Kits	0																			
TC Equip- Kits	0																			
Total Installment	0	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0
Total Procurement Cost		9.1		19.9		46.2		20.4		54.5		41.8		52.2		0.0		0.0		244.1

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: Improved Turret Side Armor [MOD 13] 1-99-05-4555

MODELS OF SYSTEM AFFECTED: IPM1 = 0, M1A1 = 0, M1A2 = 325 TOTAL = 325

DESCRIPTION/JUSTIFICATION:

This modification provides better protection against rocket propelled grenade attacks on the turret sides of the crew compartment. The new design will significantly enhance survivability. Additional installations (240 ea) will be procured in GA0730, System Enhancement PGM: SEP M1A2.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Preliminary Design Review.....PLANNED: 4Q98 ACCOMPLISHED: 4Q98
 VAL/VER Ballistic Testing.....PLANNED: 4Q00 ACCOMPLISHED: 4Q00
 Critical Design Review.....PLANNED: 3Q99 ACCOMPLISHED: 3Q99
 Production Contract Award.....PLANNED: 1Q01 ACCOMPLISHED: 1Q01
 Tech Data Package Available.....PLANNED: 4Q00 ACCOMPLISHED: 4Q00

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs	41				60	60	60	60	22	15	7									
Outputs	16	6	6	6	7				15	15	15	15	41	41	41	42	41	41	41	41

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs																	0	325
Outputs	34	34	34	33														565

METHOD OF IMPLEMENTATION: Contr Team ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 13 Months
 Contract Dates: FY 2004 OCT 03 FY 2005 OCT 04 FY 2006
 Delivery Date: FY 2004 APR 05 FY 2005 APR 06 FY 2006

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): Improved Turret Side Armor [MOD 13] 1-99-05-4555

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RDT&E	0																		
Procurement	0																			
Kit Quantity	41				240		44													325
Installation Kits	0																			
Installation Kits, Nonrecurring	0																			
Equipment	0	2.2				13.7		2.5												18.4
Equipment, Nonrecurring	0																			
Engineering Change Orders	0																			
Data	0																			
Training Equipment	0																			
Support Equipment	0																			
Other	0																			
Interim Contractor Support	0																			
Installation of Hardware	0																			
FY2002 & Prior Equip-- Kits	16																			16
FY2003 Equip-- Kits	0		25	0.5																25
FY2004 Equip-- Kits	0																			
FY2005 Equip-- Kits	0						60	1.3												60
FY2006 Equip-- Kits	0								165	3.6										165
FY2007 Equip-- Kits	0										164	3.6								164
FY2008 Equip-- Kits	0												135	3.0						135
FY2009 Equip-- Kits	0																			
TC Equip- Kits	0																			
Total Installment	16	0.0	25	0.5		0.0	60	1.3	165	3.6	164	3.6	135	3.0		0.0		0.0	565	12.0
Total Procurement Cost		2.2		0.5		13.7		3.8		3.6		3.6		3.0		0.0		0.0		30.4

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: Eyesafe Laser Rangefinder (ESLRF) [MOD 14] 1-99-05-4563

MODELS OF SYSTEM AFFECTED: IPM1 = 0, M1A1 = 2655 M1A2 = 547 TOTAL = 3202

DESCRIPTION/JUSTIFICATION:

This modification is for an improved LASER range finder that is eye-safe at any range. This allows unit training exercises to proceed without the stringent safety precautions needed to protect crewmen from eye damaging LASER beams emitted by the older model range finders.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

N / A - The M1A1 ESLRF program is a continuation of the M1A2 Upgrade ESLRF program. All development, testing and decision milestones are complete.

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007				
	Totals	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Inputs	547	123	124	124	124	123	124	124	124	123	124	124	124	123	124	124	124	123	124	124	124
Outputs	412	123	124	124	124	123	124	124	124	123	124	124	124	63	64	64	64	93	94	94	94

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
Inputs	45	45	45	45																	3202
Outputs	123	124	124	124	45	45	45	45													3202

METHOD OF IMPLEMENTATION:	Contractor Team	ADMINISTRATIVE LEADTIME:	3 Months	PRODUCTION LEADTIME:	9 Months
Contract Dates:	FY 2004 NOV 03	FY 2005 NOV 04		FY 2006 NOV 05	
Delivery Date:	FY 2004 DEC 04	FY 2005 DEC 05		FY 2006 DEC 06	

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): Eyesafe Laser Rangefinder (ESLRF) [MOD 14] 1-99-05-4563

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RDT&E	0																		
Procurement	0																			
Kit Quantity	547		495		495		495		495		495		180						3202	
Installation Kits	0																			
Installation Kits, Nonrecurring	0																			
Equipment	0	9.7		6.2		6.2		6.3		9.4		11.1		4.2						53.1
Equipment, Nonrecurring	0																			
Engineering Change Orders	0																			
Data	0																			
Training Equipment	0																			
Support Equipment	0																			
Other	0																			
Interim Contractor Support	0																			
Installation of Hardware	0																			
FY2002 & Prior Equip-- Kits	412	0.9																	412	0.9
FY2003 Equip-- Kits	0		495	1.3															495	1.3
FY2004 Equip-- Kits	0				495	1.3													495	1.3
FY2005 Equip-- Kits	0						495	1.3											495	1.3
FY2006 Equip-- Kits	0								255	1.1									255	1.1
FY2007 Equip-- Kits	0										375	2.8							375	2.8
FY2008 Equip-- Kits	0												495	3.7					495	3.7
FY2009 Equip-- Kits	0														180	1.4			180	1.4
TC Equip- Kits	0																			
Total Installment	412	0.9	495	1.3	495	1.3	495	1.3	255	1.1	375	2.8	495	3.7	180	1.4		0.0	3202	13.8
Total Procurement Cost		10.6		7.5		7.5		7.6		10.5		13.9		7.9		1.4		0.0		66.9

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: LV100 Engine Pgm with CEEP [MOD 15] 1-00-05-0014

MODELS OF SYSTEM AFFECTED: IPM1 = 0, M1A1 = 0, M1A2 = 618, TOTAL = 618

DESCRIPTION/JUSTIFICATION:

This modification is intended to reduce the Operating and Support (O&S) cost of the Abrams Tank engine. It will equip the active component Abrams fleet with a lighter, more reliable, more fuel efficient and easier to repair engine. It also includes modifications to the transmission to accommodate the new engine and Continuous Electronic Enhancement Program (CEEP) architecture. Note that the cost of installation is included in the hardware cost.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Preliminary Design Review.....PLANNED: 1Q01.....ACCOMPLISHED: 3Q01
 Critical Design Review.....PLANNED: 4Q01.....ACCOMPLISHED: 4Q01
 Development Test & Eval.....PLANNED: 3Q02.....ACCOMPLISHED: 3Q02
 IPR Production Decision.....PLANNED: 4Q02.....ACCOMPLISHED: 4Q02
 MWO Approved.....PLANNED: 1Q03.....ACCOMPLISHED: 1Q03

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals																				
Inputs	0		15	22	17	17	17	18	47	47	47	47	22	22	22	22	29	29	29	29
Outputs	0																			

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
Inputs	18	18	17	17													50	618
Outputs																		0

METHOD OF IMPLEMENTATION: Contractor Team ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 18 Months
 Contract Dates: FY 2004 DEC 03 FY 2005 DEC 04 FY 2006 DEC 05
 Delivery Date: FY 2004 NA FY 2005 NA FY 2006 NA

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): LV100 Engine Pgm with CEEP [MOD 15] 1-00-05-0014

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RDT&E	0																		
Procurement	0																			
Kit Quantity	0		37		69		197		96		116		70				33		618	
Installation Kits	0																			
Installation Kits, Nonrecurring	0																			
Equipment	0			107.7		154.4		414.4		198.7		238.1		146.8				71.3		1331.4
Equipment, Nonrecurring	0																			
Engineering Change Orders	0																			
Data	0																			
Training Equipment	0																			
Support Equipment	0																			
Other	0																			
Interim Contractor Support	0																			
Installation of Hardware	0																			
FY2002 & Prior Equip-- Kits	0																			
FY2003 Equip-- Kits	0																			
FY2004 Equip-- Kits	0																			
FY2005 Equip-- Kits	0																			
FY2006 Equip-- Kits	0																			
FY2007 Equip-- Kits	0																			
FY2008 Equip-- Kits	0																			
FY2009 Equip-- Kits	0																			
TC Equip- Kits	0																			
Total Installment	0	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0
Total Procurement Cost		0.0		107.7		154.4		414.4		198.7		238.1		146.8		0.0		71.3		1331.4

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: Electronics Obsolescence [MOD 16] 1-00-05-0015

MODELS OF SYSTEM AFFECTED: M1A1

DESCRIPTION/JUSTIFICATION:

The M1A1 electronics uses 1980s or earlier technology. The turret/Hull network boxes (RxNBs) are key electrical system components with numerous obsolete parts that may be replaced only through cannibalization of discarded components. Cannibalization is not a viable means to sustain the Abrams tanks until 2030. Replacing the analog RxNBs with new digital units eliminates the associated obsolescence and makes it easy to add Embedded Diagnostics (ED) to support the Force XXI maintenance structure. There are no quantity/year specifics because component requirements vary by unit and sometimes by tank. Installation costs are built into the Procurement costs.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Redesigned TNB: Preliminary Design Review...PLANNED: 2Q98....ACCOMPLISHED: 2Q98
 Critical Design Review.....PLANNED: 2Q00....ACCOMPLISHED: 2Q00
 Developmental Test & Eval...PLANNED: 2Q00....ACCOMPLISHED: 2Q00
 IPR Decision.....PLANNED: 1Q01....ACCOMPLISHED: 2Q01
 Redesigned HNB: Preliminary Design Review...PLANNED: 2Q00....ACCOMPLISHED: 2Q00
 Critical Design Review.....PLANNED: 1Q01....ACCOMPLISHED: 2Q01
 Developmental Test & Eval...PLANNED: 1Q01....ACCOMPLISHED: 2Q01
 IPR Decision.....PLANNED: 2Q01....ACCOMPLISHED: 3Q01

Installation Schedule:

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

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

METHOD OF IMPLEMENTATION: Contractor Teams. ADMINISTRATIVE LEADTIME: 4 Months PRODUCTION LEADTIME: 8 Months
 Contract Dates: FY 2004 DEC 03 FY 2005 DEC 04 FY 2006 DEC 05
 Delivery Date: FY 2004 FY 2005 FY 2006

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): Electronics Obsolescence [MOD 16] 1-00-05-0015

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RDT&E	0																		
Procurement	0																			
Kit Quantity	0																			
Installation Kits	0	25.4		19.9		19.8		20.1		20.5										105.7
Installation Kits, Nonrecurring	0	21.3																		21.3
Equipment	0																			
Equipment, Nonrecurring	0																			
Engineering Change Orders	0																			
Data	0																			
Training Equipment	0																			
Support Equipment	0																			
Contractor Support	0																			
Interim Contractor Support	0																			
Installation of Hardware	0																			
FY2002 & Prior Equip-- Kits	0																			
FY2003 Equip-- Kits	0																			
FY2004 Equip-- Kits	0																			
FY2005 Equip-- Kits	0																			
FY2006 Equip-- Kits	0																			
FY2007 Equip-- Kits	0																			
FY2008 Equip-- Kits	0																			
FY2009 Equip-- Kits	0																			
TC Equip- Kits	0																			
Total Installment	0	0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0		0.0
Total Procurement Cost		46.7		19.9		19.8		20.1		20.5		0.0		0.0		0.0		0.0		127.0

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: N B C Filter Fire Fixes (NBCF3) [MOD 22] 2-03-05-0004

MODELS OF SYSTEM AFFECTED: M1A1 / M1A2

DESCRIPTION/JUSTIFICATION:

The Nuclear, Biological, Chemical(NBC) Filter Fire Fixes are a series of modifications intended to prevent fires from originating in the NBC system. Included are an Automatic electrical shutdown, NBC cover spacers and Sponson drains. Ongoing investigation of tank fires may suggest additional changes. Quantities are not listed as they will vary depending on individual tank configuration. Contract date will likely also vary by item and cannot yet be predicted.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Items described above will have varying Milestones.

Installation Schedule:

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

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

METHOD OF IMPLEMENTATION:

Contract Dates: FY 2004
 Delivery Date: FY 2004

ADMINISTRATIVE LEADTIME: 0 Months
 FY 2005

PRODUCTION LEADTIME: 0 Months
 FY 2006

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): N B C Filter Fire Fixes (NBCF3) [MOD 22] 2-03-05-0004

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RDT&E																			
Procurement																				
Kit Quantity																				
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment		2.4		0.7		2.4		2.4		2.4		4.5		3.8		3.8				22.4
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware																				
FY 2002 & Prior Equip -- Kits																				
FY 2003 -- Kits				1.3																1.3
FY 2004 Equip -- Kits						1.4														1.4
FY 2005 Equip -- Kits								2.9												2.9
FY 2006 Equip -- Kits										3.0										3.0
FY 2007 Equip -- Kits												2.2								2.2
FY 2008 Equip -- Kits														3.9						3.9
FY 2009 Equip -- Kits																2.9				2.9
TC Equip- Kits																		3.0		3.0
Total Installment		0.0		1.3		1.4		2.9		3.0		2.2		3.9		2.9		3.0		20.6
Total Procurement Cost		2.4		2.0		3.8		5.3		5.4		6.7		7.7		6.7		3.0		43.0

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: Impr. Fire Control Electronics Unit (IFCEU) [MOD 24] 2-03-05-0003

MODELS OF SYSTEM AFFECTED: All models M1A1's & M1A2's

DESCRIPTION/JUSTIFICATION:

The Improved Fire Control Electronics Unit (IFCEU) replaces the current Fire Control Electronics Unit (FCEU), which contains many outdated parts and is becoming increasingly difficult to support. The IFCEU provides a significant processing and memory growth margin using contemporary, easily procured components assuring that improvements to the Abrams Fire Control System continue to be feasible and affordable.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Preliminary Design Review PLANNED: 1Q03 ACCOMPLISHED: 1Q03
 Critical Design Review PLANNED: 2Q03 ACCOMPLISHED:
 Initial Operational Test & Eval PLANNED: 2Q03 ACCOMPLISHED:
 IPR Production Decision PLANNED: 3Q03 ACCOMPLISHED:
 Tech Data Package Available PLANNED: 3Q03 ACCOMPLISHED:

Installation Schedule:

Pr Yr	FY 2003				FY 2004				FY 2005				FY 2006				FY 2007			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Totals						42	48	48	48	48	48	48	5							
Inputs																				
Outputs									46	46	46	48	48	48	48	48	5			

	FY 2008				FY 2009				FY 2010				FY 2011				To Complete	Totals			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
Inputs																					335
Outputs																					335

METHOD OF IMPLEMENTATION: Contractor ADMINISTRATIVE LEADTIME: 1 Months PRODUCTION LEADTIME: 3 Months
 Contract Dates: FY 2004 NOV 03 FY 2005 NOV 04 FY 2006 AUG 05
 Delivery Date: FY 2004 MAR 04 FY 2005 MAR 05 FY 2006 DEC 05

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): Impr. Fire Control Electronics Unit (IFCEU) [MOD 24] 2-03-05-0003

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RDT&E																			
Procurement																				
Kit Quantity					138		192		5										335	
Installation Kits																				
Installation Kits, Nonrecurring																				
Equipment						5.7		8.1		0.2										14.0
Equipment, Nonrecurring																				
Engineering Change Orders																				
Data																				
Training Equipment																				
Support Equipment																				
Other																				
Interim Contractor Support																				
Installation of Hardware																				
FY 2002 & Prior Equip -- Kits																				
FY 2003 -- Kits																				
FY 2004 Equip -- Kits																				
FY 2005 Equip -- Kits							138	0.1											138	0.1
FY 2006 Equip -- Kits									192	0.2									192	0.2
FY 2007 Equip -- Kits											5								5	
FY 2008 Equip -- Kits																				
FY 2009 Equip -- Kits																				
TC Equip- Kits																				
Total Installment		0.0		0.0		0.0	138	0.1	192	0.2	5	0.0		0.0		0.0		0.0	335	0.3
Total Procurement Cost		0.0		0.0		5.7		8.2		0.4		0.0		0.0		0.0		0.0		14.3

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army /I/Tracked combat vehicles

P-1 Item Nomenclature
M1A1D RETROFIT (GA0720)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost		1.9	11.5			12.2						25.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)		1.9	11.5			12.2						25.6
Initial Spares												
Total Proc Cost		1.9	11.5			12.2						25.6
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

The Abrams M1A1-D is an M1A1 Abrams Main Battle Tank that has been equipped with a digital appliqué command and control package consisting of an A-Kit (Upgraded Tank Commander's Panel/UTCP) with peripheral hardware, a B-Kit (Appliqué computer display and keyboard) and a C-Kit (provides far target capability by integrating a North Finding Module (NFM) and a Digital Interface Unit (DIU) to process raw tank data and format messages for transmittal to the Appliqué card. This system supports the Legacy transition path of the Transformation Campaign Plan (TCP).

Justification:

FY04/05 procures the digitization modification to enable the M1A1 to exchange digital command and control data in the Army's Common Operating Environment format used by the more advanced M1A2 SEP tanks and other members of the combined arms team. The M1A1-D conversion is a key component in the Army's plan to field the First Digital Division and will also significantly add to the "Useful Combat Life" of these vehicles.

Exhibit P-5, Weapon WTCV Cost Analysis		Appropriation/Budget Activity/Serial No. Procurement of W&TCV, Army / 1 / Tracked combat vehicles			P-1 Line Item Nomenclature: M1A1D RETROFIT (GA0720)			Weapon System Type:			Date: February 2003		
WTCV Cost Elements		FY 02			FY 03			FY 04			FY 05		
ID CD		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000
1. Upgraded Tank Commander's Panel (A K		1098	135	8.133									
2. Appliqué Card (B-Kit)											4654	135	34.474
3. Far Target (C-Kit)		1358	7	194.000							6698	128	52.328
4. M1A1D Kit Installation											855		
5. Contractor Engineering		8674											
6. Government Support		351											
Total		11481									12207		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army / 1 / Tracked combat vehicles

Weapon System Type:

P-1 Line Item Nomenclature:
M1A1D RETROFIT (GA0720)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
1. Upgraded Tank Commander's Panel (A K) FY 2002	GDLS Sterling Heights, MI	CPFF	TACOM, Warren, MI	Dec 01	Oct 02	135	8			
2. Appliqué Card (B-Kit) FY 2005	PM, FBCB2 Ft. Monmouth, NJ	GFE	Ft. Monmouth, NJ	Dec 04	Oct 05	135	34			
3. Far Target (C-Kit) FY 2002	GDLS Sterling Heights, MI	CPFF	TACOM, Warren, MI	May 02	Mar 03	7	194			
FY 2005	GDLS Sterling Heights, MI	CPFF	TACOM, Warren, MI	Dec 04	Oct 05	128	52			

REMARKS: FY02 funding for Far Target (C-Kits) includes the cost of ECP development effort.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army /1/Tracked combat vehicles

P-1 Item Nomenclature
SYSTEM ENHANCEMENT PGM: SEP M1A2 (GA0730)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty		16	25	31								72
Gross Cost		54.9	98.6	120.6								274.2
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)		54.9	98.6	120.6								274.2
Initial Spares												
Total Proc Cost		54.9	98.6	120.6								274.2
Flyaway U/C												
Wpn Sys Proc U/C		3.4	3.9	3.9								

Description:

This program upgrades M1A2 tanks to the newer System Enhancement Package (SEP) configuration. It will upgrade the M1A2's computer systems and its night vision capabilities. The SEP tank has better microprocessors; color flat panel displays, more memory capacity, better Soldier-Machine Interface (SMI), and a new open operating system designed to run the Army's Common Operating Environment (ACOE) software. Both the Gunner's Primary Sight (GPS) and the Commander's Independent Thermal Viewer (CITV) on the SEP tank include the improved thermal imaging capabilities of the new 2nd Generation Forward-Looking Infra-Red (FLIR) technology. This system supports the Legacy transition path of the Transformation Campaign Plan (TCP).

Exhibit P-5, Weapon WTCV Cost Analysis		Appropriation/Budget Activity/Serial No. Procurement of W&TCV, Army / 1 / Tracked combat vehicles			P-1 Line Item Nomenclature: SYSTEM ENHANCEMENT PGM: SEP M1A2 (GA0730)			Weapon System Type:			Date: February 2003			
WTCV Cost Elements		ID CD	FY 02			FY 03			FY 04			FY 05		
			TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000
SEP		A	53484	25	2139	79875	31	2577						
FLIR		A	12357	25	494	13295	31	429						
ESLRF		A	568	25	23	659	31	21						
M1A2 Depot-Maintenance Pre-MOD			3742	14	267	7758	31	250						
STS, TPF & ST/TS, Gov't Spt			28476			19046								
Total			98627			120633								

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army / 1 / Tracked combat vehicles

Weapon System Type:

P-1 Line Item Nomenclature:
SYSTEM ENHANCEMENT PGM: SEP M1A2 (GA0730)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Units	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
SEP										
FY 2002	GDLs Sterling Hgts, MI	SS/FFP	TACOM - Warren	Jun-02	Oct-03	25	2139			
FY 2003	GDLs Sterling Hgts, MI	SS/FFP	TACOM - Warren	Apr-03	Dec-04	31	2577			
FLIR										
FY 2002	Various	SS/FFP	CECOM	Nov-01	Jun-03	25	494			
FY 2003	Various	SS/FFP	CECOM	Feb-03	Jun-04	31	429			
ESLRF										
FY 2002	Litton Apopka, FL	SS/FFP	TACOM - Rock Island	Jan 02	Jan 03	25	23			
FY 2003	TBS	C/FFP	TACOM - Rock Island	Mar 03	Jan 04	31	21			

REMARKS:

FY 05 / 06 BUDGET PRODUCTION SCHEDULE

P-1 Item Nomenclature:
SYSTEM ENHANCEMENT PGM: SEP M1A2 (GA0730)

Date:
February 2003

COST ELEMENTS	MFR	FY	SERV	PROC QTY Units	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 05												Fiscal Year 06												L A T E R						
							Calendar Year 05												Calendar Year 06																		
							OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP							
SEP																																					
	2	FY 01	A	16	16	0																															
	2	FY 02	A	25	17	8	3	3	2																												0
	2	FY 03	A	31	0	31			2	4	4	4	4	4	4	4	4	3	2																	0	
Total				72	33	39	3	3	4	4	4	4	4	4	4	4	4	3	2																		

MFR	NAME/LOCATION	PRODUCTION RATES			REACHED D+	MFR Number	ADMINLEAD TIME		MFR After 1 Oct	TOTAL After 1 Oct	REMARKS	
		MIN.	1-8-5	MAX.			Prior 1 Oct	After 1 Oct				
2	Lima Army Tank Plant, Lima, OH	10.00	10.00	25.00	22	2	INITIAL	0	3	14	17	
							REORDER	0	3	14	17	
							INITIAL					
							REORDER					
							INITIAL					
							REORDER					
							INITIAL					
							REORDER					

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army /1/Tracked combat vehicles

P-1 Item Nomenclature
ABRAMS UPGRADE PROGRAM (GA0750)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	360	100	104	103								667
Gross Cost	2889.6	554.9	651.4	585.6	92.9							4774.4
Less PY Adv Proc	1325.0	266.5	258.8	215.7								2065.9
Plus CY Adv Proc	1698.6	172.8	194.4									2065.9
Net Proc (P-1)	3263.2	461.2	587.0	369.9	92.9							4774.4
Initial Spares	59.0	14.7	19.3	9.8	5.4	5.4	5.4					118.9
Total Proc Cost	3322.3	475.9	606.3	379.7	98.3	5.4	5.4					4893.3
Flyaway U/C	4.3	5.0	5.5	4.9								
Wpn Sys Proc U/C		4.6	5.6	3.7								

Description:

This is the production program for the M1A2 System Enhancement Program (SEP) tank, the successor to the M1A2, which was the Army's first fully digital ground combat system. The prime contractor is using depot refurbished M1 tank hulls supplied by the Government. Therefore, for each M1A2 SEP tank produced, there will be a corresponding decrease in the Army's M1 tank inventory. SEP refers to a System Enhancement Package, which upgrades the M1A2's computer systems and its night vision capabilities. The first M1A2 SEP tank was delivered to the Government on 1 September 1999. The SEP tank has better microprocessors; color flat panel displays, more memory capacity, better Soldier-Machine Interface (SMI), and a new open operating system designed to run the Army's Common Operating Environment (ACOE) software. Both the Gunner's Primary Sight (GPS) and the Commander's Independent Thermal Viewer (CITV) on the SEP tank include the improved thermal imaging capabilities of the new 2nd Generation Forward-Looking Infra-Red (FLIR) technology. This system supports the legacy transition path of the Transformation Campaign Plan (TCP).

Justification:

FY04/FY05 procures System Technical Support to the M1A2 SEP Tank.

Exhibit P-5, Weapon WTCV Cost Analysis		Appropriation/Budget Activity/Serial No. Procurement of W&TCV, Army / 1 / Tracked combat vehicles			P-1 Line Item Nomenclature: ABRAMS UPGRADE PROGRAM (GA0750)			Weapon System Type:			Date: February 2003		
WTCV Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Basic Vehicle	A	303299	104	2916	261598	103	2540						
2. Armor		72063	121	596	44221	48	921						
3. H/TEU													
4. Engine DECU/PROSE		23550	104	226	27207	103	264						
5. Transmission		20670	104	199	23906	103	233						
6. Final Drive		1489	208	7	1259	206	6						
7. Fire Control		3179	104	31	3176	103	31						
8. Track		4479	16224	0	4295	16068	0						
9. Road Wheels		1816	3328	1	1799	3296	1						
10. Gun Mounts		3379	52	65	3689	52	71						
11. Gun		11739	104	113	22576	103	219						
12. Driver's Night Viewer		597	104	6	601	103	6						
13. Basic Issue Items		1217	104	12	1283	103	12						
14. MILSTRIPS/RIK		637	104	6	642	103	6						
15. VIS		1266	104	12	1236	103	12						
16. Special Tools & Test Sets		10430			10511								
17. System Technical Support (STS)		80279			67637			92942					
18. Government Support		12351			12568								
19. Auxiliary Services		2152			2190								
20. Testing		5121			6399								
21. Transportation (FDT)		842			848								
22. Total Package Fielding		10837			10921								
23. II Gen FLIR		64772	104	623	61713	103	599						
24. Pre Mod Depot Maintenance		15192	104	147	15335	103	149						
Gross P-1 End Cost		651356			585610			92942					
Less: Prior Year Adv Proc		258759			215672								
Net P-1 Full Funding Cost		392597			369938			92942					
Plus: P-1 CY Adv Proc		194438											
Initial Spares		19258			9784			5390			5370		
Total		606293			379722			98332			5370		

Exhibit P-5a, Budget Procurement History and Planning

Date:

February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army / 1 / Tracked combat vehicles

Weapon System Type:

P-1 Line Item Nomenclature:
ABRAMS UPGRADE PROGRAM (GA0750)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
1. Basic Vehicle										
FY 2002	GDLS Sterling Hgts, MI	SS/FFP/M2	TACOM-Warren	Feb 02	Aug 02	104	2916	Yes		Sep 99
FY 2003	GDLS Sterling Hgts, MI	SS/FFP/M3	TACOM-Warren	Feb 03	Aug 03	103	2540	Yes		Sep 99
2. Armor										
FY 2002	Bechtel BXWT Idaho Falls, ID	SS/CPFF	Department of Energy	Jan 01	Feb 02	121	596	NA		NA
FY 2003	Bechtel BXWT Idaho Falls, ID	SS/CPFF	Department of Energy	Jan 02	Feb 03	48	921	NA		NA
4. Engine DECU/PROSE										
FY 2002	AlliedSignal Tucson, AZ	SS/FFP	TACOM-Warren	Jun 01	Feb 02	104	226	Yes		Sep 97
FY 2003	AlliedSignal Tucson, AZ	Option	TACOM-Warren	Aug 02	Feb 03	103	264	Yes		Sep 97
5. Transmission										
FY 2002	Allison Transmission Div Indianapolis, IN	Option	TACOM-Warren	Dec 00	Feb 02	104	199	Yes		Jun 99
FY 2003	Allison Transmission Div Indianapolis, IN	Option	TACOM-Warren	Mar 02	Feb 03	103	233	Yes		Jun 99
6. Final Drive										
FY 2002	LOC Performance, Inc Plymouth, MI	Option	TACOM-Warren	Feb 01	Feb 02	208	7	Yes		May 98
FY 2003	LOC Performance, Inc Plymouth, MI	Option	TACOM-Warren	Jul 02	Feb 03	206	6	Yes		May 98

REMARKS: /1 RIA produces 50% of gun mounts. The remainder are procured with the GDLS contract.

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army / 1 / Tracked combat vehicles

Weapon System Type:

P-1 Line Item Nomenclature:
ABRAMS UPGRADE PROGRAM (GA0750)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
7. Fire Control										
FY 2002	Various	Various	TACOM-ACALA	Various	Feb 02	104	31	Yes		Various
FY 2003	Various	Various	TACOM-ACALA	Various	Feb 03	103	31	Yes		Various
8. Track										
FY 2002	Goodyear Tire & Rubber Akron, OH	Option	TACOM-Warren	Mar 01	Feb 02	16224	0	Yes		Dec 97
FY 2003	Goodyear Tire & Rubber Akron, OH	C-FFP	TACOM-Warren	Aug 02	Feb 03	16068	0	Yes		
9. Road Wheels										
FY 2002	Red River Army Depot Texarkana, TX	WR		Mar 01	Feb 02	3328	1	Yes		Sep 98
FY 2003	Red River Army Depot Texarkana, TX	WR		Jul 02	Feb 03	3296	1	Yes		Sep 98
10. Gun Mounts										
FY 2002	Rock Island Arsenal/GDLS Rock Island, IL	WR	/1	Feb 01	Feb 02	52	65	Yes		NA
FY 2003	Rock Island Arsenal/GDLS Rock Island, IL	WR	/1	Feb 02	Feb 03	52	71	Yes		NA
11. Gun										
FY 2002	Watervliet Arsenal Watervliet, NY	WR		Feb 01	Feb 02	104	113	Yes		NA
FY 2003	Watervliet Arsenal Watervliet, NY	WR		Feb 02	Feb 03	103	219	Yes		NA

REMARKS: /1 RIA produces 50% of gun mounts. The remainder are procured with the GDLS contract.

Exhibit P-5a, Budget Procurement History and Planning

Date:

February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army / 1 / Tracked combat vehicles

Weapon System Type:

P-1 Line Item Nomenclature:
ABRAMS UPGRADE PROGRAM (GA0750)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
12. Driver's Night Viewer										
FY 2002	CECOM NICP Fort Monmouth, NJ	REQ		Feb 02	Feb 02	104	6	Yes		NA
FY 2003	CECOM NICP Fort Monmouth, NJ	REQ		Feb 03	Feb 03	103	6	Yes		NA
13. Basic Issue Items										
FY 2002	TACOM-ACALA Rock Island, IL	WR		Feb 01	Feb 02	104	12	Yes		NA
FY 2003	TACOM-ACALA Rock Island, IL	WR		Jul 02	Feb 03	103	12	Yes		NA
14. MILSTRIPS/RIK										
FY 2002	NA	REQ		Various	Feb 02	104	6	Yes		NA
FY 2003	NA	REQ		Various	Feb 03	103	6	Yes		NA
15. VIS										
FY 2002	Grumman Aerospace Corp Bethpage, NY	REQ		Oct 00	Feb 02	104	12	Yes		Sep 91
FY 2003	Grumman Aerospace Corp Bethpage, NY	REQ		May 02	Feb 03	103	12	Yes		Sep 91
23. II Gen FLIR										
FY 2002	Various	Option	CECOM	Nov 00	Feb 02	104	623	Yes		Sep 96
FY 2003	Various	Option	CECOM	Nov 01	Feb 03	103	599	Yes		Sep 96

REMARKS: /1 RIA produces 50% of gun mounts. The remainder are procured with the GDLS contract.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army /1/Tracked combat vehicles

P-1 Item Nomenclature
ABRAMS UPGRADE PROGRAM(Adv Proc) (GA0750)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost												
Less PY Adv Proc												
Plus CY Adv Proc	1698.6	172.8	194.4									2065.9
Net Proc (P-1)	1698.6	172.8	194.4									2065.9
Initial Spares												
Total Proc Cost	1698.6	172.8	194.4									2065.9
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

Advance procurement for long lead materials to support procurement for the Abrams Upgrade Program. This system supports the Legacy transition path of the Transformation Campaign Plan (TCP).

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: Procurement of W&TCV, Army /1/Tracked combat vehicles	P-1 Item Nomenclature ITEMS LESS THAN \$5.0M (TCV-WTCV) (GL3100)
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Program Elements for Code B Items:	Code:	Other Related Program Elements:
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	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	17.6	7.1	7.6	0.1	0.5	0.5	0.5	0.5	0.5	0.5		35.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	17.6	7.1	7.6	0.1	0.5	0.5	0.5	0.5	0.5	0.5		35.3
Initial Spares												
Total Proc Cost	17.6	7.1	7.6	0.1	0.5	0.5	0.5	0.5	0.5	0.5		35.3
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

Provides for procurement/assembly of full tracked vehicle organizational maintenance tool/shop sets. This equipment has multi-applications and is essential for effective maintenance on all tracked vehicles. This system supports the Legacy transition path of the Transformation Campaign Plan (TCP).

Justification:

FY04/05 provides organizational maintenance personnel with equipment essential to maintain full tracked vehicles in an acceptable state of readiness. Funding of this program will establish and maintain the operational capability of the Bradley Fighting Vehicle, M1 Tank, etc.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army /1/Tracked combat vehicles

P-1 Item Nomenclature
PRODUCTION BASE SUPPORT (TCV-WTCV) (GA0050)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	317.9	9.2	9.8	9.7	10.2	10.3	11.0	11.4	11.6	11.8		413.0
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	317.9	9.2	9.8	9.7	10.2	10.3	11.0	11.4	11.6	11.8		413.0
Initial Spares												
Total Proc Cost	317.9	9.2	9.8	9.7	10.2	10.3	11.0	11.4	11.6	11.8		413.0
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

This program provides for the Provision of Industrial Facilities (PIF). Funds are used to establish, modernize, expand or replace facilities owned by the Army. It provides Production Support Equipment Replacement (PSR) and Modernization (MOD) to Government owned equipment and real property used in the production of Weapons and Tracked Combat Vehicles. The program also provides funding for the Layaway of Industrial Facilities (LIF) for preserving equipment for the portions of Government owned plants no longer required for active production, but vital to surge or replacement effort in case of National need.

Justification:

FY04/05 supports PSR and MOD at the Lima Army Tank Plant (LATP), which supports various heavy tracked systems such as the M series of tanks. The funding is used to keep Government owned equipment and facilities capable of supporting the manufacturing effort at LATP. Funding also covers work at plants in Muskegon, MI and Scranton, PA. Funding for LIF affords a reduction in costs at various locations by properly preserving equipment for future needs or excessing equipment no longer needed.

Exhibit P-5, Weapon WTCV Cost Analysis		Appropriation/Budget Activity/Serial No. Procurement of W&TCV, Army / 1 / Tracked combat vehicles			P-1 Line Item Nomenclature: PRODUCTION BASE SUPPORT (TCV-WTCV) (GA0050)			Weapon System Type:			Date: February 2003			
WTCV Cost Elements		ID CD	FY 02			FY 03			FY 04			FY 05		
			TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
PIF			9540			9533			10011			10174		
LIF			370			367			387			392		
Total			9910			9900			10398			10566		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army /1/Tracked combat vehicles

P-1 Item Nomenclature
PIF1 OMNIBUS(TCV-WTCV) (GA2001)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	279.7	8.8	9.5	9.4	9.8	9.9	10.6	10.9	11.2	11.4		371.2
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	279.7	8.8	9.5	9.4	9.8	9.9	10.6	10.9	11.2	11.4		371.2
Initial Spares												
Total Proc Cost	279.7	8.8	9.5	9.4	9.8	9.9	10.6	10.9	11.2	11.4		371.2
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

This program provides for the Provision of Industrial Facilities (PIF). Funds are needed to establish, modernize, expand, or replace facilities owned by the Army. Funds provide Production Support Equipment Replacement (PSR) and Modernization (MOD) to Government Owned Equipment (GOE) and real property required for production and production testing of Weapons and Tracked Combat Vehicles.

Justification:

FY04/05 supports PSR to GOE and Government owned real property at Lima Army Tank Plant (LATP) and GOE at contractor-owned manufacturing facilities at Muskegon MI, Scranton PA, and other locations. This request also supports items such as Emergency/Unplanned Repairs to prevent loss of resources, production interruptions, and threats to security, worker safety, and the environment. Representative projects include milling capabilities, upgrading of a grinding machine, and rehab of machining centers. At LATP, tasks such as rehab of weld machines, resurfacing of deteriorating asphalt and concrete, and rehab of machining centers are samples of projects to be accomplished. Such efforts help prevent increased costs due to use and maintenance of obsolete or uneconomical equipment and avoids violations of environmental and safety laws and regulations.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army /2/Weapons and other combat vehicles

P-1 Item Nomenclature
ARMOR MACHINE GUN, 7.62MM M240 SERIES (G13000)

Program Elements for Code B Items:
Code: A

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	59224	1306	716	1780	1480	1960	645	761	896			68768
Gross Cost	265.8	12.3	7.9	16.8	16.6	24.1	8.7	11.0	13.8			376.9
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	265.8	12.3	7.9	16.8	16.6	24.1	8.7	11.0	13.8			376.9
Initial Spares												
Total Proc Cost	265.8	12.3	7.9	16.8	16.6	24.1	8.7	11.0	13.8			376.9
Flyaway U/C												
Wpn Sys Proc U/C		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			

Description:

The M240B Machine Gun is a ground version of the M240 Machine Gun, 7.62mm Medium Machine Gun class weapon, designed as a coaxial/pintle-mounted weapon for tanks and light armored vehicles. The M240B is an air cooled, link-belt fed, gas operated weapon. The weapon features fixed head space, which permits rapid changing of the barrels. The principle difference between the M240 and the M240B is the addition of a flash suppressor, front sight, carrying handle for the barrel, buttstock, pistol grip, bipod, heat shield and rear sight assembly. The M240B Machine Gun may also be tripod-mounted and used in conjunction with a traversing and elevating mechanism and a flex mount pintle. This system supports the Legacy-to-Objective transition path of the Transformation Campaign Plan (TCP).

Justification:

FY04/05 procures 342 M240B Medium Machine guns and 3,098 M240 Helicopter Machine guns. The M240B Medium Machine Gun is an infantry version of the M240 Armored Machine Gun intended to replace the M60 series Machine Gun in light infantry, mechanized infantry, and combat engineer units. The U.S. Army has identified a need to upgrade its current inventory of 7.62mm Medium Machine guns in order to provide the dismounted infantryman a more reliable, accurate, and lethal medium machine gun to suppress and destroy enemy personnel, lightly armored vehicles and fortified positions. The M240 Helicopter Machine gun is an aviation version of the M240, which replaces the M60 Machine Gun. All Black Hawk and Chinooks (CH47) equipped with the M60D will be replaced with the aviation variant to include 160th Special Operations Aviation Regiment, 82nd, 101st and 10th Mountain. All units with Black Hawk and Chinook aircraft will have their M60D Machine Guns replaced with M240 Machine Guns.

Exhibit P-5, Weapon WTCV Cost Analysis		Appropriation/Budget Activity/Serial No. Procurement of W&TCV, Army / 2 / Weapons and other combat vehicles			P-1 Line Item Nomenclature: ARMOR MACHINE GUN, 7.62MM M240 SERIES (G13000)			Weapon System Type:			Date: February 2003			
WTCV Cost Elements		ID CD	FY 02			FY 03			FY 04			FY 05		
			TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Hardware (Incls Blank Firing Device)														
Hardware (Infantry Version)		A	6006	716	8	14643	1780	8	2865	342	8			
Hardware (Aviation Version)									12202	1138	11	22066	1960	11
2.Engineering Support - In House Support			645			1149			944			1215		
3. Integrated Logistics Support			185			125			100			125		
4. Engineering Change Proposals			280			468			73			144		
5. Fielding			375			330			300			325		
6. Engineering Studies			235			131			75			175		
7. Overhead Fire Test			193											
Total			7919			16846			16559			24050		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army / 2 / Weapons and other combat vehicles

Weapon System Type:

P-1 Line Item Nomenclature:
ARMOR MACHINE GUN, 7.62MM M240 SERIES (G13000)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Hardware (Infantry Version)										
FY 2002	FN Mfg Inc., Columbia, SC	C/FFP IDIQ	TACOM - Rock Island, ILL	Dec 01	Aug 04	716	8	Yes	No	
FY 2003	TBS	TBS	TACOM - Rock Island, ILL	Jun 03	Nov 04	1780	8	Yes	No	
FY 2004	TBS	TBS	TACOM - Rock Island, ILL	Jun 04	Jun 05	342	8	Yes	No	
Hardware (Aviation Version)										
FY 2004	TBS	TBS	TACOM - Rock Island, ILL	Jun 04	Dec 05	1138	11	No	N/A	
FY 2005	TBS	TBS	TACOM - Rock Island, ILL	Dec 04	Jun 06	1960	11	No	N/A	

REMARKS:

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army /2/Weapons and other combat vehicles

P-1 Item Nomenclature
GRENADE LAUNCHER, AUTO, 40MM, MK19-3 (G13400)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	18236	811	1510	626								21183
Gross Cost	291.7	14.9	28.3	16.4								351.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	291.7	14.9	28.3	16.4								351.3
Initial Spares												
Total Proc Cost	291.7	14.9	28.3	16.4								351.3
Flyaway U/C												
Wpn Sys Proc U/C		0.0	0.0	0.0								

Description:

The MK19, Mod 3 is a self-powered, air cooled, blowback, 40mm automatic Grenade Launcher capable of a cyclic rate of 325-375 rounds per minute. It will engage point targets up to 1,500 meters and provide suppressive fire up to 2,200 meters. Component items for this system include the 40mm assembly group 1 and the MK64 mount. The system supports the Legacy-to-Objective transition path of the Transformation Campaign Plan (TCP).

Exhibit P-5, Weapon WTCV Cost Analysis		Appropriation/Budget Activity/Serial No. Procurement of W&TCV, Army / 2 / Weapons and other combat vehicles			P-1 Line Item Nomenclature: GRENADE LAUNCHER, AUTO, 40MM, MK19-3 (G13400)			Weapon System Type:			Date: February 2003			
WTCV Cost Elements		ID CD	FY 02			FY 03			FY 04			FY 05		
			TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000
1. Hardware		A	23107	1510	15	10221	626	16						
MK64 ERC A Mounts			1651			729								
2. GFM			421											
3. Round Removal Tool (GFM)			196			66								
4. Engineering Support (In-House)			1204			1983								
5. Integrated Logistics Support (ILS)			185			568								
6. Engineering Change Proposals (ECP's)			343											
7. Testing (TECOM)			30			1037								
8. Fielding			563			889								
9. Engineering Studies			618			650								
10. Bore Obstruction Device (BOD)			4			2								
10. Bags						33								
11. Arms Rack						205								
Total			28322			16383								

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No: Procurement of W&TCV, Army / 2 / Weapons and other combat vehicles		Weapon System Type:			P-1 Line Item Nomenclature: GRENADE LAUNCHER, AUTO, 40MM, MK19-3 (G13400)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Units	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
1. Hardware										
FY 2002	Gen Dyn Armament & Tech Prod Saco, Maine	SS/FFP Opt	TACOM - Rock Island	Dec 01	Sep 02	1510	15	Yes	No	
FY 2003	Gen Dyn Armament & Tech Prod Saco, Maine	SS/FFP Opt	TACOM - Rock Island	FEB 03	Feb 04	626	16	Yes	No	

REMARKS:

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: Procurement of W&TCV, Army /2/Weapons and other combat vehicles
 P-1 Item Nomenclature: Mortar Systems (G02200)

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

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty				52	59	26						137
Gross Cost	139.4		3.3	9.7	10.1	4.6						167.0
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	139.4		3.3	9.7	10.1	4.6						167.0
Initial Spares												
Total Proc Cost	139.4		3.3	9.7	10.1	4.6						167.0
Flyaway U/C												
Wpn Sys Proc U/C				0.2	0.2	0.2						

Description:

This program funds the 81mm subcaliber training insert for the 120mm Battalion Mortar System. The training insert will allow the M120/M121 mortar, currently fielded to all Mechanized Infantry, Armor and Armored Cavalry units in the Army and Army National Guard, to use less expensive M800 series, 81mm ammunition in training. The program consists of a two year value engineering effort to test and qualify a domestically producible 81mm mortar tube and to produce 137 inserts. This program will result in cost avoidance of approximately \$25M per year by using lower cost 81mm ammunition in lieu of full sized (120mm) ammunition. These gun tubes will be produced at Watervliet Arsenal as an Arsenal Act order.

This system supports the Legacy transition path of the Transformation Campaign Plan

Justification:

FY04/05 procures 85 inserts, Conduct Production Verification Tests, and fielding.

ACQUISITION MANAGER : PM Combat Ammunition Systems

TC Date 2Q FY03

Exhibit P-5, Weapon WTCV Cost Analysis		Appropriation/Budget Activity/Serial No. Procurement of W&TCV, Army / 2 / Weapons and other combat vehicles			P-1 Line Item Nomenclature: Mortar Systems (G02200)			Weapon System Type:			Date: February 2003			
WTCV Cost Elements		ID	FY 02			FY 03			FY 04			FY 05		
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
HARDWARE														
81mm Mortar Tube Insert						1552	52	30	1758	59	30	866	26	33
Unutilized Capacity Surcharge						1863	52	36	2110	59	36	1039	26	40
Subtotal Hardware						3415			3868			1905		
PRODUCTION SUPPORT														
Production Engineering - ARDEC						246			1682			1180		
Production Engineering Watervliet						349			415			390		
Fielding and NET						116			1442			1104		
Subtotal Production Support						711			3539			2674		
NON-RECURRING COSTS														
Value Engineering Material Change			3267			5530								
Production Verification Tests									2695					
Subtotal Non-Recurring Costs			3267			5530			2695					
TOTAL			3267			9656			10102			4579		
Total			3267			9656			10102			4579		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No: Procurement of W&TCV, Army / 2 / Weapons and other combat vehicles		Weapon System Type:			P-1 Line Item Nomenclature: Mortar Systems (G02200)					
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
81mm Mortar Tube Insert										
FY 2003	Watervliet Arsenal Watervliet NY	SS/CR	TACOM	Apr 04	Apr 05	52	30	No	Mar 04	
FY 2004	Watervliet Arsenal Watervliet NY	SS/CR	TACOM	Apr 04	Sep 05	59	30	No	Mar 04	
FY 2005	Watervliet Arsenal Watervliet NY	SS/CR	TACOM	Mar 05	Mar 06	26	33	No	Mar 04	

REMARKS: Watervliet Arsenal is a Government Owned- Government Operated (GOGO) facility. Work is accomplished through yearly negotiated work orders, not contracts.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: Procurement of W&TCV, Army /2/Weapons and other combat vehicles

P-1 Item Nomenclature
XM107, CAL. 50, SNIPER RIFLE (G01500)

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

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty		48	150	600	600	600	600	545				3143
Gross Cost		0.5	2.1	8.8	8.8	8.7	8.7	7.9				45.5
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)		0.5	2.1	8.8	8.8	8.7	8.7	7.9				45.5
Initial Spares												
Total Proc Cost		0.5	2.1	8.8	8.8	8.7	8.7	7.9				45.5
Flyaway U/C												
Wpn Sys Proc U/C		0.0	0.0	0.0	0.0	0.0	0.0	0.0				

Description:

The XM107 is a Cal. 50 rifle with attached optics/electro-optics that supports all weather, day/night tactical dominance via rapid-fire direct fire engagements with armor penetrating, incendiary, dual-purpose ammunition. The XM107 provides a man-portable, materiel destruction capability to the Sniper team and/or supported force and complements the anti-personnel precision fire capability of the M24 Sniper Weapon System (SWS). The XM107, with a family of ammunition, enables Sniper teams to employ greater destructive force at greater ranges and at a higher rate of fire that exceed the terminal effect capability of the M24 (7.62mm, bolt action) SWS. Additionally, the XM107 will replace existing non-standard, M82A1, caliber .50 rifles in Explosive Ordnance Detachments as detonation tools. The primary mission of this rifle is to engage and defeat materiel targets at extended ranges to include parked aircraft; command, control, communications, computers, and intelligence (C4I) sites; radar sites; ammunition; petroleum, oil and lubricants; and various other thin skinned (lightly armored) materiel targets out to 2000 meters. The XM107 will also be used in a counter sniper role taking advantage of the longer stand off range and increased terminal effect when opposing snipers armed with smaller caliber weapons out to 1000 meters. This system supports the Legacy-to-Objective transition path of the Transformation Campaign Plan (TCP).

Justification:

FY 04/05 procures 600 XM107, which is a replacement for the current M24 (SWS). The XM107 is more effective against light materiel and personnel targets and supplements the sniper's role to support combat operations. It allows precise engagement of high value targets and counter sniper capability. It provides greater destructive force at greater ranges and at a higher rate of fire that exceeds the terminal effect capability of the M24 Sniper Weapon System. The XM107 is an improvement over the existing M24 (SWS) by providing increased ranges have 2000 (anti-materiel) and 1000 (anti-personnel).

Exhibit P-5, Weapon WTCV Cost Analysis		Appropriation/Budget Activity/Serial No. Procurement of W&TCV, Army / 2 / Weapons and other combat vehicles			P-1 Line Item Nomenclature: XM107, CAL. 50, SNIPER RIFLE (G01500)			Weapon System Type:			Date: February 2003		
WTCV Cost Elements	ID CD	FY 02			FY 03			FY 04			FY 05		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Hardware													
Weapons	B	1852	150	12	6700	600	11	6128	600	10	6220	600	10
Laser Protection Filters & Anti-Reflect		92	150	1	406	600	1	376	600	1	383	600	1
Flash/Sound/Recoil Suppressors								800	800	1	800	800	1
GFM		24	150	0	93	600	0	94	600	0	94	600	0
Shipping (GBL)		15	150	0	75	600	0	75	600	0	75	600	0
Retrofit/Refurbishment of Urgent Release					157								
2. ESIP QA		65			762			905			754		
3. STRICOM (MILES)					200								
4. DBBL User Experiments		15											
5. Testing					120			120			120		
6. Integrated Logistical Support		45			125			175			175		
7. New Equipment Training					45								
8. Fielding		10			35			50			50		
9. ECPs					30			15			15		
10. Ammunition					15			15			15		
Total		2118			8763			8753			8701		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army / 2 / Weapons and other combat vehicles

Weapon System Type:

P-1 Line Item Nomenclature:
XM107, CAL. 50, SNIPER RIFLE (G01500)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Weapons										
FY 2002	Barrett Firearms Mfg. Murfreesboro, TN	Option	MARCORSYSCOM	APR 02	APR 02	9	13	YES		
FY 2002	Barrett Firearms Mfg. Murfreesboro, TN	Option	MARCORSYSCOM	MAY 02	MAY 02	9	13	YES		
FY 2002	Barrett Firearms Mfg. Murfreesboro, TN	SS/FFP	TACOM-ARDEC	SEP 02	OCT 02	132	13	YES		
FY 2003	Barrett Firearms Mfg. Murfreesboro, TN	Option	TACOM-ARDEC	DEC 02	DEC 02	258	11	YES		
FY 2003	Barrett Firearms Mfg. Murfreesboro, TN	SS/FFP	TACOM-ARDEC	MAY 03	JUN 03	342	11	YES		
FY 2004	Barrett Firearms Mfg. Murfreesboro, TN	Option	TACOM-ARDEC	DEC 03	JAN 04	600	10			
FY 2005	Barrett Firearms Mfg. Murfreesboro, TN	Option	TACOM-ARDEC	DEC 04	JAN 05	600	10			
Laser Protection Filters & Anti-Reflect										
FY 2002	TBS	C/FFP	TACOM-ROCK ISLAND	MAY 03	AUG 03	150	1	YES		
FY 2003	TBS	Option	TACOM-ROCK ISLAND	JAN 04	FEB 04	600	1	YES		
FY 2004	TBS	Option	TACOM-ROCK ISLAND	JAN 05	FEB 05	600	1	YES		
FY 2005	TBS	Option	TACOM-ROCK ISLAND	JAN 06	FEB 06	600	1	YES		
Flash/Sound/Recoil Suppressors										
FY 2004	TBS	SS/FFP	TACOM-ARDEC	DEC 04	MAR 05	800	1	NO	SEP 03	

REMARKS: Prior to Type Classification permission to procure XM107 Sniper Rifle based on Urgent Materiel Release approval for overseas operations.

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No: Procurement of W&TCV, Army / 2 / Weapons and other combat vehicles		Weapon System Type:			P-1 Line Item Nomenclature: XM107, CAL. 50, SNIPER RIFLE (G01500)					
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
FY 2005	TBS	Option	TACOM-ARDEC	DEC 05	JAN 06	800	1	NO	SEP 03	

REMARKS: Prior to Type Classification permission to procure XM107 Sniper Rifle based on Urgent Materiel Release approval for overseas operations.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: Procurement of W&TCV, Army /2/Weapons and other combat vehicles
 P-1 Item Nomenclature: 5.56 CARBINE M4 (G14904)

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

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty	101782	16215	2386	8999	8635	8362	2772					149151
Gross Cost	58.9	11.2	2.4	9.0	9.0	9.1	3.0					102.4
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	58.9	11.2	2.4	9.0	9.0	9.1	3.0					102.4
Initial Spares												
Total Proc Cost	58.9	11.2	2.4	9.0	9.0	9.1	3.0					102.4
Flyaway U/C												
Wpn Sys Proc U/C		0.0	0.0	0.0	0.0	0.0	0.0					

Description:

The M4 Carbine is a 5.56mm gas-operated, air-cooled, magazine-fed, selective-rate, shoulder-fired weapon. It is fed by a 30-round magazine and will replace all M3A1 WWII era .45 Cal Submachine guns, selective M16 series rifles, and M9 pistols. It provides the individual soldier operating in close quarters the capability to engage targets at extended ranges with accurate lethal fire. Although more compact and featuring a collapsible stock, it achieves over 85% commonality with the M16A2 Rifle. The system supports the Legacy-to-Objective transition path of the Transformation Campaign Plan (TCP).

Justification:

FY 04/05 procures 16,997 M4 Carbines. The M4 Carbine provides soldiers with a compact, lightweight weapon that can provide better self-protection and additional firepower in close quarters. The funded program will allow for the uninterrupted fielding to the U.S. Army Reserves.

Exhibit P-5, Weapon WTCV Cost Analysis		Appropriation/Budget Activity/Serial No. Procurement of W&TCV, Army / 2 / Weapons and other combat vehicles			P-1 Line Item Nomenclature: 5.56 CARBINE M4 (G14904)			Weapon System Type:			Date: February 2003		
WTCV Cost Elements		FY 02			FY 03			FY 04			FY 05		
ID CD		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Hardware		2240	2386	0.9	8286	8999	0.9	8263	8635	1.0	8154	8362	1.0
2. Engineering Support (In-House)		100			500			500			720		
3. Integrated Logistics Support					85			85			90		
4. Fielding/Transportation		25			130			130			160		
Total		2365			9001			8978			9124		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army / 2 / Weapons and other combat vehicles

Weapon System Type:

P-1 Line Item Nomenclature:
5.56 CARBINE M4 (G14904)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
1. Hardware										
FY 2002	Colt's Mfg Co. Inc Hartford, CT	SS/FFP	TACOM-Rock Island	Jul 02	Jul 03	1400	1	Yes	No	
FY 2002	Colt's Mfg Co. Inc Hartford, CT	SS/FFP	TACOM-Rock Island	Dec 02	Jul 03	986	1	Yes	No	
FY 2003	Colt's Mfg Co. Inc Hartford, CT	SS/FFP	TACOM-Rock Island	Jan 03	Oct 03	8999	1	Yes	No	
FY 2004	Colt's Mfg Co. Inc Hartford, CT	Option	TACOM-Rock Island	Jan 04	Nov 04	8635	1	Yes	No	
FY 2005	Colt's Mfg Co. Inc Hartford, CT	Option	TACOM-Rock Island	Jan 05	Nov 05	8362	1	Yes	No	

REMARKS:

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: Procurement of W&TCV, Army /2/Weapons and other combat vehicles
 P-1 Item Nomenclature: HOWITZER LT WT 155MM (T) (G01700)

Program Elements for Code B Items: 0604854A
 Code: B
 Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty						28	56	88	38	23	40	273
Gross Cost			1.1		5.0	51.1	100.7	135.8	59.0	33.6	74.3	460.7
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)			1.1		5.0	51.1	100.7	135.8	59.0	33.6	74.3	460.7
Initial Spares												
Total Proc Cost			1.1		5.0	51.1	100.7	135.8	59.0	33.6	74.3	460.7
Flyaway U/C												
Wpn Sys Proc U/C						1.8	1.8	1.5	1.6	1.5	1.9	

Description:

The Lightweight 155mm Towed Howitzer (LW155) is a Joint USMC/Army Program. A 40% reduction in weight compared to the current system allows for greater strategic and tactical mobility while improving range, weapon stability, accuracy, and durability. Significantly improved battlefield mobility creates a weapon that is more survivable and lethal. The LW155 includes a digital fire control system that will replace conventional fire control. Conventional fire control will remain as a backup to the digital fire control. The digital fire control will enable the LW155 Howitzer section to emplace faster and without survey, aiming posts or an aiming circle. Digital communications and an on-board antenna eliminate the need for wire to the Fire Direction Center and will increase dispersion and survivability on the battlefield. Modifications to the existing prime mover will enable the howitzer section to navigate, recharge the system and receive fire missions, all while moving to the next firing position.

This system supports both the Legacy and Interim transition paths of the Transformation Campaign Plan (TCP).

Justification:

FY04/05 procures 27 Lightweight 155mm Towed Howitzers (LW155). This quantity and the Army's overall procurement of LW155s are being planned as a joint multi-year buy with the Marine Corps for FY05-FY09. The LW155 replaces the M198 Towed Howitzer for the U.S. Army and USMC. It must be procured in FY05 to begin replacing the aging, heavier M198 howitzer. Additionally, the U.S. Army has decided the LW155 will be the cannon fire support for the Army's Stryker Brigade Combat Teams.

The United Kingdom and Italy are participating in the development of the LW155 under an MOU and are intending to continue this cooperation through production.

Exhibit P-5, Weapon WTCV Cost Analysis		Appropriation/Budget Activity/Serial No. Procurement of W&TCV, Army / 2 / Weapons and other combat vehicles			P-1 Line Item Nomenclature: HOWITZER LT WT 155MM (T) (G01700)			Weapon System Type:			Date: February 2003			
WTCV Cost Elements		ID	FY 02			FY 03			FY 04			FY 05		
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000	\$000	Units	\$000
LONG LEAD Titanium/Tooling/Fixtures, etc.			1091						3132	27	116	6264	54	116
LIGHTWEIGHT 155MM HOWITZER Howitzer												40500	27	1500
PROGRAM MANAGEMENT SUPPORT Program Management/Admin/Facilities									1866			4333		
Total			1091						4998			51097		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army / 2 / Weapons and other combat vehicles

Weapon System Type:

P-1 Line Item Nomenclature:
HOWITZER LT WT 155MM (T) (G01700)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Units	Unit Cost \$	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Titanium/Tooling/Fixtures, etc.										
FY 2002	BAE SYSTEMS Barrow-in-Furness, UK	FFP	Picatinny Arsenal, NJ	Feb 02	Oct 04			N/A	N/A	N/A
FY 2004	BAE SYSTEMS Barrow-in-Furness, UK	FFP	Picatinny Arsenal, NJ	Dec 03	Dec 04	27	116			
FY 2005	BAE SYSTEMS Barrow-in-Furness, UK	FFP	Picatinny Arsenal, NJ	Dec 04	Dec 05	54	116			
Howitzer										
FY 2005	BAE SYSTEMS Barrow-in-Furness, UK	MYP/FFP	Picatinny Arsenal, NJ	Dec 04	Oct 05	27	1504			

REMARKS: A joint service multi-year contract is anticipated with the USMC commencing in FY05.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: Procurement of W&TCV, Army /2/Weapons and other combat vehicles

P-1 Item Nomenclature
M4 CARBINE MODS (GB3007)

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

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	29.2	10.8		9.1	6.7	7.4	5.9	6.1	4.9	0.0		80.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	29.2	10.8		9.1	6.7	7.4	5.9	6.1	4.9	0.0		80.3
Initial Spares												
Total Proc Cost	29.2	10.8		9.1	6.7	7.4	5.9	6.1	4.9	0.0		80.3
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

The M4 Carbine Modification Program provides a close combat optic, an improved buttstock, and a modular weapon suite (which includes a rail system, a top carry sling, a flashlight mount, a quick attach bracket kit for the M203 Grenade Launcher and a permanently affixed back-up iron sight). It also provides the capability for firing the M203A1 Grenade Launcher (GL) with the M4 Carbine and an M203 Rail System which provides targeting capability for 40MM night engagements. This system supports the Legacy-to-Objective transition path of the Transformation Campaign Plan (TCP).

Justification:

The FY04/05 procures M4 Modular Weapon Systems, Close Combat Optics and M203 Rail Systems. The close combat optic allows the soldier to fire a weapon with both eyes open allowing greater awareness of events happening in close proximity and improves hit probability in daylight, low light level, wet weather and other adverse conditions. The modular weapon system is a key component of Soldier Lethality and allows the combat commander to custom configure weapons based upon the mission. The permanent back-up rear operative, iron sight provides that capability in the event it becomes immediately necessary. The M203 Rail System (RS) will allow the M203 weapon system to engage targets at night.

Exhibit P-40M, Budget Item Justification Sheet

Date:

February 2003

Appropriation/Budget Activity/Serial No:

Procurement of W&TCV, Army /2/Weapons and other combat vehicles

P-1 Item Nomenclature

M4 CARBINE MODS (GB3007)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

Description

Fiscal Years

OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
Modular Weapon System											
TBD1	Operational	23.6	8.4	5.9	2.6	1.1	2.9	0.0	0.0	0.0	44.5
Close Combat Optic											
TBD2	Operational	14.1	0.7	0.8	0.0	0.0	0.0	0.0	0.0	0.0	15.6
M203 Rail System											
TBD3	Operational	0.0	0.0	0.0	4.8	4.8	3.2	5.0	0.0	0.0	17.8
Closed Mods											
TBD4		2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4
Totals		40.1	9.1	6.7	7.4	5.9	6.1	5.0	0.0	0.0	80.3

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE: Modular Weapon System [MOD 1] TBD1

MODELS OF SYSTEM AFFECTED: 5.56 Carbine M4

DESCRIPTION/JUSTIFICATION:

The modular weapon is a system of mounting rails/methods to allow the custom configuration of M4 Carbines with ancillary items such as optics, night sights, IR laser pointers, the grenade launcher, etc. based upon mission requirements. The Modular Weapon System includes the adapter rail system, Close Quarters Battle (CQB) sling, back-up iron sight and weapon flashlight mount.

DEVELOPMENT STATUS/MAJOR DEVELOPMENT MILESTONES:

Developmental/Operational Tests 3Q95/2Q96 (Actual)
 Milestone III Production Decision 4Q97 (Actual)
 Production Contract Award 4Q97 (Actual)
 First Production Hardware Delivered 4Q98 (Actual)
 First Unit Equipped 2Q99 (Actual)

Installation Schedule:

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

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

METHOD OF IMPLEMENTATION:

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

INDIVIDUAL MODIFICATION

Date: February 2003

MODIFICATION TITLE (Cont): Modular Weapon System [MOD 1] TBD1

FINANCIAL PLAN: (\$ in Millions)

	FY 2002 and Prior		FY 2003		FY 2004		FY 2005		FY 2006		FY 2007		FY 2008		FY 2009		TC		TOTAL	
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$
	RDT&E																			
Procurement																				
Quantity (Rail Systems Only)	67210		11000		4584				16500		1163		1372							82794
Quantity (Other Components)								16500		1163		1372								19035
Installation Kits, Nonrecurring																				
Hardware		20.8		7.6		5.4		2.0		0.8		1.0								37.6
Equipment, Nonrecurring																				
Engineering Support		1.4		0.4		0.3		0.4		0.2		0.7								3.4
Testing		0.0																		
Integrated Logistical Support		0.4		0.3		0.1		0.1		0.1		0.3								1.3
Fielding		0.8		0.1		0.1		0.1		0.0		0.2								1.3
Engineering Study		0.2										0.7								0.9
Interim Contractor Support																				
Installation of Hardware	0																			
FY2002 & Prior Equip-- Kits	67210																			67210
FY2003 Equip-- Kits				11000																11000
FY2004 Equip-- Kits						4584														4584
FY2005 Equip-- Kits								16500												16500
FY2006 Equip-- Kits										1163										1163
FY2007 Equip-- Kits												1372								1372
FY2008 Equip-- Kits																				
FY2009 Equip-- Kits																				
TC Equip- Kits																				
Total Installment	67210	0.0		0.0	11000	0.0	4584	0.0	16500	0.0	1163	0.0	1372	0.0		0.0		0.0	101829	0.0
Total Procurement Cost		23.6		8.4		5.9		2.6		1.1		2.9		0.0		0.0		0.0		44.5

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: Procurement of W&TCV, Army /2/Weapons and other combat vehicles

P-1 Item Nomenclature
SQUAD AUTOMATIC WEAPON (MOD) (GZ1290)

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

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	10.2	2.4	4.4	4.0	5.1	0.8	0.6	0.4	19.7	4.1		51.7
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	10.2	2.4	4.4	4.0	5.1	0.8	0.6	0.4	19.7	4.1		51.7
Initial Spares												
Total Proc Cost	10.2	2.4	4.4	4.0	5.1	0.8	0.6	0.4	19.7	4.1		51.7
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

The M249 Squad Automatic Weapon (SAW) is a 5.56mm, lightweight, machine gun that can be utilized in the automatic rifle role and the machine gun role. The M249 Feedtray Cover will provide a Military Standard 1913 rail interface allowing the mounting of standard military optics (M145 Machine Gun Optics, TWS, PVS-4, etc.) directly to the machine gun. The front rails will be fastened to the sides and bottom of the M249 SAW receiver. The side rails accommodate the devices when the weapon is used in either role, while the bottom rail provides an attachment for the vertical handgrip when the SAW is used in the automatic rifle role. The M249 Machine Gun Short Barrel will provide a short version of the 5.56mm automatic weapon. The Light Weight Ground Mount will incorporate a modern traverse and elevating mechanism that will maintain predetermined elevation throughout the full range of weapon traverse, as well as have a series of index marks that enable gunners to construct a range data card. This system supports the Legacy-to-Objective transition path of the Transformation Campaign Plan (TCP).

Justification:

The FY04/05 procures M249 Rails/Bipods/Handguards, M249 Short Barrels, Improved Collapsible Buttstocks, Improved Heatshields and Light Weight Ground Mounts. The M249 Rails/Bipods/Handguards will allow for the attachment of a large variety of existing and future high technology electronic and night vision devices, vertical handgrip and horizontal handgrip, which will provide the soldier additional capabilities to engage targets at extended ranges and during periods of limited visibility. The Short Barrel, when used in conjunction with the M5 Collapsible Buttstock, shortens the M249 Machine Gun by more than 10 inches enhancing the operational capability by improving Military Operations in Urban Terrain (MOUT) maneuverability and Airborne/Air Assault jump capabilities. The Light Weight Ground Mount will reduce the weight of the current tripod by approximately 7 lbs.

Exhibit P-40M, Budget Item Justification Sheet

Date:

February 2003

Appropriation/Budget Activity/Serial No:

Procurement of W&TCV, Army /2/Weapons and other combat vehicles

P-1 Item Nomenclature

SQUAD AUTOMATIC WEAPON (MOD) (GZ1290)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

Description		Fiscal Years									
OSIP NO.	Classification	2002 & PR	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	TC	Total
M249 Feedtray Covers											
TBD1	Operational	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6
M249 Rails/Bipod/Handguard											
TBD2	Operational	5.0	0.8	1.5	0.6	0.3	0.1	1.0	0.4	0.0	9.7
M249 Short Barrel/Coll Buttstock/Heatshield											
TBD3	Operational	3.4	3.2	1.3	0.2	0.3	0.3	8.0	1.7	0.0	18.4
Light Weight Ground Mount											
TBD4	Operational	0.0	0.0	2.3	0.0	0.0	0.0	10.7	2.0	0.0	15.0
Closed Mods											
TBD5		6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
Totals		17.0	4.0	5.1	0.8	0.6	0.4	19.7	4.1	0.0	51.7

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: Procurement of W&TCV, Army /2/Weapons and other combat vehicles
 P-1 Item Nomenclature: PRODUCTION BASE SUPPORT (WOCV-WTCV) (GC0050)

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

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	295.4	5.7	7.1	5.7	7.1	6.6	6.9	6.1	6.2	6.3		353.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	295.4	5.7	7.1	5.7	7.1	6.6	6.9	6.1	6.2	6.3		353.3
Initial Spares												
Total Proc Cost	295.4	5.7	7.1	5.7	7.1	6.6	6.9	6.1	6.2	6.3		353.3
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

This program provides funding to establish, modernize, expand or replace Army-owned industrial facilities used in production testing of Weapons and Tracked Combat Vehicles and their components. The program also provides for the preserving, storing and disposing for facilities and equipment that either not required for current active production or are not needed by the Army. Provisioning of Industrial Facilities (PIF) occurs at Aberdeen Test Center, MD; White Sands Missile Range, NM; and Yuma Proving Grounds, AZ. The Layaway of Industrial Facilities (LIF) funding supports efforts at Rock Island, IL and Watervliet, NY arsenals.

The PIF program supports all transition paths, and the LIF program supports the Legacy transition path of the Army Transformation Campaign Plan (TCP).

Justification:

FY04/05 provides funding for the PIF and LIF programs. The PIF funding will support upgrading and replacing of technically or economically obsolete production test instrumentation to ensure that complete and accurate test data is collected and that safety and environmental hazards are minimized. Benefits of this effort include increased test efficiencies and decreased costs and risks to Army program managers. The Layaway of Industrial Facilities effort preserves the Army's abilities to respond to increases in production capabilities while keeping active production costs down. The effort allows the Army to excess equipment no longer needed. Economies are derived from this effort that benefit the entire Army.

Exhibit P-5, Weapon WTCV Cost Analysis		Appropriation/Budget Activity/Serial No. Procurement of W&TCV, Army / 2 / Weapons and other combat vehicles			P-1 Line Item Nomenclature: PRODUCTION BASE SUPPORT (WOCV-WTCV) (GC0050)			Weapon System Type:			Date: February 2003			
WTCV Cost Elements		ID CD	FY 02			FY 03			FY 04			FY 05		
			TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
PIF			4109			3150			4612			4761		
LIF			3033			2682			2627			2050		
Total			7142			5832			7239			6811		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: Procurement of W&TCV, Army /2/Weapons and other combat vehicles
 P-1 Item Nomenclature: PIF2 OMNIBUS (WOCV-WTCV) (GC2001)

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

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	242.6	3.5	4.1	3.1	4.5	4.6	5.0	4.1	4.2	4.3		279.9
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	242.6	3.5	4.1	3.1	4.5	4.6	5.0	4.1	4.2	4.3		279.9
Initial Spares												
Total Proc Cost	242.6	3.5	4.1	3.1	4.5	4.6	5.0	4.1	4.2	4.3		279.9
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

This program provides funding to the Army Test and Evaluation Command (ATEC), Developmental Test Command (DTC) to establish, modernize, expand or replace Army-owned industrial facilities used in production testing of Weapons and Tracked Combat Vehicles and their 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 generally 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 Aberdeen Test Center (ATC), Aberdeen Proving Ground, MD; White Sands Missile Range (WSMR), NM and Yuma Proving Ground (YPG), Yuma, AZ. Note: funding in this program was increased in FY04-06 for development of a Transportability/Winch test capability at ATC which will provide a full transportability assessment of production combat vehicles including lifting and tie down, automotive winch performance and endurance, center of gravity, vertical drop, suspension spring rate and rail impact. This project supports all transition paths of the Army Transformation Campaign Plan (TCP).

Justification:

FY04/05 procures: At ATC, instrumentation and instrumentation interfaces for testing on-board computers and micro-controllers in combat vehicles; high speed gas and particulate analyzers for vehicle fire extinguisher testing; on-board vehicle data collection equipment for monitoring automotive and data bus performance during field shock and vibration testing; data acquisition and analysis equipment for toxic fumes testing; gun tube positioning and video equipment for fire control testing; electronic diagnostic instrumentation used to troubleshoot, calibrate, set-up, and repair sensors and data acquisition equipment; high speed digital cameras, data acquisition equipment and climatic control for armor ballistics tests and metrology and non-destructive test equipment for materials testing and analysis. At WSMR, upgrade to the linear accelerator, a gamma pulse simulator used in dose rate testing of electronic components; replacement of Semiconductor Test Lab instrumentation used to test complex integrated circuits during radiation survivability/vulnerability tests; instrumentation and equipment to support nuclear survivability testing of stockpile electronic piece parts for combat vehicles at the WSMR Radiation Tolerance Assured Supply and Support Center and replacement/upgraded amplifiers and antennas for electromagnetic radiation effects testing. At YPG, real-time data collection and transmitting equipment and sensors for on-board collection of automotive performance data and ballistics measurements; automation and upgrade of environmental conditioning equipment; radio controlled moving and stationary targets for the combat systems firing range, an acoustic scoring system and target control system used for combat vehicle fire control system testing, a mobile instrumentation control system, materials analysis instrumentation and high speed digital cameras, and upgrade of gas analyzers and measurement equipment in the Material Analysis Laboratory.

Exhibit P-40C, Budget Item Justification Sheet

Date:

February 2003

Appropriation/Budget Activity/Serial No:

Procurement of W&TCV, Army /2/Weapons and other combat vehicles

P-1 Item Nomenclature

PIF2 OMNIBUS (WOCV-WTCV) (GC2001)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

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.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: Procurement of W&TCV, Army /2/Weapons and other combat vehicles
 P-1 Item Nomenclature: LAYAWAY OF INDUSTRIAL FACILITIES (GC2100)

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

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	52.9	2.3	3.0	2.6	2.6	2.0	1.9	2.0	2.0	2.1		73.4
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	52.9	2.3	3.0	2.6	2.6	2.0	1.9	2.0	2.0	2.1		73.4
Initial Spares												
Total Proc Cost	52.9	2.3	3.0	2.6	2.6	2.0	1.9	2.0	2.0	2.1		73.4
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

This budget line provides for the preserving, storing, decontamination and plant clearance requirements of industrial facilities and equipment that are no longer required to support current production at Watervliet and Rock Island Arsenals.
 Foot Print Reduction: Fiscal Year (FY) 2004/2005 major projects efforts provide for the layaway of 333 and excess of 288 pieces of equipment in the Army Reserve Plant (ARP) 0727 at Rock Island Arsenal. Work also includes layaway of manufacturing floor space in Building 220. Efforts at Watervliet will consist of layaway of 10 machines and excess and/or layaway of approximately 750 pieces of measuring equipment.
 Environmental Clean Up: Resources are required in FY 2004/2005 to complete subsurface investigations on the interior and exterior of Building 64 (Old Plating Shop). Scope of project includes subsurface remedial designs and completion of the actual remediation as mandated by an Illinois Environmental Protection Agency (IEPA) Notice of Violation (NOV). The project covers hydraulic conductivity test of Deep Well 51 to determine if contamination from Building 64 is entering the drinking water aquifer, sampling interiors and subsurfaces of 3 steam tunnels to determine whether hazardous levels of contamination exist, and installing additional groundwater monitoring wells to determine whether contamination is in the deeper Silurian formation.

Justification:

FY04/05 funding is required and has been validated with the completion of RAND Corporation's Phase 1 sizing recommendations in accordance with Program Budget Decision (PBD) 407. As a result of PBD 407, Rock Island and Watervliet Arsenals have been undergoing very large footprint reduction efforts since FY 2001, with expected completion in FY 2005. PBD 407 was directed by the Office of Secretary of Defense (OSD) in coordination with Headquarters, U.S. Army Materiel Command (AMC) and has congressional interest. Major weapons systems affected include the M109 Self-Propelled Howitzer, M198 Howitzer, M119 Howitzer, M1A1 Tank, XM777 Lightweight 155mm Gun.
 The execution of the footprint reduction programs allows the arsenals to meet the requirements of Program Budget Decision 407, be more efficient, and reduce their operating costs. This results in lower costs for the weapon systems produced.
 Funds in FY 2004/2005 are also required to support environmental clean-up of Building 64 at Rock Island Arsenal which is mandated by an Illinois Environmental Protection Agency (IEPA) Notice of Violation (NOV).
 These efforts support the Legacy transition path of the Transformation Campaign Plan (TCP).

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No: Procurement of W&TCV, Army /2/Weapons and other combat vehicles
 P-1 Item Nomenclature: INDUSTRIAL PREPAREDNESS (GC0075)

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

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	62.8	2.9	3.4	7.3	2.7	2.6	2.8	2.9	3.1	3.0		93.5
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	62.8	2.9	3.4	7.3	2.7	2.6	2.8	2.9	3.1	3.0		93.5
Initial Spares												
Total Proc Cost	62.8	2.9	3.4	7.3	2.7	2.6	2.8	2.9	3.1	3.0		93.5
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

This program provides for the maintenance of laidaway portions of active weapons production plants, and the storage, protection, and maintenance of laidaway Government-owned equipment being stored on-site at Government-owned plants.

At Hawthorne Army Depot, the funding represents the storage costs for items from Rock Island and Watervliet Arsenals, and stored under Contract DAAA09-99-D-0022. The funds also pay for storage, facilities/equipment maintenance, and inspection of Industrial Plant Equipment (IPE) stored at Rock Island Arsenal, and 57 laidaway machine tools (IPE), gauges, special measuring equipment, tooling and fixturing stored at Watervliet Arsenal.

This system supports the Legacy transition path of the Transformation Campaign Plan (TCP).

Justification:

FY04/05 provides funds for the maintenance of laidaway weapons production facilities to include utilities, buildings, nonseverable equipment, plant equipment, special tooling (ST), and special test equipment (STE) being retained as part of approved Army Reserve Plants (ARPs) which are required to support future production and replenishment requirements. Also, includes a fair share of the recurring overhead costs such as grounds maintenance, fire protection, plant security, and administrative support. Decreased Industrial Preparedness Operations (IPO) funding in FYs 2004-2005 reflects savings anticipated from footprint reduction plans at the two arsenals.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2003

Appropriation/Budget Activity/Serial No:
Procurement of W&TCV, Army /3/Spare and repair parts

P-1 Item Nomenclature
SPARES AND REPAIR PARTS (WTCV) (GE0150)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Complete	Total Prog
Proc Qty												
Gross Cost	102.7	26.1	28.0	25.0	18.0	14.0	5.4					219.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	102.7	26.1	28.0	25.0	18.0	14.0	5.4					219.3
Initial Spares												
Total Proc Cost	102.7	26.1	28.0	25.0	18.0	14.0	5.4					219.3
Flyaway U/C												
Wpn Sys Proc U/C												

Description:

This program provides for the procurement of spares to support initial fielding of new or modified end items.

Justification:

FY04/05 procures 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. Some of the WTCV systems included in this requirement are: M1 Series Tank, M88 Series Tank Recovery Vehicle, Bradley Fighting Vehicle, and other Tank and Automotive systems.