Department of Defense Fiscal Year (FY) 2016 President's Budget Submission

February 2015



Army

Justification Book of

Procurement of W&TCV, Army

UNCLASSIFIED

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 therefore; specialized equipment and training devices; expansion of public and private plants, including the land necessary therefore, for the foregoing purposes, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to approval of title; and procurement and installation of equipment, appliances, and machine tools in public and private plants; reserve plant and government and contractor-owned equipment layaway; and other expenses necessary for the foregoing purposes, \$1,913,103.00 to remain available for obligation until September 30, 2018.

The following Justification Books were prepared at a cost of \$1,187,353.84: Aircraft (ACFT), Missile (MSLS), Weapons & Tracked Combat Vehicles (WTCV), Ammunition (AMMO), Other Procurement Army (OPA) 1 - Tactical & Support Vehicles, Other Procurement Army (OPA) 2 - Communications & Electronics, Other Procurement Army (OPA) 3 & 4 - Other Support Equipment & Spares, Research, Development, Test and Evaluation (RDTE) for: Budget Activity 1, Budget Activity 2, Budget Activity 3, Budget Activity 4, Budget Activity 5A, Budget Activity 5B, Budget Activity 6, and Budget Activity 7.

Department of the Army FY 2016 President's Budget Exhibit P-1 FY 2016 President's Budget Total Obligational Authority (Dollars in Thousands)

12 Jan 2015

Appropriation	FY 2014 (Base & OCO)	FY 2015 Base Enacted	FY 2015 OCO Enacted	FY 2015 Total Enacted		
Procurement of W&TCV, Army	1,610,811	1,722,136	5,000	1,727,136		
Total Department of the Army	1,610,811	1,722,136	5,000	1,727,136		

Department of the Army FY 2016 President's Budget Exhibit P-1 FY 2016 President's Budget Total Obligational Authority (Dollars in Thousands)

12 Jan 2015

Appropriation	FY 2016 Base	FY 2016 OCO	FY 2016 Total
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
Procurement of W&TCV, Army	1,887,073	26,030	1,913,103
Total Department of the Army	1,887,073	26,030	1,913,103

# Department of the Army FY 2016 President's Budget Exhibit P-1 FY 2016 President's Budget Total Obligational Authority (Dollars in Thousands)

tional Authority 12 Jan 2015

Appropriation: Procurement of W&TCV, Army

Budget Activity	FY 2014 (Base & OCO)	FY 2015 Base Enacted	FY 2015 OCO Enacted	FY 2015 Total Enacted
01. Tracked Combat Vehicles	1,383,430	1,496,714		1,496,714
02. Weapons and Other Combat Vehicles	227,381	225,422	5,000	230,422
Total Procurement of W&TCV, Army	1,610,811	1,722,136	5,000	1,727,136

# Department of the Army FY 2016 President's Budget Exhibit P-1 FY 2016 President's Budget Total Obligational Authority (Dollars in Thousands)

12 Jan 2015

Appropriation: Procurement of W&TCV, Army

Budget Activity	FY 2016 Base	FY 2016 OCO	FY 2016 Total
01. Tracked Combat Vehicles	1,671,860		1,671,860
02. Weapons and Other Combat Vehicles	215,213	26,030	241,243
Total Procurement of W&TCV, Army	1,887,073	26,030	1,913,103

# Department of the Army FY 2016 President's Budget Exhibit P-1 FY 2016 President's Budget Total Obligational Authority

Total Obligational Authority 12 Jan 2015
(Dollars in Thousands)

Appropriation: 2033A Procurement of W&TCV, Army

Line No Item Nomenclature	Ident Code	FY 2014 (Base & OCO) Quantity Cost	FY 2015 Base Enacted Quantity Cost	FY 2015 OCO Enacted Quantity Cost	FY 2015 Total Enacted Quantity Cost	s e c
Budget Activity 01: Tracked Combat Vehicles				<del>_</del>		-
Tracked Combat Vehicles						
1 Stryker Vehicle		419,100	435,110		435,110	U
Modification of Tracked Combat Vehicles						
2 STRYKER (MOD)	A	20,522	39,683		39,683	Ū
3 Stryker Upgrade	A					U
4 Fist Vehicle (MOD)		29,965	26,759		26,759	U
5 Bradley Program (MOD)	А	158,000	136,006		136,006	U
6 Howitzer, Med Sp Ft 155mm M109a6 (MOD)	. А	4,769	45,411		45,411	Ū
7 Paladin Integrated Management (PIM)	A	8 199,477	18 247,400		18 247,400	U
8 Improved Recovery Vehicle (M88A2 Hercules)	A	53 186,031	15 122,451		15 122,451	U
9 Assault Bridge (Mod)		2,500	2,473		2,473	U
10 Assault Breacher Vehicle	A	15 62,951	7 36,583		7 36,583	U
11 M88 FOV MODS	· A	28,469	1,975		1,975	U
12 Joint Assault Bridge	A	2,002	4 39,362		4 39,362	บ
13 M1 Abrams Tank (MOD)	A	178,100	237,023		237,023	U
14 Abrams Upgrade Program	A	90,000	120,000		120,000	U
Support Equipment & Facilities						
15 Production Base Support (TCV-WTCV)		1,544	6,478		6,478	υ
Total Tracked Combat Vehicles		1,383,430	1,496,714		1,496,714	

# Department of the Army FY 2016 President's Budget Exhibit P-1 FY 2016 President's Budget Total Obligational Authority (Dollars in Thousands)

12 Jan 2015

Appropriation: 2033A Procurement of W&TCV, Army

Line	Line			2016 ase	FY 20 OCC		FY 2016 Total		S
No	Item Nomenclature	Ident Code	Quantity	Cost	Quantity	Cost	Quantit	y Cost	e
Budge	et Activity 01: Tracked Combat Vehicles	<b>u u u</b> u u							-
Trac	cked Combat Vehicles								
1 8	Stryker Vehicle			181,245				181,245	U
Mod	ification of Tracked Combat Vehicles								
2 8	STRYKER (MOD)	A		74,085				74,085	U
3 8	Stryker Upgrade	A	62	305,743			62	305,743	U
4 F	Fist Vehicle (MOD)								U
5 E	Bradley Program (MOD)	А		225,042				225,042	U
6 F	Howitzer, Med Sp Ft 155mm M109a6 (MOD)	A		60,079				60,079	U
7 E	Paladin Integrated Management (PIM)	А	30	273,850			30	273,850	U
8 1	Improved Recovery Vehicle (M88A2 Hercules)	A	31	123,629			31	123,629	U
9 P	Assault Bridge (Mod)			2,461				2,461	υ
10 A	assault Breacher Vehicle	A		2,975				2,975	U
11 M	188 FOV MODS	А		14,878				14,878	ប
12 J	Toint Assault Bridge	A	4	33,455			4	33,455	υ
13 M	11 Abrams Tank (MOD)	А		367,939				367,939	U
14 A	brams Upgrade Program	A							U
Supp	ort Equipment & Facilities								
15 P	roduction Base Support (TCV-WTCV)			6,479				6,479	U
Total	Tracked Combat Vehicles		1,	671,860	<del>-</del>		:	1,671,860	

# Department of the Army FY 2016 President's Budget Exhibit P-1 FY 2016 President's Budget Total Obligational Authority

Total Obligational Authority 12 Jan 2015 (Dollars in Thousands)

Appropriation: 2033A Procurement of W&TCV, Army

Timo		<b>-1</b>	FY 2014 (Base & OCO)		FY 2015 Base Enacted		FY 2015 OCO Enacted		FY 2015 Total Enacted		S	
Line No	Item Nomenclature	Ident Code	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	e C	
Budge	et Activity 02: Weapons and Other Combat Veh	cles									-	
Wea	oons & Other Combat Vehicles											
16 I	Mortar Systems			5,310		5,012				5,012	U	
17 2	XM320 Grenade Launcher Module (GLM)	A	6793	22,449		28,390				28,390	U	
18 I	Precision Sniper Rifle	A									U	
19 (	Compact Semi-Automatic Sniper System	A				148			•	148	U	
20 (	Carbine	А	28964	21,254		20,616				20,616	U	
21 (	Common Remotely Operated Weapons Station			47,012		8,409	V	5,000		13,409	U	
22 I	Handgun	A		300		3,957				3,957	U	
Mod	of Weapons and Other Combat Veh											
23 N	MK-19 Grenade Machine Gun Mods			,							υ	
24 N	1777 Mods	A		35,800		18,166				18,166	U	
25 N	44 Carbine Mods	A		9,900		6,446				6,446	U	
26 N	42 50 Cal Machine Gun Mods	В		28,242		25,296				25,296	υ	
27 N	M249 Saw Machine Gun Mods			7,608		5,546				5,546	U	
28 M	1240 Medium Machine Gun Mods	A		2,719		2,635				2,635	ΰ	
29 8	Sniper Rifles Modifications			7,017		4,079				4,079	U	
30 M	1119 Modifications	A		22,207		72,718				72,718	U	
31 M	116 Rifle Mods	A		2,136							U	
32 M	Mortar Modification	A				8,903				8,903	U	
	odifications Less Than \$5.0m (WOCV-WTCV)			1,569		2,089	•			2,089		
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# Department of the Army FY 2016 President's Budget Exhibit P-1 FY 2016 President's Budget Total Obligational Authority (Dollars in Thousands)

12 Jan 2015

Appropriation: 2033A Procurement of W&TCV, Army

Line		Ident	FY 20		FY 20		FY 2016		S	
No	No Item Nomenclature		Base Quantity Cost		OCC Quantity	Cost	Tota Quantity	Cost	e	
		<b></b>						***	-	
_	et Activity 02: Weapons and Other Combat Veh	icles								
Wear	ons & Other Combat Vehicles									
16 N	Mortar Systems			4,991		7,030		12,021	U	
17 2	KM320 Grenade Launcher Module (GLM)	A		26,294				26,294	U	
18 I	Precision Sniper Rifle	A		1,984				1,984	U	
19 (	Compact Semi-Automatic Sniper System	A		1,488				1,488	υ	
20 (	Carbine	A		34,460				34,460	U	
21 (	Common Remotely Operated Weapons Station			8,367		19,000		27,367	U	
22 F	landgun	A		5,417				5,417	U	
Mod	of Weapons and Other Combat Veh					•				
23 N	K-19 Grenade Machine Gun Mods			2,777				2,777	U	
24 M	1777 Mods	А		10,070				10,070	υ	
25 M	14 Carbine Mods	A		27,566				27,566	U	
26 M	12 50 Cal Machine Gun Mods	В		44,004				44,004	U	
27 M	1249 Saw Machine Gun Mods			1,190				1,190	U	
28 M	1240 Medium Machine Gun Mods	A		1,424				1,424	U	
29 S	niper Rifles Modifications		•	2,431				2,431	U	
30 M	1119 Modifications	А		20,599				20,599	U	
31 M	116 Rifle Mods	A							U	
32 M	Ortar Modification	А		6,300				6,300	U	
33 M	odifications Less Than \$5.0m (WOCV-WTCV)			3,737				3,737	U	

# Department of the Army FY 2016 President's Budget Exhibit P-1 FY 2016 President's Budget Total Obligational Authority (Dollars in Thousands)

12 Jan 2015

Appropriation: 2033A Procurement of W&TCV, Army

		FY 2014		FY 2015		FY 2015		FY 2015		S	
Line	Ident	(Base & C	(Base & OCO) Base Enacted		OCO Ena	cted	Total E	nacted	e		
No Item Nomenclature	Code	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	C	
										-	
Support Equipment & Facilities											
34 Items Less Than \$5.0m (WOCV-WTCV)		2	2,024		2,005				2,005	Ŭ	
35 Production Base Support (WOCV-WTCV)		10	,108		8,911				8,911	Ū	
36 Industrial Preparedness			459		414				414	U	
37 Small Arms Equipment (Soldier Enh Prog)		1	1,267		1,682				1,682	U	
Total Weapons and Other Combat Vehicles		227	7,381	2	225,422		5,000		230,422		
Total Procurement of W&TCV, Army		1,610	,811	1,7	22,136		5,000		727,136		

# Department of the Army FY 2016 President's Budget Exhibit P-1 FY 2016 President's Budget Total Obligational Authority (Dollars in Thousands)

12 Jan 2015

Appropriation: 2033A Procurement of W&TCV, Army

T-3							S	
Code	Quantity	Cost	Quantity	Cost	Quantity	Cost	e C	
							-	
		391				391	U	
		9,027				9,027	υ	
		304				304	υ	
		2,392				2,392	U	
	2	15,213		26,030		241,243	-	
	1,8	87,073		26,030	. 1,	913,103	-	
	Ident Code 	Ident Bas Code Quantity	Code Quantity Cost 391 9,027	Ident Base OCO Code Quantity Cost Quantity  391  9,027  304  2,392  215,213	Ident Base OCO Code Quantity Cost Quantity Cost  391  9,027  304  2,392  215,213 26,030	Ident Base OCO Tot Code Quantity Cost Quantity  391  9,027  304  2,392  215,213 26,030	Ident         Base         OCO         Total           Code         Quantity         Cost         Quantity         Cost           391         391         391           9,027         9,027         304         304           2,392         2,392         2,392           215,213         26,030         241,243	

Army • President's Budget Submission FY 2016 • Procurement

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# Army • President's Budget Submission FY 2016 • Procurement

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2	01	20	GM0100	Stryker (Mod)	7
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4	01	20	GZ2300	FIST Vehicle (Mod)	33
5	01	20	GZ2400	Bradley Program (MOD)	41
6	01	20	GA0400	Howitzer, Med Sp Ft 155MM M109A6 (MOD)	56
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8	01	20	GA0570	Improved Recovery Vehicle (M88A2 HERCULES)	83
9	01	20	GZ3250	Assault Bridge (Mod)	92
10	01	20	G82925	Assault Breacher Vehicle	100
11	01	20	G80571	M88 FOV MODS	108
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13	01	20	GA0700	M1 Abrams Tank (MOD)	122
14	01	20	GA0750	Abrams Upgrade Program	137
15	01	30	GA0050	Production Base Support (TCV-WTCV)	145

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# Army • President's Budget Submission FY 2016 • Procurement

# Appropriation 2033A: Procurement of W&TCV, Army

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16	02	10	G02200	Mortar Systems	150
17	02	10	G01501	XM320 Grenade Launcher Module (GLM)	159
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20	02	10	G13501	Carbine	174
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22	02	10	G15325	Handgun	188
23	02	20	GB3000	MK-19 Grenade Machine Gun MODS	192
24	02	20	GZ1700	M777 Mods	200
25	02	20	GB3007	M4 Carbine Mods	212
26	02	20	GB4000	M2 50 Cal Machine Gun MODS	221
27	02	20	GZ1290	M249 SAW Machine Gun MODS	
28	02	20	GZ1300	M240 Medium Machine Gun MODS	
29	02	20	GZ1500	Sniper Rifles Modifications	245
30	02	20	GC0401	M119 Modifications	253
31	02	20	GZ2800	M16 Rifle Mods	263

## **UNCLASSIFIED**

# Army • President's Budget Submission FY 2016 • Procurement

## Appropriation 2033A: Procurement of W&TCV, Army

Line #	ВА	BSA	Line Item Number	Line Item Title	Page
32	02	20	G02100	Mortar Modification	264
33	02	20	GC0925	Modifications Less Than \$5.0m (WOCV-WTCV)	269
34	02	30	GL3200	Items Less Than \$5.0m (WOCV-WTCV)	271
35	02	30	GC0050	Production Base Support (WOCV-WTCV)	273
36	02	30	GC0075	Industrial Preparedness	280
37	02	30	GC0076	Small Arms Equipment (Soldier Enh Prog)	282

# Army • President's Budget Submission FY 2016 • Procurement

# Line Item Table of Contents (Alphabetically by Line Item Title)

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Assault Breacher Vehicle	G82925	10	01	20 100
Assault Bridge (Mod)	GZ3250	9	01	20 92
Bradley Program (MOD)	GZ2400	5	01	20 41
COMPACT SEMI-AUTOMATIC SNIPER SYSTEM	G01507	19	02	10 172
Carbine	G13501	20	02	10 174
Common Remotely Operated Weapons Station	G04700	21	02	10 183
FIST Vehicle (Mod)	GZ2300	4	01	20 33
Handgun	G15325	22	02	10 188
Howitzer, Med Sp Ft 155MM M109A6 (MOD)	GA0400	6	01	20 56
Improved Recovery Vehicle (M88A2 HERCULES)	GA0570	8	01	20 83
Industrial Preparedness	GC0075	36	02	30 280
Items Less Than \$5.0m (WOCV-WTCV)	GL3200	34	02	30 271
Joint Assault Bridge	GZ3001	12	01	20 113
M1 Abrams Tank (MOD)	GA0700	13	01	20 122
M119 Modifications	GC0401	30	02	20 253
M16 Rifle Mods	GZ2800	31	02	20 263

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Line Item Title	Line Item Number	Line #	ВА	BSA	Page
M2 50 Cal Machine Gun MODS	GB4000	26	02	20	221
M240 Medium Machine Gun MODS	GZ1300	28	02	20	243
M249 SAW Machine Gun MODS	GZ1290	27	02	20	233
M4 Carbine Mods	GB3007	25	02	20	212
M777 Mods	GZ1700	24	02	20	200
M88 FOV MODS	G80571	11	01	20	108
MK-19 Grenade Machine Gun MODS	GB3000	23	02	20	192
Modifications Less Than \$5.0m (WOCV-WTCV)	GC0925	33	02	20	269
Mortar Modification	G02100	32	02	20	264
Mortar Systems	G02200	16	02	10	150
Paladin Integrated Management (PIM)	GZ0410	7	01	20	73
Precision Sniper Rifle	G01506	18	02	10	167
Production Base Support (TCV-WTCV)	GA0050	15	01	30	145
Production Base Support (WOCV-WTCV)	GC0050	35	02	30	273
Small Arms Equipment (Soldier Enh Prog)	GC0076	37	02	30	282
Sniper Rifles Modifications	GZ1500	29	02	20	245
Stryker (Mod)	GM0100	2	01	20	7
Stryker Upgrade	G85200	3	01	20	24
Stryker Vehicle	G85100	1	01	10	1
XM320 Grenade Launcher Module (GLM)	G01501	17	02	10	159

Exhibit P-40, Budget Line Item Justification: PB 2016 Army Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV. Army / BA 01: Tracked Combat Vehicles / BSA 10: | G85100 / Stryker Vehicle

Tracked Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) : A

**Program Elements for Code B Items:** 

Other Related Program Elements:

Line Item MDAP/MAIS Code: Item MDAP/MAIS Code(s): 299

			-(-)									
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	4,607	-	-	-	-	-	-	-	-	-	-	4,607
Gross/Weapon System Cost (\$ in Millions)	14,367.871	419.100	435.110	181.245	-	181.245	72.260	-	-	-	198.820	15,674.406
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	14,367.871	419.100	435.110	181.245	-	181.245	72.260	-	-	-	198.820	15,674.406
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	14,367.871	419.100	435.110	181.245	-	181.245	72.260	-	-	-	198.820	15,674.406
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	ne corresponding	g budget request:	s are documente	ed elsewhere.)	Ŷ	*		
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	3,118.704	-	-	-	-	-	-	-	-	-	-	3,402.302

## **Description:**

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 is essential to fulfilling the Army's Warfighting needs. The Stryker-equipped Brigade Combat Team (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.

The Stryker Brigade Combat Team (SBCT), equipped with Stryker Vehicles, can be used across the full spectrum of military operations. The Stryker 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) carries an infantry squad with individual equipment. The ICV also provides protected transport and supporting fires for the infantry squad during dismounted assault.

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) supports infantry units with screening obscurants, suppressive forces and on-call supporting fires. 120mm, 81mm, and 60mm mortars provide complementary 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 commanders and infantry battalion commanders 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.

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 fire.

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.

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 2033A: Procurement of W&TCV, Army / BA 01: Tracked Combat Vehicles / BSA 10: Tracked Combat Vehicles	P-1 Line Item Number / Title: G85100 / Stryker Vehicle	

ID Code (A=Service Ready, B=Not Service Ready) : A Program Elements for Code B Items:

Line Item MDAP/MAIS Code: Item MDAP/MAIS Code(s): 299

Secondary	<i>y</i> Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	419.100	435.110	181.245	-	181.245	72.260	-	-	-
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	419.100	435.110	181.245	-	181.245	72.260	-	-	-

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Exhibit P-40, Budget Line Item Justification: PB 2016	S Army			Date: February 2015				
<b>Appropriation / Budget Activity / Budget Sub Activity</b> 2033A: Procurement of W&TCV, Army / BA 01: Tracked Tracked Combat Vehicles		P-1 Line Item Number / Title: G85100 / Stryker Vehicle						
ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Ite	ems:	Other Related Pi	rogram Elements:				

Line Item MDAP/MAIS Code:	Item MDAP/MAIS Code(s	): 299	)					
Exhibits Sche	dule		Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)				
G85100 / Stryker Vehicle	P-5	Α	4,607 / 14,367.871	- /419.100	- /435.110	- / 181.245	- / -	- / 181.245
Total Gross/Weapon System Cost			4,607 / 14,367.871	- /419.100	- / 435.110	- / 181.245	- / -	- / 181.245

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

#### Justification:

FY 2016 Base procurement dollars in the amount of \$181.245 million will complete the procurement of Double V Hull (DVH) exchange vehicles for the 3rd DVH brigade. Also supports fielding of DVH exchange and NBCRVs, Technical Data Package (TDP) clean-up, software update support, and program management (government and contractor) as well as procurement of survivability enhancement kits. Supports the Active Army.

DVH exchange vehicle quantities do not increase the Army Acquisition Objective (4408).

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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LI G85100 - Stryker Vehicle Army

Exhibit P-5, Cost Analysis: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:
2033A / 01 / 10

Date: February 2015

Item Number / Title [DODIC]:
G85100 / Stryker Vehicle

ID Code (A=Service Ready, B=Not Service Ready): A

MDAP/MAIS Code:299

ID Code (A=Service Ready, B=Not Service Ready) : A		IVIL						
Resource Summary	Prior Years	FY 2014	FY 2015	<b>FY 2016 Base</b>	FY 2016 OCO	FY 2016 Total		
Procurement Quantity (Units in Each)	4,607	-	-	-	-	-		
Gross/Weapon System Cost (\$ in Millions)	14,367.871	419.100	435.110	181.245	-	181.245		
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-		
Net Procurement (P1) (\$ in Millions)	14,367.871	419.100	435.110	181.245	-	181.245		
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-		
Total Obligation Authority (\$ in Millions)	14,367.871	419.100	435.110	181.245	-	181.245		
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)								
Initial Spares (\$ in Millions)	-	-	-	-	-	-		

Gross/Weapon System Unit Cost (\$ in Thousands)

3,118.704

- - - -

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

LI G85100 - Stryker Vehicle

Army

	P	rior Years	3		FY 2014			FY 2015		FY	' 2016 Ba	se	FY	2016 OC	0	FY	2016 Tot	tal
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)															
lyaway Cost						,			,									
Recurring Cost																		
Infantry Carrier Vehicle (ICV)	1,390.000	1,972	2,741.079	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Reconnaissance Vehicle (RV)	1,264.000	545	688.879	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Anti-Tank Guided Missile Vehicle (ATGM)	2,603.000	133	346.198	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Mortar Carrier (MC)	1,561.000	441	688.400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Fire Support Vehicle (FSV)	1,411.000	188	265.267	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Engineer Squad Vehicle (ESV)	2,358.000	168	396.143	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Commander's Vehicle (CV)	1,673.000	348	582.203	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Medical Evacuation Vehicle (MEV)	1,385.000	304	421.039	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
NBC Reconnaissance Vehicle (NBCRV)	1,518.000	374	567.731	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Mobile Gun System (MGS)	4,023.000	134	539.081	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GFE (ASIOE/COEI/ AAL)	-	-	1,303.178	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Engineering Change Orders (ECO)	-	-	165.935	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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Exhibit P-5, Cost Analysis: PB 2016 Army

Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:
2033A / 01 / 10

P-1 Line Item Number / Title:
G85100 / Stryker Vehicle

Item Number / Title [DODIC]:
G85100 / Stryker Vehicle

ID Code (A=Service Ready, B=Not Service Ready): A MDAP/MAIS Code:299

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

	F	Prior Year	s		FY 2014			FY 2015		F۱	' 2016 Bas	se	FY	2016 OC	0	FY	²⁰¹⁶ Tot	:al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Tota Cost												
Basic Issue Items (BII)	-	-	11.044	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Government Test	-	-	193.815	-	-	5.200	-	-	5.900	-	-	-	-	-	-	-	-	
Contractor Support to Test	-	-	279.916	-	-	-	-	-	1.800	-	-	-	-	-	-	-	-	
Refurbishment of Test Vehicles	-	-	11.899	-	-	-	-		-	-	-	-	-	-	-	-	-	
Program Management Support (Govt)	-	-	576.174	-	-	39.701	-	-	42.578	-	-	21.534	-	-	-	-	-	21
Program Management Support (Contractor)	-	-	48.935	-	-	-	-	-	11.186	-	-	11.399	-	-	-	-	-	11
Logistics Engineer Support (Contractor)	-	-	208.909	-	-	19.235	-	-	6.970	-	-	25.181	-	-	-	-	-	25
Depot Level Repair Instruction/Equipment	-	-	91.282	-	-	7.426	-	-	10.956	-	-	-	-	-	-	-	-	
System Fielding Support	-	-	547.206	-	-	5.000	-	-	10.000	-	-	4.507	-	-	-	-	-	4
Vehicle Retrofit	-	-	1,743.834	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Post Production Mods (unscheduled mods)	-	-	635.400	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Initial Spares/ Authoriz'd Stock List ASL	-	_	275.314	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Support Equipment (STTE)	-	-	51.783	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Training Devices	-	-	233.753	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
System Technical Support (STS)	-	-	609.035	-	-	13.151	-	-	14.365	-	-	11.529	-	-	-	-	-	1
Data	-	-	4.266	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Double V Hull (DVH) Exchange	-	-	68.883	-	-	250.995	-	-	273.057	-	-	27.761	-	-	-	-	-	2
DVH Exchange GFE	-	-	20.994	-	-	14.876	-	-	6.789	-	-	2.147	-	-	-	-	-	
DVH Exchange System Fielding Support	-	-	39.758	-	-	63.396	-	-	40.509	-	-	43.592	-	-	-	-	-	4
DVH Full Material Release	-	-	-	-	-	0.120	-	-	11.000	-	-	-	-	-	-	-	-	
Survivability Enhancements	-	-	10.528	-	-	-	-	-	-	-	-	33.595	-	-	-	-	-	3:
Subtotal: Recurring Cost	-	-	14,367.871	-	-	419.100	-	-	435.110	-	-	181.245	-	-	-	-	-	18
ıbtotal: Flyaway Cost	-	-	14,367.871	-	-	419.100	_	_	435.110	-	_	181.245	-	-	_	-	_	18

LI G85100 - Stryker Vehicle Army UNCLASSIFIED
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Exhibit P-5, Cost Analysis: PB 2016 Army

Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:
2033A / 01 / 10

P-1 Line Item Number / Title:
G85100 / Stryker Vehicle

Item Number / Title [DODIC]:
G85100 / Stryker Vehicle

ID Code (A=Service Ready, B=Not Service Ready): A MDAP/MAIS Code:299

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

	Prior Years FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total					
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Gross/Weapon System Cost	3,118.704	4,607	14,367.871	-	-	419.100	_	-	435.110	-	-	181.245	-	-	-	_	-	181.245

Seconda	ry Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Army	Quantity	-	•		-	-
	Total Obligation Authority	419.100	435.110	181.245	-	181.245
Total:	Quantity	-	=	=	-	-
Secondary Distribution	Total Obligation Authority	419.100	435.110	181.245	-	181.245

Exhibit P-40, Budget Line Item Justification: PB 2016 Army **Date:** February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 01: Tracked Combat Vehicles / BSA 20: GM0100 / Stryker (Mod)

Modification of Tracked Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) : A	4		Program Ele	ments for Co	de B Items: 06	603653A		Other Relate	d Program El	ements:		
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	187.256	20.522	39.683	74.085	-	74.085	42.150	76.399	506.376	535.815	1,836.773	3,319.059
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	187.256	20.522	39.683	74.085	-	74.085	42.150	76.399	506.376	535.815	1,836.773	3,319.059
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	187.256	20.522	39.683	74.085	-	74.085	42.150	76.399	506.376	535.815	1,836.773	3,319.059
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	ne corresponding	g budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

### **Description:**

Modifications to the Stryker Family of Vehicles (FOV) are required to resolve various Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) obsolescence, reliability, capability and performance degradation, safety, and operational related issues, and to provide system-specific training devices to support the requirement for a new 91S Stryker Vehicle Maintainer training course.

				FY 2016	FY 2016	FY 2016				
Secondar	ry Distribution	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	20.522	39.683	74.085	-	74.085	42.150	76.399	506.376	535.815
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	<b>Total Obligation Authority</b>	20.522	39.683	74.085	-	74.085	42.150	76.399	506.376	535.815

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Page 1 of 17 P-1 Line #2

Exhibit P-40, Budget Line Item Justification: PB 2016 Army Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 01: Tracked Combat Vehicles / BSA 20: GM0100 / Stryker (Mod)

Modification of Tracked Combat Vehicles

Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:	s: 0603653A Oth	ner Related Program Ele	ements:

ID Code (A=Service Ready, B=Not Service Ready) : A	P	rogram	Elements for Code	b items: 0003033A	Oth	ier Related Program	Elements:	
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) I (\$ M)					
GM0100 / STRYKER MODIFICATION (Increase Performance)	P-3a		- / 187.256	- /20.522	- / 39.683	- /74.085	- / -	- / 74.085
Total Gross/Weapon System Cost			- / 187.256	- / 20.522	- / 39.683	- / 74.085	- 1 -	- / 74.085
Exhibits Schedule			FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)
GM0100 / STRYKER MODIFICATION (Increase Performance)	P-3a		- / 42.150	- /76.399	- / 506.376	- / 535.815	- / 1,836.773	- / 3,319.059
Total Gross/Weapon System Cost			- / 42.150	- / 76.399	- / 506.376	- / 535.815	- / 1,836.773	- / 3,319.059

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

#### Justification:

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FY 2016 Base procurement dollars in the amount \$74.085 million supports the development and application of modifications to Stryker Training Aids, Devices, Simulators, and Simulations (TADSS) to ensure Stryker soldiers continue to train using equipment that reflects the configuration and behavior of the current fielded vehicles; provides for the maintenance of the Stryker test fleet to ensure test assets are positioned to provide accurate, verifiable test results; continues retrofit planning efforts and site management to ensure modification kits procured are applied in an efficient and effective fashion; provides application of modifications required to achieve Mobile Gun System (MGS) Full Material Release (FMR); and funds multiple fleet modifications to address obsolescence, reliability, capability, and performance degradation, safety, and operational related issues.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

LI GM0100 - Stryker (Mod) Army

P-1 Line #2

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Exhibit P-3a, Individual Modification: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Modification Number / Title:
2033A / 01 / 20	GM0100 / Stryker (Mod)	GM0100 / STRYKER MODIFICATION

2033A / 01 / 20			GM	0100 / Stryl	ker (Mod)				GM0100	) / STRYKE	R MODIFIC	AHON
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	187.256	20.522	39.683	74.085	-	74.085	42.150	76.399	506.376	535.815	1,836.773	3,319.059
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	187.256	20.522	39.683	74.085	-	74.085	42.150	76.399	506.376	535.815	1,836.773	3,319.059
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	187.256	20.522	39.683	74.085	-	74.085	42.150	76.399	506.376	535.815	1,836.773	3,319.059
(The following	Resource Sum	mary rows are fo	or informational p	urposes only. Th	ne corresponding	g budget requests	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	_	_	_	_	_	_	_	_	_	_	_	_

## **Description:**

Modifications are needed to support obsolescence issues with Command, Control, Communications, Computer, and Intelligence (C4I) components of the Stryker Vehicles, (Blue Force Tracker (BFT2) and Vehicular Radio Communications (VRC)-103 radio). Modifications to the Stryker Family of Vehicles (FOV) are also required to achieve MGS FMR and to address safety and operational-related issues on both the Stryker flat-bottom and Double V Hull (DVH) fleets. Additionally, to ensure Stryker soldiers continue to receive maintenance training consistent with Army prescribed Stryker training programs, the procurement of system-specific training devices is required to support the emerging 91S Stryker Vehicle Maintainer training course. Modifications of existing Stryker TADSS will ensure Stryker soldiers continue to train using equipment that mirrors the configuration and behavior of the current fielded vehicle.

Mobile Gun System (MGS) Full Materiel Release (FMR): The MGS variant has been granted Conditional Materiel Release (CMR) and efforts to obtain Full Materiel Release are being worked. All deficiencies noted on the CMR Get Well Plan must be resolved within three years. Items required include: Main Gun improvements (Turret system Electronic Unit (TSEU)-13 and Coax Low ammo chute), Generation II Air Conditioning System, Stryker Reactive Armor Tiles II (SRAT II) rear door improvement and ongoing retrofits of current improvements. Current improvements include: Commanders display with shock mounts and color situational awareness, ELRIP Electronic Handle Electronic Trigger (EHET), replenisher cover, hydraulic circuit check valve, rear view sensor system, engine cold start warm-up circuit, remote combat lock, carousel improvement, rammer improvement and open protected hatches. Installation of hardware is generally conducted by field modification teams at unit location subject to vehicle/hardware availability.

Fleet Modifications: Fleet modifications address changes to the vehicle configurations based on Modified Table of Organization & Equipment (MTO&E) changes, test results, Operational Need Statements and system improvements. Items identified and prioritized for execution include: VRC-103 for the Commander's Vehicle (CV) variant, Unique Energy Attenuating seats for Flat Bottom Hull (FBH) vehicles, exterior stowage boxes for both DVH and FBH vehicles, Mortar Carrier Fire Control Computer, RMS6-L N2 Recuperator gauge, Improve Battery Box, Counter-Radio Electronic Warfare (CREW) Relocation Kits, and Troop heater improvements. Modifications will be conducted either during Reset (for DVH vehicles returning from Afghanistan) or by field modification teams at unit location subject to vehicle/hardware availability.

C4I Obsolescence and Next Generation Items: Modifications are needed to support obsolescence issues with Command, Control, Communications, Computer, and Intelligence (C4I) components of the Stryker Vehicles. These modifications efforts include the engineering effort and purchase of hardware and installation costs for C4I Next Generation program such as Blue Force Tracker (BFT2), Mid-Tier Networking Vehicular Radio (MNVR), Vehicular Intercom Communication (VIC-5), and Universal Software Loader (USL).

Test Fleet Maintenance: Funding provides for the ongoing maintenance of the Stryker test vehicles and the Stryker logistical warehouse operations located at the Army's test centers (Aberdeen Proving Grounds, Yuma Proving Grounds, and Electronic Proving Grounds). Maintenance is required to ensure the test fleet is positioned to support testing needs and is in the appropriate condition to ensure accurate test results.

Retrofit Planning and Site Management: Retrofit planning, kit material handling, and retrofit site management to support fleet wide retrofits on the Stryker platforms.

LI GM0100 - Stryker (Mod)
Army

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P-1 Line #2

Exhibit P-3a, Individual Modification: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Modification Number / Title:
2033A / 01 / 20	GM0100 / Stryker (Mod)	GM0100 / STRYKER MODIFICATION

Training Aids, Devices, Simulators and Simulations: Training Aids, Devices, Simulators, and Simulations (TADSS) - The United States Army Combined Arms Support Command (CASCOM) validated the requirement for the Stryker Vehicle Maintainer Training Course in support of establishing the Stryker unique 91S Military Occupational Series (MOS). The 91S training course requires purchase of the following training devices: Diagnostic Troubleshooting Trainers (DTTs), Anti-Tank Guided Missile Vehicle Part Task Trainers (PTTs), Full-UP Power Pack Part Task Trainers (FUPP PTTs), Mortar Carrier Part Task Trainers (MC PTTs) Mobile Gun System Hands-On Trainers (HOTs) and Remote Weapon Station (RWS) Hands-on Trainers.

Engineering Change Proposal (ECP): ECP addresses Size, Weight, Power and Cooling (SWaP-C) deficiencies in the Stryker DVH Fleet. The ECP incorporates a 910 amp alternator, In-vehicle network, 450 HP C9 engine, and upgraded suspension. Project Manager (PM) Stryker plans to accomplish the ECP by a joint contractor and depot team in a production like environment.

Double V Hull (DVH) Survivability and Safety Mods: DVH survivability and safety modifications address changes to the DVH vehicle configuration driven by MTO&E changes, test results, and Operational Need Statements. Efforts included are Driver's Station Enhancement 2 (DSE2), rear ramp gap plate, and integration of Stryker Reactive Armor Tiles (SRAT) II onto the DVH vehicles. Modifications will be conducted either during Reset (for DVH vehicles returning from Afghanistan) or by field modification teams at unit location subject to vehicle/hardware availability.

Program Management Support: Program Management (PM), engineering, and logistics support necessary to execute Stryker modifications to include Engineering Change Proposal (ECP) (beginning FY 2019).

Secondar	y Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	20.522	39.683	74.085	-	74.085	42.150	76.399	506.376	535.815
Total:	Quantity	-	<del>-</del>	-	-	-	-	-	-	
Secondary Distribution	Total Obligation Authority	20.522	39.683	74.085	-	74.085	42.150	76.399	506.376	535.815

LI GM0100 - Stryker (Mod)

Army

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P-1 Line #2

Exhibit P-3a, Individual Modification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:
2033A / 01 / 20

P-1 Line Item Number / Title:
GM0100 / Stryker (Mod)

GM0100 / STRYKER MODIFICATION

2033A / 01 / 20		GM01007	Stryker (M	loa)		GM0100 / STRYKER MODIFICATION						
Models of Systems Affected: VARIOUS	3	Modifi	cation Typ	e: Increas	e Performa	ance	Re	lated RDT	&E PEs:			
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ A										
Procurement										,		
Modification Item 1 of 9: Mobile Gun System (MGS) Full Materiel Release(FMR)												
A Kits												
Recurring												
Hardware	570 / 31.900	3 / 0.015	188 / 1.500	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	761 / 33.41
Subtotal: Recurring	- /31.900	- /0.015	- /1.500	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- /33.41
Non-Recurring						'		'				
Engineer Support	0 / 8.692	- 1 -	- /1.906	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 10.59
Test	0 / 1.651	- / 0.025	- / 0.278	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /1.95
Subtotal: Non-Recurring	- /10.343	- /0.025	- /2.184	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- /12.55
Subtotal: Mobile Gun System (MGS) Full Materiel Release(FMR)	570 / 42.243	3 / 0.040	188 / 3.684	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	761 / 45.9
Modification Item 2 of 9: Fleet Modifications						'		'				
A Kits												
Recurring												
Hardware	2,890 / 30.507	- 1 -	68 / 1.114	2,911 / 26.681	- 1 -	2,911 / 26.681	180 / 1.522	1,519 / 19.386	- 1 -	182 / 7.494	4,408 / 205.597	12,158 292.30
Subtotal: Recurring	- /30.507	- / -	- /1.114	- / 26.681	- / -	- /26.681	- /1.522	- /19.386	- / -	- /7.494	- / 205.597	- /292.30
Non-Recurring											,	
Engineer Support	0 / 7.812	- / 0.151	- /1.780	- /2.188	- 1 -	- /2.188	- 1 -	- /1.520	- 1 -	- 1 -	- /27.721	- /41.17
Test	0 / 1.495	- 1 -	- 1 -	- / 1.015	- 1 -	- / 1.015	- 1 -	- 1 -	- / -	- 1 -	- / 9.685	- / 12.19
Subtotal: Non-Recurring	- /9.307	- /0.151	- /1.780	- /3.203	- / -	- /3.203	- / -	- /1.520	- / -	- / -	- /37.406	- / 53.36
Subtotal: Fleet Modifications	2,890 / 39.814	- /0.151	68 / 2.894	2,911 / 29.884	- / -	2,911 / 29.884	180 / 1.522	1,519 / 20.906	- / -	182 / 7.494	4,408 / 243.003	12,158 345.66
<b>Modification Item 3 of 9:</b> C4I Obsolescence and Next Generation Items												
A Kits												
Recurring												
Hardware	232 / 9.951	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / -	- 1 -	- 1 -	232 / 9.95
Fielding	- 1 -	- 1 -	- / 0.166	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 0.16
Subtotal: Recurring	- /9.951	- / -	- /0.166	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- /10.1
Non-Recurring			<u> </u>		1				<u> </u>	1		
Engineer Support	0 / 12.995	- / 0.163	- /9.668	- / 0.250	- 1 -	- / 0.250	- /2.269	- / 0.050	- 1 -	- 1 -	- 1 -	- /25.39
Test	0 / 0.189	- 1 -	- / 0.162	- / 0.500	- 1 -	- / 0.500	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 0.85

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Exhibit P-3a, Individual Modification: PB 2016 ArmyDate: February 2015Appropriation / Budget Activity / Budget Sub Activity:<br/>2033A / 01 / 20P-1 Line Item Number / Title:<br/>GM0100 / Stryker (Mod)Modification Number / Title:<br/>GM0100 / STRYKER MODIFICATION

2033A / 01 / 20		GM01007	Stryker (M	oa)		GM01007STRYKER MODIFICATION						
Models of Systems Affected: VARIOUS		Modifi	cation Typ	e: Increas	e Performa	nce	Re	lated RDT	&E PEs:			
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)	Qty (Each) Total Cost (\$										
Subtotal: Non-Recurring	- /13.184	- /0.163	- /9.830	- /0.750	- / -	- /0.750	- /2.269	- /0.050	- / -	- / -	- / -	- /26.2
Subtotal: C4I Obsolescence and Next Generation Items	232 / 23.135	- /0.163	- /9.996	- /0.750	- / -	- /0.750	- /2.269	- /0.050	- / -	- / -	- / -	232 / 36.3
Modification Item 4 of 9: Test Fleet Maintenance												
A Kits												
Recurring												
Labor (Contractor)	0 / 7.886	- / 0.099	- /4.746	- /5.500	- 1 -	- /5.500	- /5.575	- /5.700	- /2.699	- 12.799	- / 81.248	- / 116.:
Subtotal: Recurring	- /7.886	- /0.099	- /4.746	- /5.500	- / -	- /5.500	- /5.575	- /5.700	- /2.699	- /2.799	- /81.248	- / 116.
Subtotal: Test Fleet Maintenance	0 / 7.886	- /0.099	- /4.746	- /5.500	- / -	- /5.500	- /5.575	- /5.700	- /2.699	- /2.799	- /81.248	- / 116.
<b>Modification Item 5 of 9:</b> Retrofit Planning and Site Management			1									
A Kits												
Recurring												
Labor (Contractor)	0 / 4.150	- /5.156	- /6.830	- /5.380	- 1 -	- /5.380	- /5.483	- /5.587	- /5.693	- /5.801	- / 101.823	- <i>I</i> 145
Subtotal: Recurring	- /4.150	- /5.156	- /6.830	- /5.380	- / -	- /5.380	- /5.483	- /5.587	- /5.693	- /5.801	- /101.823	- /145
Subtotal: Retrofit Planning and Site Management	0 / 4.150	- /5.156	- /6.830	- /5.380	- / -	- /5.380	- /5.483	- /5.587	- /5.693	- /5.801	- /101.823	- /145
Modification Item 6 of 9: Training Aids, Devices, Simulators and Simulations												
A Kits												
Recurring												
Hardware	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	6 / 14.182	19 / 25.093	- 1 -	- 1 -	2 / 7.966	27 / 47.
Life Cycle Management Plan	0 / 10.810	- 1 -	- / 3.394	- / 18.000	- 1 -	- / 18.000	- 12.629	- / 9.432	- 1 -	- /4.063	- <i>I</i> 77.031	- <i>I</i> 125.
Subtotal: Recurring	- /10.810	- / -	- /3.394	- /18.000	- / -	- /18.000	- /16.811	- / 34.525	- / -	- /4.063	- /84.997	- /172.
Subtotal: Training Aids, Devices, Simulators and Simulations	0 / 10.810	- / -	- /3.394	- /18.000	- / -	- /18.000	6 / 16.811	19 / 34.525	- / -	- /4.063	2 / 84.997	27 / 172.
<b>Modification Item 7 of 9:</b> Engineering Change Proposal (ECP)												
A Kits												
Recurring												
Labor (Production Engineering)	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 11.418	- 1 -	- / 14.817	- /26.
Hardware	- 1 -	- / -	- 1 -	- / -	- 1 -	- 1 -	- / -	- / -	321 / 467.885	321 <i>l</i> 477.379	504 / 1,140.564	1,1 2,085
Fielding	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 15.273	- / 16.219	- 172.762	- 194.
Subtotal: Recurring	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- /484.576	- /493.598	- / 1,228.143	2,206.3

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Exhibit P-3a, Individual Modification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:
2033A / 01 / 20

Date: February 2015

Modification Number / Title:
GM0100 / Stryker (Mod)

GM0100 / STRYKER MODIFICATION

Models of Systems Affected: VARIOUS		Modifi	cation Tyr	e: Increas	e Performa	ance	Re	lated RDT	&F PEs:			
nouse of eyelemer and each with the				FY 2016	FY 2016	FY 2016	1.40				То	
	Prior Years	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ I										
Subtotal: Engineering Change Proposal (ECP)	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- /-	321 / 484.576	321 / 493.598	504 / 1,228.143	1,146 2,206.3
Modification Item 8 of 9: Double V Hull (DVH) Survivability and Safety Mods								,	·			
A Kits												
Recurring												
Hardware	774 / 0.143	450 / 10.555	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	1,224 / 10.69
Subtotal: Recurring	- /0.143	- /10.555	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- /10.6
Non-Recurring												
Labor (Production Engineering)	0 / 0.230	- 1 -	- 1 -	- 14.978	- 1 -	- /4.978	- /4.978	- /3.923	- 1 -	- 1 -	- 1 -	- / 14.10
Subtotal: Non-Recurring	- /0.230	- / -	- / -	- /4.978	- / -	- /4.978	- /4.978	- /3.923	- / -	- / -	- / -	- /14.10
Subtotal: Double V Hull (DVH) Survivability and Safety Mods	774 / 0.373	450 / 10.555	- / -	- /4.978	- / -	- /4.978	- /4.978	- /3.923	- /-	- /-	- / -	1,224 / 24.8
<b>Modification Item 9 of 9:</b> Program Management Support						'						
A Kits												
Recurring												
Program Management Support	- 1 -	- /3.284	- /5.322	- /5.414	- 1 -	- /5.414	- /5.512	- /5.608	- / 13.408	- / 22.056	- /85.292	- / 145.89
Subtotal: Recurring	- / -	- /3.284	- /5.322	- /5.414	- / -	- /5.414	- /5.512	- /5.608	- /13.408	- /22.056	- /85.292	- /145.8
Subtotal: Program Management Support	- / -	- /3.284	- /5.322	- /5.414	- / -	- /5.414	- /5.512	- /5.608	- /13.408	- /22.056	- /85.292	- /145.89
Subtotal: Procurement, All Modification Items	4,466 / 128.411	453 / 19.448	256 / 36.866	2,911 / 69.906	- / -	2,911 / 69.906	186 / 42.150	1,538 / 76.299	321 / 506.376	503 / 535.811	4,914 / 1,824.506	15,548 3,239.77
nstallation	•				,							
<b>Modification Item 1 of 9:</b> Mobile Gun System (MGS) Full Materiel Release(FMR)	570 / 1.908	3 / 1.056	45 / 1.163	143 / 3.696	- / -	143 / 3.696	- 1 -	- 1 -	- 1 -	- 1 -	- / -	761 <i>I</i> 7.82
Modification Item 2 of 9: Fleet Modifications	2,838 / 1.006	52 / 0.018	68 / 1.057	2,911 / 0.483	- 1 -	2,911 / 0.483	- 1 -	1,699 / 0.100	- 1 -	182 / 0.004	4,408 / 12.267	12,158 / 14.93
Modification Item 3 of 9: C4I Obsolescence and Next Generation Items	195 / 0.850	- 1 -	37 / 0.161	- / -	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- / -	232 / 1.0°
Modification Item 7 of 9: Engineering Change Proposal ECP)	0 / 0.000	- 1 -	- 1 -	- 1 -	- / -	- 1 -	- 1 -	- 1 -	122 / -	240 / -	784 / -	1,146 / -
Modification Item 8 of 9: Double V Hull (DVH) Survivability and Safety Mods	774 / 0.684	- 1 -	450 / 0.436	- 1 -	- / -	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	1,224 / 1.12
Subtotal: Installation	4,377 / 4.448	55 / 1.074	600 / 2.817	3,054 / 4.179	- / -	3,054 / 4.179	- / -	1,699 / 0.100	122 / -	422 / 0.004	5,192 / 12.267	15,521 / 24.8

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Exhibit P-3a, Individual Modification: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Modification Number / Title:
2033A / 01 / 20	GM0100 / Stryker (Mod)	GM0100 / STRYKER MODIFICATION

Models of Systems Affected: VARIOUS		Modifi	cation Typ	e: Increas	e Performa	ince	Re	lated RDT	&E PEs:			
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)											
Total Cost (Procurement + Support + Installation)	187.256	20.522	39.683	74.085	-	74.085	42.150	76.399	506.376	535.815	1,836.773	3,319.059

Exhibit P-3a, Individual Modification: PB 2016 Army		Date: February 2015									
	P-1 Line Item Number / Title: GM0100 / Stryker (Mod)	Modification Number / Title: GM0100 / STRYKER MODIFICATION									
Modification Item 1 of 9: Mobile Gun System (MGS) Full Materiel Release(FM	IR)										
Manufacturer Information											

Manufacturer informatio							
Manufacturer Name: GM (	GDLS Defense Group, L.L.	C		Manufacturer Location: St	erling Heights, Michigan		
Administrative Leadtime (i	n Months): 8			Production Leadtime (in M	fonths): 3		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	May 2014	May 2015	May 2016				
Delivery Dates	Aug 2014	Aug 2015	Aug 2016				

### Installation Information

Method of Implementation: Prime Contractor

mounds of impromotivation : inner con-												
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	570 / 1.908	- /0.000	- / 0.000	- / 0.000	- 1 -	- /0.000	- /0.000	- / 0.000	- / 0.000	- / 0.000	- /0.000	570 / 1.908
FY 2014	0 / 0.000	3 / 1.056	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	3 / 1.056
FY 2015	0 / 0.000	- 1 -	45 / 1.163	143 / 3.696	- 1 -	143 / 3.696	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	188 / 4.859
FY 2016	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	570 / 1.908	3 / 1.056	45 / 1.163	143 / 3.696	- 1 -	143 / 3.696	- / -	- 1 -	- 1 -	- 1 -	- / -	761 / 7.823

## Installation Schedule

													_																		
			FY 2	2014			FY 2	2015			FY 2	2016			FY 2	2017			FY 2	2018			FY 2	2019			FY 2	2020			
	PYS	Q1	Q2	Q3	Q4	тс	Tot																								
In	570	-	-	3	-	-	-	188	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	761
Out	570	-	-	-	3	-	-	-	45	45	49	49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	761

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Exhibit P-3a, Indi	vidual Modification: PE	3 2016 Army				Date: February 2015					
<b>Appropriation / B</b> 2033A / 01 / 20	udget Activity / Budge	t Sub Activity:	P-1 Line Item Nur GM0100 / Stryker			Modification Numb GM0100 / STRYKER					
Modification Item 2 or	f 9: Fleet Modifications					·					
Manufacturer Informa	ation										
Manufacturer Name: G	M GDLS Defense Group, LLC			Manufacturer Location: S	erling Heights, Michigar	1					
Administrative Leadtim	e (in Months): 4			Production Leadtime (in N	Months): 3						
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020				
Contract Dates		Jan 2015	Jan 2016	Jan 2017	Jan 2018		Jan 2020				
Delivery Dates	elivery Dates Apr 2015 Apr 2016 Apr 2017 Apr 2018 Apr 2020										

### Installation Information

**Method of Implementation:** Prime contractor to produce hardware, installation by both prime contract and field team

				FY 2016	FY 2016	FY 2016					То	
	Prior Years	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	2,838 / 1.006	52 / 0.018	- / 0.000	- / 0.000	- / -	- / 0.000	- /0.000	- / 0.000	- / 0.000	- / 0.000	- /0.000	2,890 / 1.024
FY 2014	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2015	0 / 0.000	- 1 -	68 / 1.057	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	68 / 1.057
FY 2016	0 / 0.000	- 1 -	- 1 -	2,911 / 0.483	- 1 -	2,911 / 0.483	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	2,911 / 0.483
FY 2017	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	180 / 0.011	- 1 -	- 1 -	- 1 -	180 / 0.011
FY 2018	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	1,519 / 0.089	- 1 -	- 1 -	- 1 -	1,519 / 0.089
FY 2019	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / -
FY 2020	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	182 / 0.004	- 1 -	182 / 0.004
To Complete	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	4,408 / 12.267	4,408 / 12.267
Total	2,838 / 1.006	52 / 0.018	68 / 1.057	2,911 / 0.483	- 1 -	2,911 / 0.483	- 1 -	1,699 / 0.100	- 1 -	182 / 0.004	4,408 / 12.267	12,158 / 14.935

### Installation Schedule

		FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020					1
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	тс	Tot
In	2,890	-	-	-	-	-	68	-	-	-	2,911	-	-	-	-	-	180	-	1,519	-	-	-	-	-	-	-	182	-	-	4,408	12,158
Out	2,838	52	-	-	-	-	-	68	-	-	-	1,455	1,456	-	-	-	-	180	-	1,519	-	-	-	-	-	-	-	182	-	4,408	12,158

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Exhibit P-3a, Indiv	idual Modification: P	B 2016 Army				Date: February 201	5
Appropriation / Bu 2033A / 01 / 20	idget Activity / Budge	et Sub Activity:	P-1 Line Item Nu GM0100 / Stryker			Modification Numb	
Modification Item 3 of	9: C4I Obsolescence and No	ext Generation Items					
Manufacturer Informat	ion						
Manufacturer Name: GN	I GDLS Defense Group, L.L	.C.		Manufacturer Location:	Sterling Heights, Michiga	า	
Administrative Leadtime	(in Months): 1			Production Leadtime (in	Months): 7		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							

### Installation Information

**Method of Implementation:** Combination of depot reset team and contractors at a government facility.

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	195 / 0.850	- / 0.000	37 / 0.161	- / 0.000	- 1 -	- /0.000	- /0.000	- / 0.000	- / 0.000	- / 0.000	- /0.000	232 / 1.011
FY 2014	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2015	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2016	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	195 / 0.850	- 1 -	37 / 0.161	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	232 / 1.011

### Installation Schedule

			FY 2	2014			FY 2	2015			FY 2	2016			FY 2	2017			FY 2	2018			FY 2	2019			FY 2	2020		'	
	PYS	Q1	Q2	Q3	Q4	тс	Tot																								
In	232	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	232
Out	195	-	-	-	-	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- '	232

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Exhibit P-3a, Indiv	vidual Modification: F	PB 2016 Army				Date: February 2015	5
Appropriation / Bu 2033A / 01 / 20	udget Activity / Budg	et Sub Activity:	P-1 Line Item Nu GM0100 / Stryker			Modification Number GM0100 / STRYKER	
Modification Item 4 of	9: Test Fleet Maintenance					'	
Manufacturer Informat	ion						
Manufacturer Name: GN	// GDLS Defense Group, L.	L.C		Manufacturer Location: S	Sterling Heights, Michiga	n	
Administrative Leadtime	(in Months): 1			Production Leadtime (in I	Months):		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							
					1		
Installation Informatio	n						
Method of Implementa	tion (Organic): Maintenan	ce is provided by contrac	ctor at government test sites	3	Installation	Quantity: 0	

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Exhibit P-3a, Indivi	dual Modification: Pl	3 2016 Army				Date: February 2015	5
<b>Appropriation / Bu</b> 2033A / 01 / 20	dget Activity / Budge	t Sub Activity:	P-1 Line Item Nu GM0100 / Stryker			Modification Number GM0100 / STRYKER	
Modification Item 5 of 9	: Retrofit Planning and Site	Management				•	
Manufacturer Informati	on						
Manufacturer Name: GM	GDLS Defense Group, L.L.	С		Manufacturer Location: St	erling Heights, Michiga	ı	
Administrative Leadtime	(in Months): 3			Production Leadtime (in M	lonths):		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Dec 2013	Dec 2014	Dec 2015	Dec 2016	Dec 2017	Dec 2018	Dec 2019
Delivery Dates							
Installation Information					1		
	ion (Organic): Prime Contra	actor			Installation C	Quantity: 0	
		actor			Installation C	Quantity: 0	
		actor			Installation (	Quantity: 0	
		actor			Installation C	Quantity: 0	
		actor			Installation (	Quantity: 0	
		actor			Installation C	Quantity: 0	
		actor			Installation C	Quantity: 0	

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		UNCI	LASSIFIED			
khibit P-3a, Individual Modifica	i <b>on:</b> PB 2016 Army				Date: February 2015	
ppropriation / Budget Activity / 33A / 01 / 20	Budget Sub Activity:	P-1 Line Item Nu GM0100 / Stryker			Modification Number GM0100 / STRYKER	
odification Item 6 of 9: Training Aids, De	vices, Simulators and Simulatio	ns			-	
nufacturer Information						
nufacturer Name: Rockwell Collins Simu	ation & Training		Manufacturer Location: Ce	dar Rapids, Iowa		
ministrative Leadtime (in Months): 4			Production Leadtime (in M	onths): 7		
Dates FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
ntract Dates			Jan 2017	Jan 2018		
livery Dates			Aug 2017	Aug 2018		
stallation Information						
ethod of Implementation (Organic): Col	tractor			Installation (	Quantity: ()	

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Exhibit P-3a, Indiv	vidual Modification: Pl	B 2016 Army				Date: February 201	5
<b>Appropriation / B</b> 2033A / 01 / 20	udget Activity / Budge	et Sub Activity:	P-1 Line Item Nu GM0100 / Stryker			Modification Numb	
Modification Item 7 of	9: Engineering Change Prop	osal (ECP)	·				
Manufacturer Informa	tion						
Manufacturer Name: G	M GDLS Defense Group, L.L.	С		Manufacturer Location:	Sterling Heights, Michigan		
Administrative Leadtime	e (in Months): 2			Production Leadtime (in	Months): 3		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates						Nov 2018	Nov 2019
Delivery Dates						Feb 2019	Feb 2020

### Installation Information

Method of Implementation: Prime Contractor and depot team

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- 1 -	- /0.000	- /0.000	- / 0.000	- / 0.000	- / 0.000	- /0.000	- / 0.000
FY 2014	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2015	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2016	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	122 / -	199 / -	- 1 -	321 / -
FY 2020	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	41/ -	280 / -	321 / -
To Complete	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	504 / -	504 / -
Total	0 / 0.000	- / -	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- 1 -	122 / -	240 / -	784 / -	1,146 / -

### Installation Schedule

			FY 2	2014			FY 2	2015			FY 2	2016			FY 2	2017			FY 2	2018			FY 2	019			FY 2	020			
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot																
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	20	50	60	60	60	60	60	766	1,146
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22	50	50	60	60	60	60	784	1,146

LI GM0100 - Stryker (Mod) Army UNCLASSIFIED
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Exhibit P-3a, Indi	vidual Modification: P	B 2016 Army				Date: February 201	5
<b>Appropriation / B</b> 2033A / 01 / 20	udget Activity / Budge	et Sub Activity:	P-1 Line Item Nu GM0100 / Stryker			Modification Numb	
Modification Item 8 of	9: Double V Hull (DVH) Surv	rivability and Safety Mo	ds				
Manufacturer Informa	tion						
Manufacturer Name: G	M GDLS Defense Group, L.L	.C.		Manufacturer Location:	Sterling Heights, Michiga	n	
Administrative Leadtime	e (in Months): 9			Production Leadtime (in	Months): 4		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Jun 2014						
Delivery Dates	Oct 2014						

## Installation Information

Method of Implementation: Prime Contractor

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M										
Prior Years	774 / 0.684	- /0.000	- / 0.000	- / 0.000	- 1 -	- /0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- /0.000	774 / 0.684
FY 2014	0 / 0.000	- 1 -	450 / 0.436	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	450 / 0.436
FY 2015	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2016	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	774 / 0.684	- / -	450 / 0.436	- / -	- 1 -	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- / -	1,224 / 1.120

### Installation Schedule

			FY 2	2014			FY 2	2015			FY 2	2016			FY 2	2017			FY 2	2018			FY 2	2019			FY 2	2020			
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	тс	Tot
In	774	-	-	450	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,224
Out	774	-	-	-	-	450	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,224

LI GM0100 - Stryker (Mod) Army UNCLASSIFIED
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			UNC	LASSIFIED			
Exhibit P-3a, Indivi	dual Modification: PE	3 2016 Army				Date: February 2015	
Appropriation / Bud 2033A / 01 / 20	dget Activity / Budge	t Sub Activity:	P-1 Line Item Nu GM0100 / Stryker			Modification Number GM0100 / STRYKER	
Modification Item 9 of 9	: Program Management Sup	pport	'			1	
Manufacturer Information	on						
lanufacturer Name: GM	GLDS Defense Group, L.L.	C.		Manufacturer Location: St	erling Heights, Michigan		
Administrative Leadtime	(in Months):			Production Leadtime (in M	fonths):		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							
nstallation Information							
lethod of Implementati	ion (Organic): Government	employees			Installation Q	uantity: 0	

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 01: Tracked Combat Vehicles / BSA 20: G85200 / Stryker Upgrade

Modification of Tracked Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) : A

Program Elements for Code B Items:

Other Related Program Elements: 0203735A

Line Man ADADANAIO Octor

Line Item MDAP/MAIS Code:	Item MD	OAP/MAIS Cod	de(s): 299									
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	62	-	62	133	126	-	-	-	321
Gross/Weapon System Cost (\$ in Millions)	-	-	-	305.743	-	305.743	418.163	434.585	112.388	77.780	-	1,348.659
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	-	-	-	305.743	-	305.743	418.163	434.585	112.388	77.780	-	1,348.659
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	-	-	305.743	-	305.743	418.163	434.585	112.388	77.780	-	1,348.659
(The following	Resource Sum	mary rows are fo	or informational p	ourposes only. Th	ne corresponding	g budget request:	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	4,931.339	-	4,931.339	-	-	-	-	-	4,201.430

## **Description:**

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 is essential to fulfilling the Army's Warfighting needs. The Stryker-equipped Brigade Combat Team (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. In response to operational needs identified in the Theater of operations, the Double V Hull (DVH) survivability enhancement was approved for development and production by Acquisition Decision Memorandums (ADM) signed April 2010 and May 2011, respectively. A September 2014 ADM granted approval for establishment of a 4th DVH brigade through an exchange effort on which components and mission equipment packages are removed from flat bottom Strykers to be reassembled in the DVH structure with the associated DVH unique components. This resulted in a DVH configured Stryker. In May 2012, Stryker Engineer Change Proposal (ECP 1) (Phase 1) development program was approved for both flat bottom and DVH variant. In May 2013. Phase II development was approved to upgrade the mechanical power, electrical power generation, chassis upgrades, and the in-vehicle network for the DVH vehicle. The ECP 1 production decision for a DVH with ECP 1 configuration is planned for 3rd quarter FY 2016. The DVH with ECP 1 will be produced through the exchange process which will incorporate the DVH and ECP unique components into the DVH w/ECP vehicles. The Stryker Brigade Combat Team (SBCT), equipped as a Stryker DVH with (w) ECP1 Vehicles, can be used across the full spectrum of military operations. The Stryker 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 DVH with ECP1 Vehicles are:

DVH w/ECP1 Infantry Carrier: The DVH w/ECP1 Infantry Carrier Vehicle (ICVV) carries an infantry squad with individual equipment. The ICVV also provides protected transport and supporting fires for the infantry squad during dismounted assault. DVH w/ECP1 Infantry Carrier Vehicles with a Scout Dismount Kit provides for dismounted force situational awareness, gathering and transmitting real time intelligence while moving throughout the battlefield in close, complex, and urban terrain.

DVH w/ECP1 Mortar Carrier: The DVH w/ECP1 Mortar Carrier (MCVV) supports infantry units with screening obscurants, suppressive forces and on-call supporting fires. 120mm, 81mm, and 60mm mortars provide complementary capabilities with responsive, accurate and lethal indirect fire support to the dismounted infantry assault.

DVH w/ECP1 Commander's Vehicle: The DVH w/ECP1 Commander's Vehicle (CVV) provides the brigade commanders and infantry battalion commanders with the means to receive information and data, analyze, prepare and transmit data, and control the forces/functions carrying out combat missions.

DVH w/ECP1 Fire Support Vehicle: The DVH w/ECP1 Fire Support Vehicle (FSVV) provides automated enhanced surveillance, target acquisition, target tracking, target designation, position location, and communications functionality. Targets will be transmitted instantly to the fire support system and shooter.

DVH w/ECP1 Engineer Squad Vehicle: The DVH w/ECP1 Engineer Squad Vehicle (ESVV) 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.

DVH w/ECP1 Medical Evacuation Vehicle: The DVH w/ECP1 Medical Evacuation Vehicle (MEVV) is the Battalion Aid Station for brigade units, providing treatment for serious injury and advanced trauma cases.

UNCLASSIFIED LI G85200 - Stryker Upgrade 24 Page 1 of 9 P-1 Line #3 Army

Exhibit P-40, Budget Line Item Justification: PB 2016 Army **Date:** February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 01: Tracked Combat Vehicles / BSA 20: G85200 / Stryker Upgrade

Modification of Tracked Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) : A

Program Elements for Code B Items:

Other Related Program Elements: 0203735A

Line Item MDAP/MAIS Code:

Item MDAP/MAIS Code(s): 299

DVH w/ECP1 Antitank Guided Missile Vehicle: The DVH w/ECP1 Antitank Guided Missile Vehicle (ATGV) is the brigade's primary tank killing system. The ATGV reinforces the brigade's infantry battalion, reinforces the brigade reconnaissance squadron, and provides long-range direct fire. The Stryker Upgrade is a New Start in FY2016.

				FY 2016	FY 2016	FY 2016				
Secondar	y Distribution	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	62	-	62	133	126	-	-
	Total Obligation Authority	-	-	305.743	-	305.743	418.163	434.585	112.388	77.780
Total:	Quantity	-	-	62	-	62	133	126	-	-
Secondary Distribution	Total Obligation Authority	-	-	305.743	-	305.743	418.163	434.585	112.388	77.780

LI G85200 - Stryker Upgrade Army

Exhibit P-40, Budget Line Item Justification: PB 2016 Army Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 01: Tracked Combat Vehicles / BSA 20: G85200 / Stryker Upgrade

Modification of Tracked Combat Vehicles

Program Elements for Code B Items: Other Related Program Elements: 0203735A ID Code (A=Service Ready, B=Not Service Ready) : A

Item MDAP/MAIS Code(s): 299 Line Item MDAP/MAIS Code:

Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)				
G85200 / Stryker Upgrade	P-5, P-5a, P-21	Α	- / -	- / -	- / -	62 / 305.743	- / -	62 / 305.743
Total Gross/Weapon System Cost			- 1 -	- 1 -	- 1 -	62 / 305.743	- 1 -	62 / 305.743

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

#### Justification:

FY 2016 Base procurement dollars in the amount of \$305.743 million supports the conversion of 87 Stryker Flat Bottom vehicles to Stryker Double V Hull (DVH) vehicles with Engineering Change Proposal 1 (ECP1) for the 4th Brigade. These vehicles will provide for increased available electrical power while ensuring adequate mechanical power, weight margin, and cooling. Combined with a digital backbone, the enhanced DVH fleet will be able to host the future network while maintaining protection and mobility characteristics. Supports the Active Army.

DVH w/ECP1 vehicle quantities do not increase the Army Acquisition Objective (4408).

Actual conversion quantity in FY 2016 is 87. Weapon System Proc U/C is \$3.514 million

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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Exhibit P-5, Cost Analysis: PB 2016 Army **Date:** February 2015 Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Item Number / Title [DODIC]: 2033A / 01 / 20 G85200 / Stryker Upgrade G85200 / Stryker Upgrade  $\textbf{ID Code} \,\, (\mathsf{A}\text{=}\mathsf{Service} \,\, \mathsf{Ready}, \,\, \mathsf{B}\text{=}\mathsf{Not} \,\, \mathsf{Service} \,\, \mathsf{Ready}) : A$ MDAP/MAIS Code:299 **Prior Years** FY 2014 FY 2015 **FY 2016 Base FY 2016 OCO** FY 2016 Total **Resource Summary** Procurement Quantity (Units in Each) 62 Gross/Weapon System Cost (\$ in Millions) 305.743 305.743 Less PY Advance Procurement (\$ in Millions) Net Procurement (P1) (\$ in Millions) 305.743 305.743 Plus CY Advance Procurement (\$ in Millions) _ _ Total Obligation Authority (\$ in Millions) 305.743 305.743 (The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.) Initial Spares (\$ in Millions) Gross/Weapon System Unit Cost (\$ in Thousands) _ 4,931.339 4,931.339 _

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

	P	rior Years	3		FY 2014			FY 2015		FY	2016 Bas	е	FY	' 2016 OC	0	FY	2016 Tota	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost												
lyaway Cost													ll.					
Recurring Cost																	_	
DVH w/ECP1 Infantry																		
Carrier Vehicle ^(†)	-	-	-	-	-	-	-	-	-	2,818.000	43	121.174	-	-	-	2,818.000	43	121
DVH w/ECP1 Anti- Tank Guided Missile Veh ^(†)	-	-	-	-	-	-	-	-	-	2,846.000	4	11.383	-	-	-	2,846.000	4	11
DVH w/ECP1 Mortar Carrier Vehicle ^(†)	-	-	-	-	-	-	-	-	-	3,079.000	12	36.948	-	-	-	3,079.000	12	36
DVH w/ECP1 Fire Support Vehicle ^(†)	-	-	-	-	-	-	-	-	-	2,944.000	5	14.720	-	-	-	2,944.000	5	1-
DVH w/ECP1 Engineer Squad Vehicle ^(†)	-	-	-	-	-	-	-	-	-	2,931.000	5	14.655	-	_	-	2,931.000	5	1-
DVH w/ECP1 Commander's Vehicle ^(†)	-	-	-	-	-	-	-	-	-	3,064.000	10	30.641	-	-	-	3,064.000	10	3
DVH w/ECP1 Medical Evacuation Vehicle ^(†)	-	-	-	-	-	-	-	-	-	3,014.000	8	24.112	-	-	-	3,014.000	8	2
Government Furnished Equipment (GFE)	-	-	-	-	-	-	-	-	-	-	-	25.022	-	-	-	-	-	2
Program Management Support (Govt)	-	-	-	-	-	_	_	-	-	_	-	21.534	-	_	-	_	-	2

LI G85200 - Stryker Upgrade Army

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Exhibit P-5, Cost Analysis: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:

2033A / 01 / 20

Date: February 2015

P-1 Line Item Number / Title:

G85200 / Stryker Upgrade

G85200 / Stryker Upgrade

ID Code (A=Service Ready, B=Not Service Ready): A MDAP/MAIS Code:299

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

	F	Prior Years	s		FY 2014			FY 2015		FY	' 2016 Ba	se	FY	Y 2016 OC	0	FY	2016 Tot	tal
Cost Elements	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)												
System Fielding Support	-	-	-	-	-	-	-	-	-	-	-	1.347	-	-	-	-	-	1.347
Initial Spares/ Authorized Stock List	-	-	-	-	-	-	-	-	-	-	-	4.207	-	-	-	-	-	4.20
Subtotal: Recurring Cost	-	-	-	-	-	-	-	-	-	-	-	305.743	-	-	-	-	-	305.743
Subtotal: Flyaway Cost	-	-	-	-	-	-	- 1	-	-	-	-	305.743	-	-	-	-	-	305.743
Gross/Weapon System Cost	-	-	-	-	-	-	-	-	-	4,931.339	62	305.743	-	-	-	4,931.339	62	305.743

Seconda	ry Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Army	Quantity	-	-	62	-	62
	Total Obligation Authority	-	-	305.743	-	305.743
Total:	Quantity	-	-	62	-	62
Secondary Distribution	Total Obligation Authority	-	-	305.743	=	305.743

^(†) indicates the presence of a P-5a

LI G85200 - Stryker Upgrade Army

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Date: February 2015 Exhibit P-5a, Procurement History and Planning: PB 2016 Army Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Item Number / Title [DODIC]: 2033A / 01 / 20 G85200 / Stryker Upgrade G85200 / Stryker Upgrade

	0			Method/Type or		Award	Date of First	Qty	Unit Cost	Specs Avail	Revision	RFP Issue
Cost Elements	0	FY	Contractor and Location	Funding Vehicle	Location of PCO	Date	Delivery	(Each)	(\$ K)	Now?	Available	Date
DVH w/ECP1 Infantry Carrier Vehicle ^(†)		2016	GM GDLS Defense Group L.L.C. / Shelby Township	SS/FFP	TACOM	Jun 2016	Jul 2017	43	2,818.000	N		
DVH w/ECP1 Anti-Tank Guided Missile Veh ^(†)		2016	GM GDLS Defense Group L.L.C. / Shelby Township	SS / FFP	TACOM	Jun 2016	Nov 2017	4	2,846.000	N		
DVH w/ECP1 Mortar Carrier Vehicle ^(†)		2016	GM GDLS Defense Group L.L.C. / Shelby Township	SS / FFP	TACOM	Jun 2016	Oct 2017	12	3,079.000	N		
DVH w/ECP1 Fire Support Vehicle ^(†)		2016	GM GDLS Defense Group L.L.C. / Shelby Township	SS / FFP	TACOM	Jun 2016	Nov 2017	5	2,944.000	N		
DVH w/ECP1 Engineer Squad Vehicle ^(†)		2016	GM GDLS Defense Group L.L.C. / Shelby Township	SS / FFP	TACOM	Jun 2016	Oct 2017	5	2,931.000	N		
DVH w/ECP1 Commander's Vehicle ^(†)		2016	GM GDLS Defense Group L.L.C. / Shelby Township	SS/FFP	TACOM	Jun 2016	Sep 2017	10	3,064.000	N		
DVH w/ECP1 Medical Evacuation Vehicle ^(†)		2016	GM GDLS Defense Group L.L.C. / Shelby Township	SS / FFP	TACOM	Jun 2016	Aug 2017	8	3,014.000	N		

^(†) indicates the presence of a P-21

#### Remarks:

Army

Anticipate follow-on Stryker vehicle contract will have range pricing that is predicated on the total buy quantity as well as by specific variant.

Actual conversion quantity in FY 2016 is 87. Weapon System Proc U/C is \$3.514 million

Ex	hibit F	P-21, Pro	oducti	ion Sc	hedul	e: PE	3 201	6 Arm	าง														Date	: Feb	oruary	2015	;			
		iation / 1 01 / 20	Budge	et Acti	vity /	Budg	jet Si	ub Ac	tivity	:	1	<b>Line</b> 5200 <i>i</i>													<b>ber</b> / Stryk					
			lements in Each)								Fiscal Y	ear 2016		,									Fiscal Y	ear 2017						
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		SERVICE Infantry Carri	QTY	2015	1 OCT		V	C	N	В	R	K	Y	N	L	G	Ρ	ı	V	C	N	В	R	К	Y	N	L	G	Р .	L
DVI		ARMY	43		43				T					Α -	_	l -	_	-	_	_	_	_	-	-	_	_	1	2	4	
		Anti-Tank Gu														l												_	•	
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DVI	H w/ECP1	Mortar Carrie	r Vehicle				l		1	ļ				ļ			ļ.	ļ.					ļ.	ļ.						
:	3 2016	ARMY	12	-	12									Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
DVI	w/ECP1	Fire Support	Vehicle																	,								,		-
- [·	4 2016	ARMY	5	-	5									Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
DVI	w/ECP1	Engineer Squ	ad Vehicle	е																										
	5 2016	ARMY	5	-	5									A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		Commander's	s Vehicle																											
	6 2016		10		10									A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
_		Medical Evac						_	_																					
	7 2016	ARMY	8	-	8									Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	<u> </u>
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N N	U L	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	J U L	A U G	S E P	B A L

LI G85200 - Stryker Upgrade Army

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Exhib	it P-21	. Pro	ducti	on Sc	hedul	e: PB	2016	3 Arm	IV														Dat	<b>te:</b> Fel	bruary	/ 201	5			
Appro	<b>priati</b>	on / B									- 1	<b>Line</b> 5200 .				/ <b>Title</b> de	:						Iter	<b>n Nu</b> r 5200 /	nber /	Title	[DOI			
		Cost Elei (Units in								ı	Fiscal Ye	ear 2018											Fiscal	Year 2019	)					
				ACCEPT									C	Calenda	r Year 2	018								Cale	ndar Yea	r 2019				
M O F C R O # F	FY SEF		PROC QTY	PRIOR TO 1 OCT 2017	BAL DUE AS OF 1 OCT	O C T	< 0 Z	D E C	J A N	F E B	M A R	A P R	M A Y	JUN	J	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	J U L	A U G	S E P	B A L
DVH w/E	CP1 Infant	ry Carrier	Vehicle																											
1 20	016 ARM	ΙΥ	43	7	36	8	5	6	6	6	5																			] -
DVH w/E	CP1 Anti-T	ank Guid	ed Missil	e Veh																										
2 20	016 ARM	IY	4	-	4	-	1	-	-	-	-	-	3																	-
	CP1 Morta		Vehicle																											
	016 ARM		12	-	12	1	1	-	-	-	2	8																		-
	CP1 Fire S		ehicle																											
	016 ARM		5	-	5	-	1	-	-	-	-	-	4																	-
	CP1 Engin		d Vehicle	1																										
	016 ARM		5	-	5	1	1	-	-	-	-	2	1																	-
	CP1 Comn																													
	016 ARM		10	1	9	-	-	-	2	4	3																			
	CP1 Medic			icle						_																				
7 20	016 ARM	IY	8	1	7	-	1	4	2					1				1									1			—
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LI G85200 - Stryker Upgrade Army

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Exhibit P-21, Production Schedule: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:
2033A / 01 / 20

Date: February 2015

Item Number / Title [DODIC]:
G85200 / Stryker Upgrade

G85200 / Stryker Upgrade

		Produc	tion Rates (Each /	Month)				Procurement Le	adtime (Months)			
MFR						Init	ial			Reo	rder	
Ref #	MFR Name - Location	MSR For 2016	1-8-5 For 2016	MAX For 2016	ALT Prior to Oct 1	ALT After Oct 1	Mfg PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Mfg PLT	Total After Oct 1
1	GM GDLS Defense Group L.L.C Shelby Township	120	120	720	8	9	13	22	-	-	-	-
2	GM GDLS Defense Group L.L.C Shelby Township	120	120	720	8	9	13	22	-	-	-	-
3	GM GDLS Defense Group L.L.C Shelby Township	120	120	720	8	9	13	22	-	-	-	-
4	GM GDLS Defense Group L.L.C Shelby Township	120	120	720	8	9	13	22	-	-	-	-
5	GM GDLS Defense Group L.L.C Shelby Township	120	120	720	8	9	13	22	-	-	-	-
6	GM GDLS Defense Group L.L.C Shelby Township	120	120	720	8	9	13	22	-	-	-	-
7	GM GDLS Defense Group L.L.C Shelby Township	120	120	720	8	9	13	22	-	-	-	-

#### Remarks:

Lead time for Stryker DVH w/ECP1 variants is 13-20 months.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Army
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[&]quot;A" in the Delivery Schedule indicates the Contract Award Date.

Exhibit P-40, Budget Line Item Justification: PB 2016 Army Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV. Army / BA 01: Tracked Combat Vehicles / BSA 20: GZ2300 / FIST Vehicle (Mod)

Modification of Tracked Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) : A	A		Program Ele	ments for Co	de B Items:			Other Relate	d Program El	ements: 0203	3735A	
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	1,193.462	29.965	26.759	-	-	-	-	-	-	-	-	1,250.186
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	1,193.462	29.965	26.759	-	-	-	-	-	-	-	-	1,250.186
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	1,193.462	29.965	26.759	-	-	-	-	-	-	-	-	1,250.186
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Tl	ne corresponding	g budget request	s are document	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

#### Description:

The Bradley Fire Support Team (BFIST) vehicle replaces the aging M981 Fire Support Vehicle used by the Fire Support Team (FIST) that is in the Combined Arms Battalion. The FIST contributes to success on the battlefield by accurately locating and designating targets and then combining this information to develop and execute fire support plans. The BFIST allows fire support operations to be performed on the battlefield in vehicles with the same signature, survivability, and mobility as the other Bradleys in the maneuver units it supports. The BFIST consists of three variants; M7, M7 BFIST Situational Awareness (SA) and A3 BFIST.

A3 BFIST: The A3 BFIST integrates a fire support Mission Equipment Package (MEP) with the technology and capability advancements of the baseline A3 Bradley digital architecture. The A3 BFIST requires the integration of four complex software packages; Forward Observer System (FOS), Force 21 Battle Command Brigade and Below (FBCB2), FIST MEP, and the baseline A3 Bradley vehicle which are managed by four different primary contractor and government organizations. With the addition of the FS3, the FIST mission will now be able to detect, recognize and identify targets at a greater range, meeting the Operational Requirements Document (ORD). In addition, the BFIST with Fire Support Sensor System (FS3) will now be able to designate the selected target while under armor, and with the greater distance, both capabilities increase crew survivability.

M7 BFIST: The M7 BFIST integrates a fire support Mission Equipment Package (MEP) onto the baseline Operation Desert Storm (ODS) Bradley vehicle. The M7 BFIST requires the integration of four complex software packages; Forward Observer System (FOS), Force 21 Battle Command Brigade and Below (FBCB2), FIST MEP, and the baseline ODS Bradley vehicle which are managed by four different primary contractors and government organizations. Any modifications needed to the baseline vehicle to integrate the MEP are added as an Engineering Change Proposal (ECP). The M7 BFIST has transitioned to the M7 BFIST Situational Awareness (SA) Variant.

In order to maintain commonality with the baseline Bradley Operation Desert Storm (ODS) SA vehicle, the M7 BFIST is transitioning to the M7 BFIST SA vehicle. The M7 BFIST SA will have the same capabilities as the ODS-SA platform. Additionally, M7 BFIST SA no longer has the M7 BFIST obsolescence issues because of the A3 like digital architecture of the ODS-SA baseline vehicle. With the addition of the FS3, the FIST mission will be able to detect, recognize, identify, and designate targets at a greater range, meeting the Operational Requirements Document (ORD), with the greater distance, both capabilities are met, which give the M7 SA the same crew survivability as the A3 BFIST.

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LI GZ2300 - FIST Vehicle (Mod) Army

Exhibit P-40, Budget Line Item Justification: PB 2016 Army Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 01: Tracked Combat Vehicles / BSA 20: GZ2300 / FIST Vehicle (Mod)

Modification of Tracked Combat Vehicles

ID Code (A=Service Ready, B=	:Not Service Ready) : A	Pro	gram Elements	for Code B Item	s:	C	Other Related Pro	gram Elements:	: 0203735A	
Secondar	y Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	13.487	2.045	-	-	-	-	-	-	-
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	16.478	24.714	=	-	-	-	-	-	=
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	29.965	26.759	-	-	-	-	-	-	-

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army **Date:** February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 01: Tracked Combat Vehicles / BSA 20: GZ2300 / FIST Vehicle (Mod)

Modification of Tracked Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) : A	F	Program	Elements for Code	B Items:		Other Related Program	Elements: 0203735A	
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)
GZ2300 / FS3 on A3 BFIST / M7 BFIST SA (Increase Performance)	P-3a		- / 1,193.462	- / 29.965	- / 26.759	- / -	- / -	- / -
Total Gross/Weapon System Cost			- / 1,193.462	- / 29.965	- / 26.759	- 1 -	- 1 -	- 1 -
Exhibits Schedule			FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)
GZ2300 / FS3 on A3 BFIST / M7 BFIST SA (Increase Performance)	P-3a		- / -	- / -	- / -	- / -	- / -	- / 1,250.186
Total Gross/Weapon System Cost			- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 1,250.186

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

#### Justification:

There is no FY 2016 funding. Program goes into sustainment in FY 2016.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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Exhibit P-3a, Individual Modification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:
2033A / 01 / 20

P-1 Line Item Number / Title:
GZ2300 / FIST Vehicle (Mod)

GZ2300 / FS3 on A3 BFIST / M7 BFIST SA

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	1,193.462	29.965	26.759	-	-	-	-	-	-	-	-	1,250.186
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	1,193.462	29.965	26.759	-	-	-	-	-	-	-	-	1,250.186
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	1,193.462	29.965	26.759	-	-	-	-	-	-	-	-	1,250.186
(The following	Resource Sumr	mary rows are fo	or informational p	urposes only. Ti	ne corresponding	g budget request	s are documente	ed elsewhere.)	1		ĺ	
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

### **Description:**

Removing the Tube-launched Optically-tracked Wire-guided (TOW) box and integrating the FS3 into the digital architecture of the A3 BFIST and M7 BFIST SA. With the addition of the FS3, the FIST mission will be able to detect, recognize, identify, and designate targets at a greater range and greater distance, which increases crew survivability, and meet the ORD requirements. Installation costs are included in the contractor costs.

Second	dary Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	13.487	2.045	-	-	-	-	-	-	-
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	16.478	24.714	-	-	-	-	-	-	-
Total:	Quantity	-	-	-	=	=	-	=	=	=
Secondary Distribution	<b>Total Obligation Authority</b>	29.965	26.759	-	-	-	-	-	-	-

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Exhibit P-3a, Individual Modification: PB 2016 ArmyDate: February 2015Appropriation / Budget Activity / Budget Sub Activity:P-1 Line Item Number / Title:<br/>GZ2300 / FIST Vehicle (Mod)Modification Number / Title:<br/>GZ2300 / FS3 on A3 BFIST / M7 BFIST<br/>SAModels of Systems Affected: A3 BFIST / M7 BFISTModification Type: Increase PerformanceRelated RDT&E PEs:

SA FY 2016 FY 2016 FY 2016 To **Prior Years** FY 2014 FY 2015 Base oco Total FY 2017 FY 2018 FY 2019 FY 2020 Complete Total Qtv (Each) I **Financial Plan** Total Cost (\$ M) Total Cost (\$ M) | Total Cost (\$ M) Procurement Modification Item 1 of 2: PRIOR YEAR CLOSED BFIST A Kits Recurring Prior Year Closed - A3 BFIST 189 / 957.258 - 1 -189 / 957.258 - / -- / -- / -- 1 -- / -- / -- / -- / -- / -Subtotal: Recurring / 957.258 - / -- / -- / -- / -- / -- / -- / -- / -/ -- / 957.258 - / -- / -- / -- / -- / -- / -Subtotal: PRIOR YEAR CLOSED - BFIST 189 / 957.258 - / -- / -- / -- / -189 / 957.258 Modification Item 2 of 2: FS3 on BFIST A Kits Recurring BFIST A3 FS3 A-Kits 200 / 35.873 - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- / -- 1 -200 / 35.873 - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -BFIST A3 FS3 Sensors 215 / 62.302 - 1 -- 1 -- 1 -- 1 -215 / 62.302 0/9.972 - 1 -- 1 -- 1 -BFIST A3 GFE/GFM - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- /9.972 2 / 0.647 49 / 9.065 28 / 5.320 - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -79 / 15.032 BFIST M7SA FS3 A Kits - 1 -BFIST M7SA FS3 Sensors 41/7.749 38 / 1.406 - 1 -- 1 -- 1 -- 1 -79 / 9.155 - 1 -- 1 -BFIST M7SA GFE/GFM - 1 -- I 1.975 - / 0.462 - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- /2.437 0 / 2.355 - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- /2.355 LL FS3 Sensor Mod Kits Engineering Production (A3 & M7SA) 0 / 81.979 - I 10.627 - / 11.252 - 1 -- 1 -- 1 -- / -- 1 -- 1 -- 1 -- 1 -- / 103.858 Government Support (A3 & M7SA) 0 / 16.721 - /3.846 - /3.500 - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- / 24.067 - 1 -- 1 -- 1 -- 1 -- / 13,236 Fielding (A3 & M7SA) 0 / 8.474 - /2.452 - /2.310 - 1 -- 1 -- 1 -- 1 -- /2.509 - 1 -- 1 -Test & Evaluation (A3 & M7SA) 0 / 10.132 12.000 - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- / 14.641 - / 236.204 - / 29.965 - /26.759 - / -- / -- / -- / -- / -- / -- / -- / -- /292.928 Subtotal: Recurring - / -458 / 236.204 49 / 29.965 66 / 26.759 - / -- / -- / -573 / 292.928 - / -- / -- / -- / -Subtotal: FS3 on BFIST - / -647 / 1.193.462 49 / 29.965 66 / 26.759 - / -- / -- / -- / -- / -- / -762 / 1.250.186 Subtotal: Procurement, All Modification Items Installation Modification Item 1 of 2: PRIOR YEAR CLOSED - BFIST 189 / 0.000 - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -189 / -Modification Item 2 of 2: FS3 on BFIST 158 / 0.000 56 / -65/ -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -2791 -Subtotal: Installation 347 / 0.000 56/ -65/ -- / -- / -- / -- / -- / -- / -- / -- / -468/ -Total

LI GZ2300 - FIST Vehicle (Mod) Army UNCLASSIFIED
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Exhibit P-3a, Individual Modification: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 01 / 20	P-1 Line Item Number / Title: GZ2300 / FIST Vehicle (Mod)	Modification Number / Title: GZ2300 / FS3 on A3 BFIST / M7 BFIST SA

Models of Systems Affected: A3 BFIST / M7 BFIST | Modification Type: Increase Performance | Related RDT&E PEs:

SA

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)											
Total Cost (Procurement + Support + Installation)	1,193.462	29.965	26.759	-	-	-	-	-	-	-	-	1,250.186

Exhibit P-3a, Indivi	dual Modification: P	B 2016 Army				Date: February 201	5
Appropriation / Bu 2033A / 01 / 20	dget Activity / Budge	et Sub Activity:	P-1 Line Item Nu GZ2300 / FIST Vo			Modification Numb GZ2300 / FS3 on A3 SA	
Modification Item 1 of 2	: PRIOR YEAR CLOSED -	BFIST				·	
Manufacturer Information	on						
Manufacturer Name: BAE				Manufacturer Location:	YORK, PA		
Administrative Leadtime	(in Months): 5			Production Leadtime (in	Months): 5		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							

### **Installation Information**

Method of Implementation: X

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	189 / 0.000	- / 0.000	- / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 0.000	189 / 0.000
FY 2014	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2015	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2016	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / -
FY 2019	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	189 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	189 / -

## Installation Schedule

			FY 2	2014			FY 2	2015			FY 2	2016			FY 2	2017			FY 2	2018			FY 2	2019			FY 2	:020			
	PYS	Q1	Q2	Q3	Q4	TC	Tot																								
ln	189	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-	189
Out	189	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	189

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P-1 Line #4

LI GZ2300 - FIST Vehicle (Mod) Army

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Exhibit P-3a, Indivi	idual Modification: P	B 2016 Army				Date: February 201	5
<b>Appropriation / Bu</b> 2033A / 01 / 20	dget Activity / Budge	et Sub Activity:	P-1 Line Item Nu GZ2300 / FIST Vo			Modification Numb GZ2300 / FS3 on A3 SA	
Modification Item 2 of 2	2: FS3 on BFIST						
Manufacturer Informati	on						
Manufacturer Name: BAI	Ē			Manufacturer Location: Y	ORK, PA		
Administrative Leadtime	(in Months): 8			Production Leadtime (in	Months): 4		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	May 2014	May 2015					
Delivery Dates	Sen 2014	Sen 2015					

### Installation Information

Method of Implementation: Contractor

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
		-					-					
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	158 / 0.000	44 / 0.000	- / 0.000	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	202 / 0.000
FY 2014	0 / 0.000	12 / -	37 / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	49 / -
FY 2015	0 / 0.000	- 1 -	28 / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	28 / -
FY 2016	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / -
FY 2019	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	158 / 0.000	56 / -	65 / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	279 / -

### Installation Schedule

- 1																																
				FY 2	014			FY 2	2015			FY 2	2016			FY 2	2017			FY 2	2018			FY 2	2019			FY 2	:020			
		PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	тс	Tot
	ln	158	15	15	14	12	12	12	13	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	279
	Out	158	15	15	14	12	12	12	13	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	279

LI GZ2300 - FIST Vehicle (Mod) Army UNCLASSIFIED
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P-1 Line #4

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 01: Tracked Combat Vehicles / BSA 20: GZ2400 / Bradley Program (MOD)

Modification of Tracked Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) : I	Code (A=Service Ready, B=Not Service Ready) : A				de B Items:			Other Related Program Elements:				
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	4,613.909	158.000	136.006	225.042	-	225.042	303.672	519.588	573.807	578.628	5,231.449	12,340.101
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	4,613.909	158.000	136.006	225.042	-	225.042	303.672	519.588	573.807	578.628	5,231.449	12,340.101
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	4,613.909	158.000	136.006	225.042	-	225.042	303.672	519.588	573.807	578.628	5,231.449	12,340.101
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	e corresponding	budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

### **Description:**

Bradley Program (MOD) procures upgrades to Bradley Fighting Vehicles. The Bradley Program (MOD) procures hardware for field mods from the Engineering Change Proposal (ECP) program approved by the Army Acquisition Executive (AAE) in July 2011. There are two ECPs in this program. ECP1 improves vehicle suspension with extended life track. ECP2 improves the power train and electrical system to enable the A3 fleet to host inbound technologies from Army Program of Records including Handheld Manpack Small Radios (HMS) and Force XXI Battle Command - Brigade and Below (FBCB2). Additionally, the Bradley Program (MOD) procures M2 conversions, safety upgrades to the transmission, high priority improvements, and obsolescence mitigation to the Bradley Advanced Training System (BATS). Also, the Bradley Operation Desert Storm-Situational Awareness (ODS-SA) upgrades include the Second Generation (GEN) Forward Looking Infrared (FLIR) capability which provides target detection and identification at weapon maximum effective range and achieves commonality with the M1A1 Abrams Situational Awareness (SA) tank.

				FY 2016	FY 2016	FY 2016				
Second	ary Distribution	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	158.000	136.006	225.042	-	225.042	303.672	519.588	541.807	546.628
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	-	-	-	-	-	32.000	32.000
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	<b>Total Obligation Authority</b>	158.000	136.006	225.042	-	225.042	303.672	519.588	573.807	578.628

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army **Date:** February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 01: Tracked Combat Vehicles / BSA 20: GZ2400 / Bradley Program (MOD)

Modification of Tracked Combat Vehicles

	Prior Years	EV 2014			ements:				
CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)			
	- /4,613.909	- / 158.000	- / 136.006	- / 225.042	- / -	- / 225.042			
	- / 4,613.909	- /158.000	- / 136.006	- / 225.042	- 1 -	- / 225.042			
	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total			
ID	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)			
	- / 303.672	- / 519.588	- / 573.807	- / 578.628	- / 5,231.449	- / 12,340.101			
	- / 303.672	- / 519.588	- / 573.807	- / 578.628	- / 5,231.449	- / 12,340.101			
	ID	CD (Each) / (\$ M)  - / 4,613.909  - / 4,613.909  FY 2017  ID Quantity / Total Cost (Each) / (\$ M)  - / 303.672  - / 303.672	CD (Each) I (\$ M) (Each) I (\$ M)  - /4,613.909 - /158.000  - /4,613.909 - /158.000  FY 2017 FY 2018  ID Quantity / Total Cost (Each) I (\$ M)  - /303.672 - /519.588  - /303.672 - /519.588	CD	CD         (Each) I (\$ M)           - / 4,613.909         - / 158.000         - / 136.006         - / 225.042           - / 4,613.909         - / 158.000         - / 136.006         - / 225.042           FY 2017         FY 2018         FY 2019         FY 2020           ID CD         Quantity / Total Cost (Each) I (\$ M)         Quantity / Total Cost (Each) I (\$ M)         Quantity / Total Cost (Each) I (\$ M)           - / 303.672         - / 519.588         - / 573.807         - / 578.628           - / 303.672         - / 519.588         - / 573.807         - / 578.628	CD         (Each) I (\$ M)         (Each) I (\$ M)			

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

#### Justification:

FY 2016 Base procurement dollars in the amount of \$225.042 million supports procurement of multiple modifications to the Bradley Family of Vehicles including the following: procurement and installation of upgrade ECP1 kits; funds the conversion of M3 and BFIST to M2; training device obsolescence mitigation to the Bradley Advanced Training System (BATS); transmission safety upgrades; program/engineering support; high priority improvements to ensure safe and effective operation of the vehicle at full combat weight.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Modification Number / Title:
2033A / 01 / 20	GZ2400 / Bradley Program (MOD)	GZ2400 / Bradley Program Mod

2033A / 01 / 20			GZZ	GZ24007 Bradley Program (MOD)							rogram iviod	)
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
•	Icais	1 1 2017	1 1 2013	Dase	000	IOtai	1 1 2017	1 1 2010	1 1 2013	1 1 2020	Complete	IOtal
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	4,613.909	158.000	136.006	225.042	-	225.042	303.672	519.588	573.807	578.628	5,231.449	12,340.101
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	4,613.909	158.000	136.006	225.042	-	225.042	303.672	519.588	573.807	578.628	5,231.449	12,340.101
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	4,613.909	158.000	136.006	225.042	-	225.042	303.672	519.588	573.807	578.628	5,231.449	12,340.101
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	ne corresponding	budget requests	are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

## **Description:**

The Bradley Program (MOD) procures hardware for field mods from the Engineering Change Proposal (ECP) program approved by the Army Acquisition Executive (AAE) in July 2011. There are two ECPs in this program. ECP1 improves vehicle suspension with extended life track. ECP2 improves the power train and electrical system to enable the A3 fleet to host inbound technologies from Army Program of Records (i.e. HMS, FBCB2). Bradley Program (MOD) also finishes fielding of Operation Desert Storm (ODS) vehicle upgrades that improve its Situational Awareness (SA) with Second Generation (GEN) Forward Looking Infrared (FLIR) capability. Funds the conversion of 18 M3 and BFIST to M2. Funds training device obsolescence mitigation to the Bradley Advanced Training System (BATS); procures transmission safety upgrades; high priority improvements to ensure safe and effective operation of the vehicle at full combat weight.

MOD 2 (BFVS High Priority Improvements) - The Bradley Fighting Vehicle Systems (BFVS) represented the primary mechanized Infantry, Cavalry, and Engineer forces in the Armored Brigade Combat Teams which remain critical in both combat military operations as well as military operations. In order to retain a strategic combat overmatch against consistently improving forces/technologies several modifications were needed to ensure this capability. Modifications to the BFVS include modifications to ensure BFVS remain effective and suitable such as in target acquisition, towing and recovery operations, and upgrading the Interactive Electronic Technical Manuals (IETM).

MOD 3 (Training Equipment Devices) - Provide funding for Training Aids, Devices, Simulators and Simulations (TADSS). Procures replacement of Bradley Advanced Training System (BATS) with Conduct of Fire Trainer (COFT-SA) to mitigate obsolescence of the Bradley advanced training system, Table Top Trainers and ECP2 Maintenance Trainers in support of the Bradley Vehicle systems. Procurement of 40 Table tops and 36 Conduct of Fire Trainer (COFT-SA) will occur in FY15/FY16. Also, system training devices are required to remain current with upgrade fleet configuration/capabilities. TADSS include Maintenance Trainers, Gunnery Trainer Tech Refresh, Desktop Trainer Lesson modifications, Bradley Common Software Library modifications and Crew Module Unit-Recorder (CMUR). Contractor dates will vary by item and cannot be predicted. Includes non recurring engineering for hardware and software changes, procurement cost of hardware associated with modifications to existing training devices and field installation at the unit.

MOD 5 (Program/Engineering Support) - Program/Engineering Support includes both Government & contractor program management support to oversee program planning & procurement of ECP1 & 2 hardware, conversion of Bradley configurations and industrial base mitigation.

MOD 6 (Field Upgrades) - Provides funding for the components and applications related to fielding modifications to the entire Bradley Fighting Vehicle fleet which includes the mechanized Infantry version, Cavalry version and Engineer version. ECP1 field modifications include track and suspension system upgrades that help to alleviate operational deficiencies with regards to mobility, crew protection and system survivability. Costs associated with kit installations are included in the funding for the prime hardware contracts. Inert BRAT (Bradley Reactive Armor Tiles) provides crew proficiency with Reactive Armor Tiles using trainings sets.

MOD 7 (Conversion to M2) - Funds conversion of the Bradley Fighting Vehicle from the M3 Cavalry Fighting Vehicle to the M2 Infantry Fighting Vehicle to support fielding of digitized Bradley Fighting Vehicles to Armored Brigade Combat Team (ABCT) combat engineers. Provides for industrial base mitigation for Bradley vehicle manufacturing capabilities.

LI GZ2400 - Bradley Program (MOD) Army

Exhibit P-3a, Individual Modification: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Modification Number / Title:
2033A / 01 / 20	GZ2400 / Bradley Program (MOD)	GZ2400 / Bradley Program Mod

MOD 8 (Braking Safety/Transmission Industrial Base) - Procures upgraded Bradley Fighting Vehicle (BFV) Hydro Mechanically Propelled Transmissions (HMPT) to mitigate vehicle braking safety at full combat weight for forward positioned contingency forces. Sustains Bradley transmission industrial base for future Engineering Change Proposal procurements.

				FY 2016	FY 2016	FY 2016				
Secon	dary Distribution	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	158.000	136.006	225.042	-	225.042	303.672	519.588	541.807	546.628
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	-	-	-	-	-	32.000	32.000
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	158.000	136.006	225.042	-	225.042	303.672	519.588	573.807	578.628

**UNCLASSIFIED** LI GZ2400 - Bradley Program (MOD) Page 4 of 15

Exhibit P-3a, Individual Modification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:

2033A / 01 / 20

P-1 Line Item Number / Title:

GZ2400 / Bradley Program (MOD)

Date: February 2015

Modification Number / Title:

GZ2400 / Bradley Program Mod

Models of Systems Affected: M2 & M3 Bradley
Vehicle Variants

Modification Type: Increase Performance
Related RDT&E PEs:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M										
Procurement							-	-		-		
Modification Item 1 of 8: Bradley Reactive Armor												
A Kits												
Recurring												-
Kit Quantity	2,676 / 765.100	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	2,676 / 765.10
Subtotal: Recurring	- /765.100	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- /765.10
Subtotal: Bradley Reactive Armor	2,676 / 765.100	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2,676 / 765.10
<b>Modification Item 2 of 8:</b> BFVS High Priority Improvements												1
A Kits												
Recurring												
CMED Driver Vision Upgrade	617 / 85.500	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	617 / 85.50
Reset Mods	756 / 10.500	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	756 / 10.50
INU/Talon	271 / 5.000	- 1 -	- 1 -	- 1 -	- 1 -	- / -	- 1 -	- / -	- 1 -	- / -	- 1 -	271 / 5.00
Heat Abatement/Cargo Hatch	2,764 / 2.870	- 1 -	- 1 -	- 1 -	- 1 -	- / -	- / -	- 1 -	- 1 -	- / -	- 1 -	2,764 / 2.87
High Priority Mods	0 / 95.408	- 1 -	- 1 -	- / 33.190	- 1 -	- / 33.190	- / 8.529	- / 17.886	- / 103.181	- / 53.035	- 1 -	- /311.22
Urban Survivability Mods	5,276 <i>l</i> 2,099.004	- 1 -	- 1 -	- 1 -	- / -	- 1 -	- / -	- / -	- / -	- / -	- 1 -	5,276 2,099.00
Subtotal: Recurring	- / 2,298.282	- / -	- / -	- /33.190	- / -	- /33.190	- /8.529	- /17.886	- /103.181	- /53.035	- / -	2,514.10
Subtotal: BFVS High Priority Improvements	9,684 / 2,298.282	- / -	- / -	- /33.190	- / -	- /33.190	- /8.529	- /17.886	- /103.181	- /53.035	- / -	9,684 2,514.10
Modification Item 3 of 8: Training Equipment Devices												_
A Kits												
Recurring												-
Training Equipment	0 / 42.900	- /4.911	15 / 17.000	61 / 59.447	- 1 -	61 / 59.447	- /6.114	- /6.270	- / 14.976	- /8.662	- 1 -	76 / 160.28
Subtotal: Recurring	- /42.900	- /4.911	- /17.000	- / 59.447	- / -	- /59.447	- /6.114	- /6.270	- /14.976	- /8.662	- / -	- /160.28
Subtotal: Training Equipment Devices	0 / 42.900	- /4.911	15 / 17.000	61 / 59.447	- / -	61 / 59.447	- /6.114	- /6.270	- /14.976	- /8.662	- / -	76 / 160.28
Modification Item 4 of 8: ODS Situational Awareness												
A Kits												
Recurring												_
ODS Situational Awareness	770 / 1,191.887	- 17.666	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	770 / 1,199.55
IBAS Refresh	0 / 8.850	- 1 -	- 1 -	- 1 -	- / -	- 1 -	- / -	- / -	- / -	- / -	- 1 -	- /8.85
ODS-SA VEHICLE VERSION IDENTIFICATION	0 / 12.500	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 12.500

LI GZ2400 - Bradley Program (MOD) Army UNCLASSIFIED
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Exhibit P-3a, Individual Modification: PB 2016 ArmyDate: February 2015Appropriation / Budget Activity / Budget Sub Activity:P-1 Line Item Number / Title:Modification Number / Title:

2033A / 01 / 20 GZ2400 / Bradley Program (MOD) GZ2400 / Bradley Program Mod

Models of Systems Affected: M2 & M3 Bradley Modification Type: Increase Performance Related RDT&E PEs:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M										
Subtotal: Recurring	- / 1,213.237	- /7.666	- / -	- /-	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1,220.90
Subtotal: ODS Situational Awareness	770 / 1,213.237	- /7.666	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	770 / 1,220.90
Modification Item 5 of 8: Program/Engineering Support												
A Kits												
Recurring												
Government PM support	0 / 74.799	- / 12.376	- /21.470	- / 15.975	- 1 -	- / 15.975	- / 19.158	- / 19.270	- / 19.659	- / 20.151	- / 272.106	- / 474.96
Contractor PM Support	0 / 65.903	- / 15.723	- / 9.141	- / 16.368	- 1 -	- / 16.368	- / 22.704	- / 22.482	- /23.022	- / 23.508	- / 372.565	- / 571.41
Subtotal: Recurring	- /140.702	- /28.099	- /30.611	- /32.343	- / -	- /32.343	- /41.862	- /41.752	- /42.681	- /43.659	- /644.671	- 1,046.38
Subtotal: Program/Engineering Support	0 / 140.702	- /28.099	- /30.611	- /32.343	- / -	- /32.343	- /41.862	- /41.752	- /42.681	- /43.659	- /644.671	1,046.38
Modification Item 6 of 8: Field Upgrades												
A Kits												
Recurring												
ECP 1 Modification	- 1 -	641 / 87.800	199 / 29.173	336 / 51.323	- 1 -	336 / 51.323	328 / 51.692	336 / 54.012	168 / 28.800	168 / 29.376	398 / 133.374	2,574 / 465.55
ECP 2 Modification	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- / -	78 / 195.475	180 / 399.668	180 / 384.169	180 / 384.330	1,956 <i>I</i> 4,293.682	2,574 5,657.32
Field Conversion M2 Common Stowage	0 / 22.000	- /27.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /49.00
Field Conversion Inert BRAT	- 1 -	- 1 -	- 1 -	18 / 5.942	- 1 -	18 / 5.942	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	18 / 5.94
Underbelly	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	168 / 59.566	504 / 159.722	672 / 219.28
Subtotal: Recurring	- /22.000	- /114.800	- /29.173	- /57.265	- / -	- /57.265	- /247.167	- /453.680	- /412.969	- /473.272	- / 4,586.778	- 6,397.10
Subtotal: Field Upgrades	0 / 22.000	641 / 114.800	199 / 29.173	354 / 57.265	- / -	354 / 57.265	406 / 247.167	516 / 453.680	348 / 412.969	516 / 473.272	2,858 / 4,586.778	5,838 6,397.10
Modification Item 7 of 8: Conversion to M2												
A Kits												
Recurring												
Conversion M3-M2	139 / 76.786	- 1 -	38 / 28.500	18 / 13.505	- 1 -	18 / 13.505	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	195 / 118.79
Fielding	- 1 -	- 1 -	- / 15.736	- /6.868	- 1 -	- / 6.868	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 22.60
Subtotal: Recurring	- /76.786	- / -	- /44.236	- /20.373	- / -	- /20.373	- / -	- / -	- / -	- / -	- / -	- /141.39
Subtotal: Conversion to M2	139 / 76.786	- / -	38 / 44.236	18 / 20.373	- / -	18 / 20.373	- / -	- / -	- / -	- / -	- / -	195 / 141.39
Modification Item 8 of 8: Braking Safety/Transmission Industrial Base	ו											

LI GZ2400 - Bradley Program (MOD) Army UNCLASSIFIED
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Date: February 2015 Exhibit P-3a, Individual Modification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Modification Number / Title: 2033A / 01 / 20 GZ2400 / Bradley Program (MOD) GZ2400 / Bradley Program Mod

Models of Systems Affected: M2 & M3 Bradley Modification Type: Increase Performance Related RDT&E PEs:

Vehicle Variants

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)											
A Kits												
Recurring												
Transmission	177 / 54.902	9 / 2.524	54 / 14.986	80 / 22.424	- 1 -	80 / 22.424	- / -	- 1 -	- 1 -	- 1 -	- 1 -	320 / 94.836
Subtotal: Recurring	- /54.902	- /2.524	- /14.986	- /22.424	- / -	- / 22.424	- / -	- / -	- / -	- / -	- / -	- /94.836
Subtotal: Braking Safety/Transmission Industrial Base	177 / 54.902	9 / 2.524	54 / 14.986	80 / 22.424	- / -	80 / 22.424	- / -	- / -	- / -	- / -	- / -	320 / 94.836
Subtotal: Procurement, All Modification Items	13,446 / 4,613.909	650 / 158.000	306 / 136.006	513 / 225.042	- / -	513 / 225.042	406 / 303.672	516 / 519.588	348 / 573.807	516 / 578.628	2,858 / 5,231.449	19,559 / 12,340.101
Installation								<u> </u>				
Modification Item 1 of 8: Bradley Reactive Armor	2,676 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	2,676 / -
Modification Item 2 of 8: BFVS High Priority Improvements	9,684 / 0.000	- 1 -	- 1 -	- 1 -	- / -	- / -	- 1 -	- 1 -	- / -	- / -	- / -	9,684 / -
Modification Item 4 of 8: ODS Situational Awareness	770 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- / -	- 1 -	- / -	- / -	- 1 -	- 1 -	7701 -
Modification Item 6 of 8: Field Upgrades	0 / 0.000	- 1 -	90/-	360 / -	- 1 -	360 / -	282 / -	306 / -	373 / -	516 <i>l</i> -	3,893 / -	5,820 / -
Modification Item 7 of 8: Conversion to M2	0 / 0.000	- 1 -	46 / -	111 / -	- 1 -	111 / -	38 / -	- 1 -	- 1 -	- 1 -	- 1 -	195 / -
Subtotal: Installation	13,130 / 0.000	- / -	136 / -	471 / -	- / -	471 / -	320 / -	306 / -	373 / -	516/ -	3,893 / -	19,145/ -
Total												
Total Cost (Procurement + Support + Installation)	4,613.909	158.000	136.006	225.042	-	225.042	303.672	519.588	573.807	578.628	5,231.449	12,340.101

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Exhibit P-3a, Indivi	dual Modification: P	B 2016 Army			5						
Appropriation / Bu 2033A / 01 / 20	dget Activity / Budge	et Sub Activity:	P-1 Line Item Nu GZ2400 / Bradley								
Modification Item 1 of 8	: Bradley Reactive Armor		·								
Manufacturer Informati	on										
Manufacturer Name: GD	ATP			Manufacturer Location: Burlington, VT							
Administrative Leadtime	(in Months): 5			Production Leadtime (in	Months): 6						
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020				
Contract Dates											
Delivery Dates	ry Dates										

## Installation Information

Method of Implementation: Contractor

mounds of majoritations contactor	•											
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	2,676 / 0.000	- / 0.000	- / 0.000	- / 0.000	- 1 -	- /0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	2,676 / 0.000
FY 2014	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2015	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2016	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	2,676 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	2,676 / -

### Installation Schedule

			FY 2	2014			FY 2	2015			FY 2	2016			FY 2	2017			FY 2	2018			FY 2	2019			FY 2	020			
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	тс	Tot																				
In	2,676	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,676
Out	2,676	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,676

**UNCLASSIFIED** 

Exhibit P-3a, Indiv	idual Modification: Pl	3 2016 Army				Date: February 2015	5
<b>Appropriation / Bu</b> 2033A / 01 / 20	dget Activity / Budge	t Sub Activity:	P-1 Line Item Nu GZ2400 / Bradley			Modification Numb GZ2400 / Bradley Pr	
Modification Item 2 of 8	3: BFVS High Priority Improv	rements				•	
Manufacturer Informati	on						
Manufacturer Name: BAI				Manufacturer Location: Y	ORK, PA		
Administrative Leadtime	(in Months): 7			Production Leadtime (in	Months): 12		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates			Apr 2016	Apr 2017	Apr 2018	Apr 2019	Apr 2020
Delivery Dates			Apr 2017	Apr 2018	Apr 2019	Apr 2020	Apr 2021

## Installation Information

Method of Implementation: Contractor

monitor of majoritoritation contactor	·.											
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	9,684 / 0.000	- / 0.000	- / 0.000	- / 0.000	- 1 -	- /0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	9,684 / 0.000
FY 2014	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2015	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2016	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	9,684 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	9,684 / -

### Installation Schedule

			FY 2	2014			FY 2	2015			FY 2	2016			FY 2	2017	-		FY 2	2018			FY 2	2019			FY 2	2020			
	PYS	Q1	Q2	Q3	Q4	тс	Tot																								
In	9,684	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9,684
Out	9,684	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9,684

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		200104		ASSIFIED		<b>B</b> 4 <b>E</b> 1 0045	
Exhibit P-3a, Indivi	idual Modification: Pl	B 2016 Army				<b>Date:</b> February 2015	)
<b>Appropriation / Bu</b> 2033A / 01 / 20	dget Activity / Budge	et Sub Activity:	P-1 Line Item Nu GZ2400 / Bradley			Modification Number GZ2400 / Bradley Pr	
Modification Item 3 of 8	3: Training Equipment Devic	es				·	
Manufacturer Informati	on						
Manufacturer Name: Cor	mpetitive (Oasis/TBD)			Manufacturer Location: Al	UBURN HILLS, MI		
Administrative Leadtime	(in Months): 3			Production Leadtime (in M	Months): 12		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates		Jul 2015	Dec 2015	Dec 2016	Dec 2017	Dec 2019	Dec 2020
Delivery Dates		Jul 2016	Dec 2016	Dec 2017	Dec 2018	Dec 2020	Dec 2021
Delivery Dates		Jul 2016	Dec 2016	Dec 2017	Dec 2018	Dec 2020	De
Installation Information							
Method of Implementat	ion (Organic): Contractor				Installation	Quantity: 0	

Exhibit P-3a, Indi	vidual Modification: PE	3 2016 Army				Date: February 2015	5
<b>Appropriation / B</b> 2033A / 01 / 20	udget Activity / Budge	t Sub Activity:	P-1 Line Item Nu GZ2400 / Bradley			Modification Numb GZ2400 / Bradley Pr	
Modification Item 4 of	8: ODS Situational Awarenes	SS	•			•	
Manufacturer Informa	tion						
Manufacturer Name: B	AE			Manufacturer Location: \	YORK, PA		
Administrative Leadtime	e (in Months): 8			Production Leadtime (in	Months): 12		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Jan 2014	Jan 2015					
Delivery Dates	Jan 2015	Jan 2016					

#### Installation Information

Method of Implementation: Contractor

motifica of impromontations contract	0.01											
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	770 / 0.000	- /0.000	- / 0.000	- / 0.000	- / -	- /0.000	- /0.000	- / 0.000	- / 0.000	- / 0.000	- /0.000	770 / 0.000
FY 2014	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2015	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2016	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	770 / 0.000	- 1 -	- 1 -	- / -	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	770 / -

### Installation Schedule

			FY 2	014			FY 2	2015	_		FY 2	2016			FV 1	2017			FY 2	2018			FY 2	2019			FY 2	020			
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	тс	Tot
In	770	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	770
Out	770	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	770

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LI GZ2400 - Bradley Program (MOD) Army

Exhibit P-3a, Indiv	idual Modification: Pl	3 2016 Army				Date: February 2015	;
<b>Appropriation / Bu</b> 2033A / 01 / 20	dget Activity / Budge	t Sub Activity:	P-1 Line Item Nu GZ2400 / Bradley			Modification Number GZ2400 / Bradley Pr	
Modification Item 5 of 8	3: Program/Engineering Sup	port				'	
Manufacturer Informati	on						
Manufacturer Name: N/A	1			Manufacturer Location: W	/ARREN, MI		
Administrative Leadtime	(in Months): 3			Production Leadtime (in N	Months): 1		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Dec 2013	Dec 2014	Dec 2015	Dec 2016	Dec 2017	Dec 2018	Dec 2019
Delivery Dates	Jan 2014	Jan 2015	Jan 2016	Jan 2017	Jan 2018	Jan 2019	Jan 2020

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LI GZ2400 - Bradley Program (MOD) Army

Method of Implementation (Organic): x

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Installation Quantity: 0

Exhibit P-3a, Indivi	dual Modification: Pl	3 2016 Army				Date: February 2015	5							
<b>Appropriation / Buo</b> 2033A / 01 / 20	dget Activity / Budge	t Sub Activity:	P-1 Line Item Num GZ2400 / Bradley F			Modification Numb GZ2400 / Bradley Pr								
Modification Item 6 of 8	odification Item 6 of 8: Field Upgrades													
Manufacturer Information	flanufacturer Information													
Manufacturer Name: Loc	Performance Products Inc,	BAE		Manufacturer Location: Va	arious									
Administrative Leadtime	(in Months): 11			Production Leadtime (in M	Months): 12									
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020							
Contract Dates	Jun 2014	Sep 2015	Aug 2016	Jun 2017	Jun 2018	Jul 2019	Jun 2020							
Delivery Dates	Jun 2015	Nov 2016	Aug 2017	Sep 2018	Jun 2019	Jul 2020	Jun 2021							

#### Installation Information

Method of Implementation: Contractor

mounds or impromountation contactor												
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- 1 -	- /0.000	- /0.000	- / 0.000	- / 0.000	- / 0.000	- /0.000	- /0.000
FY 2014	0 / 0.000	- 1 -	90 / -	360 / -	- 1 -	360 / -	191 / -	- 1 -	- 1 -	- 1 -	- 1 -	641 / -
FY 2015	0 / 0.000	- 1 -	- 1 -	- / -	- 1 -	- 1 -	91 / -	108 / -	- 1 -	- 1 -	- 1 -	199 / -
FY 2016	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	198 / -	138 / -	- 1 -	- 1 -	336 / -
FY 2017	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	198 / -	208 / -	- 1 -	406 / -
FY 2018	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	37 / -	271 / -	208 / -	516 / -
FY 2019	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	371 -	311 / -	348 / -
FY 2020	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	516 / -	516 / -
To Complete	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	2,858 / -	2,858 / -
Total	0 / 0.000	- 1 -	90 / -	360 / -	- 1 -	360 / -	282 / -	306 / -	373 / -	516 / -	3,893 / -	5,820 / -

#### Installation Schedule

			FY 2	2014			FY 2	2015			FY 2	016			FY 2	2017			FY 2	2018			FY 2	019			FY 2	020			
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	-	-	-	-	-	-	-	30	90	90	90	90	90	54	168	48	60	90	270	90	66	90	228	90	90	90	216	198	90	3,402	5,820
Out	-	-	-	-	-	-	-	-	90	90	90	90	90	54	90	78	60	90	90	90	36	60	118	60	135	135	135	111	135	3,893	5,820

Exhibit P-3a, Individual Modification: PB 2016 Army		Date: February 2015							
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 01 / 20	P-1 Line Item Number / Title: GZ2400 / Bradley Program (MOD)	Modification Number / Title: GZ2400 / Bradley Program Mod							
Modification Item 7 of 8: Conversion to M2									
Manufacturer Information									

Manufacturer Informati	ion						
Manufacturer Name: BA	E			Manufacturer Location: You	ORK, PA		
Administrative Leadtime	(in Months): 9			Production Leadtime (in M	Months): 12		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates		Jul 2015	Jul 2016				
Delivery Dates		Jul 2016	Jul 2017				

#### Installation Information

Method of Implementation: Contractor

metriod of implementation. Contractor												
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	0 / 0.000	- / 0.000	46 / 0.000	93 / 0.000	- 1 -	93 / 0.000	- /0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	139 / 0.000
FY 2014	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2015	0 / 0.000	- 1 -	- 1 -	18/ -	- 1 -	18/ -	20/ -	- 1 -	- 1 -	- 1 -	- 1 -	38 / -
FY 2016	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	18 / -	- 1 -	- 1 -	- 1 -	- 1 -	18 / -
FY 2017	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	0 / 0.000	- 1 -	46 / -	111/ -	- 1 -	111 / -	38 / -	- 1 -	- 1 -	- 1 -	- 1 -	195 / -

#### Installation Schedule

			FY 2	2014			FY 2	2015			FY 2	2016			FY 2	2017			FY 2	2018			FY 2	2019			FY 2	2020			
	PYS	Q1	Q2	Q3	Q4	TC	Tot																								
In	-	-	10	25	26	23	25	34	14	10	10	9	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	195
Out	-	-	-	-	-	-	-	15	31	30	32	31	18	10	10	9	9	-	-	-	-	-	-	-	-	-	-	-	-	-	195

LI GZ2400 - Bradley Program (MOD)

Army

Exhibit P-3a, Indivi	dual Modification: Pl	3 2016 Army				Date: February 2015	
<b>Appropriation / Bud</b> 2033A / 01 / 20	dget Activity / Budge	t Sub Activity:	P-1 Line Item Nu GZ2400 / Bradley			Modification Number GZ2400 / Bradley Pr	
Modification Item 8 of 8	Braking Safety/Transmissi	on Industrial Base				'	
Manufacturer Information	on						
Manufacturer Name: L3C	OM			Manufacturer Location: M	USKEGON, MI		
Administrative Leadtime (	in Months): 5			Production Leadtime (in N	fonths): 12		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates		May 2015	May 2016				
Delivery Dates		May 2016	May 2017				
Installation Information							
Method of Implementati	on (Organic): Contractor				Installation (	Quantity: 0	
,	on (organiz, communic						

Exhibit P-40, Budget Line Item Justification: PB 2016 Army **Date:** February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 01: Tracked Combat Vehicles / BSA 20: GA0400 / Howitzer, Med Sp Ft 155MM M109A6 (MOD)

Modification of Tracked Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) :					de B Items: 06	604854A		Other Relate	d Program El	ements: 0604	1854A	
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	1,872.566	4.769	45.411	60.079	-	60.079	67.428	66.925	56.415	-	109.000	2,282.593
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	1,872.566	4.769	45.411	60.079	-	60.079	67.428	66.925	56.415	-	109.000	2,282.593
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	1,872.566	4.769	45.411	60.079	-	60.079	67.428	66.925	56.415	-	109.000	2,282.593
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	ne corresponding	budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

#### **Description:**

The Paladin program consists of the M109A6 Paladin Self-Propelled Howitzer (SPH) and the M992A2 Field Artillery Ammunition Supply Vehicle (FAASV). The funding profile supports all aspects of program management necessary to support the field fleet of 558 SPHs and 521 FAASVs in 19 Active Duty Army and National Guard Battalions organic to Armored Brigade Combat Teams (ABCT); 8 Battalions organic to Army Fires Brigades; two Battalions (plus floats) in ABCT Army Prepositioned Stocks; two Institutional Training Sites, two Combat Training Center, and other facility vehicles for System Technical Support engineering developmental work and prove out.

				FY 2016	FY 2016	FY 2016				
Secondary	y Distribution	FY 2014	FY 2015	Base	осо	Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	27.625	36.047	-	36.047	40.457	40.155	33.849	-
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	4.769	17.786	24.032	-	24.032	26.971	26.770	22.566	-
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	4.769	45.411	60.079	-	60.079	67.428	66.925	56.415	-

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army Date: February 2015

### Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 01: Tracked Combat Vehicles / BSA 20: GA0400 / Howitzer, Med Sp Ft 155MM M109A6 (MOD)

Modification of Tracked Combat Vehicles

	Program	Elements for Code	<b>B Items:</b> 0604854A	(	Other Related Program	Elements: 0604854A	
		Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)	t Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)
P-3a		- / 1,872.566	- /4.769	- / 45.411	- / 60.079	- / -	- / 60.079
		- / 1,872.566	- / 4.769	- / 45.411	- / 60.079	- 1 -	- / 60.079
		FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)
P-3a		- / 67.428	- / 66.925	- / 56.415	- / -	- /109.000	- /2,282.593
		- / 67.428	- / 66.925	- / 56.415	- / -	- /109.000	- / 2,282.593
	Exhibits P-3a  Exhibits	Exhibits ID CD Exhibits CD	Prior Years	Exhibits	Prior Years   FY 2014   FY 2015	Prior Years   FY 2014   FY 2015   FY 2016 Base	Prior Years   FY 2014   FY 2015   FY 2016 Base   FY 2016 OCO

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

#### Justification:

FY 2016 base procurement funding in the amount of \$60.079 million supports Paladin Systems Technical Support (STS), Program Office requirements, and Paladin Fire Control System (PFCS). Of the \$60.079 million, \$55.288 million provides for the procurement and installation of the PFCS Kits into the M109A6 SPH. Program Management is for the oversight of Other Governmental Agencies (OGAs) that provide material support to the system and the fielded units to ensure configuration management; provides the analysis and root cause of safety and non-safety related field failures; provides management of the Army's Paladin Combat Vehicle Evaluation (CVE) program; provides quality process management of production for Paladin Depot Overhaul operations; provides planning and execution for obsolescence of parts, subsystems and systems; develop and coordinate shrinking supply base mitigation strategies with item managers. The program office works to lower Operation and Sustainment costs and improve unit readiness by analyzing data and determining solutions to solve the field's problem sets. Manages the Systems Technical Support/Sustainment Systems Technical Support (STS/SSTS) contract that provides direct support to the program and the field. Contractor provides the direct engineering support required to integrate modification kits; provides the logistical support to provision, source, and support the field with the material solutions/changes. Contractor also updates/corrects all system technical data, provisioning data, technical manuals, and Interactive-Electronic Technical Manuals (IETMs). Contractor provides emergency field support to the Government as required for essential for mission accomplishment.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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Exhibit P-3a, Individual Modification: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 01 / 20	P-1 Line Item Number / Title: GA0400 / Howitzer, Med Sp Ft 155MM M109A6 (MOD)	Modification Number / Title: GA0400 / Paladin/FAASV Modification
	, , , , , , , , , , , , , , , , , , , ,	Program

	Prior			FY 2016	FY 2016	FY 2016					То	
Resource Summary	Years	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	1,872.566	4.769	45.411	60.079	-	60.079	67.428	66.925	56.415	-	109.000	2,282.593
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	1,872.566	4.769	45.411	60.079	-	60.079	67.428	66.925	56.415	-	109.000	2,282.593
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	1,872.566	4.769	45.411	60.079	-	60.079	67.428	66.925	56.415	-	109.000	2,282.593
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	ne corresponding	g budget requests	are documente	d elsewhere.)			<u>'</u>	
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

#### **Description:**

Funding supports modifications to the Paladin/FAASV Stowage Improvements, Training Aids, Devices, Simulators and Simulations - Replacement (TADSS-R) kits/upgrades, Paladin Fire Control System (PFCS) kits and its installation, Paladin Blue Force Tracker 2/KGV-72 kits, System Technical Support (STS), Breech Mod (MACS), New Gun Tubes and Lightweight Bore Evacuators, CREW II A-Kit Hardware and Fielding, and Program Office Requirements. Costs associated with kit installations are included in the funding for the prime hardware contracts.

Paladin System Technical Support – Contr (MOD 2): Funding supports contractor engineering efforts required to design and produce material solutions/changes to the fielded systems; provides the logistical support to provision, source, and supply the field with the material solutions/changes. Contractor also updates/corrects all system technical data, provisioning data, technical manuals, and Interactive-Electronic Technical Manuals (IETMs). Contractor provides emergency field support to the Government as required essential for mission accomplishment.

Paladin Program Office (MOD 3): Government System Engineering and Program Management support for the Paladin/FAASV program. Provides oversight of Other Governmental Agencies (OGAs) that provide material support to the system and the fielded units to ensure configuration management; provides the analysis and root cause of safety and non-safety related field failures; provides management of the Army's Paladin Combat Vehicle Evaluation (CVE) program; provides quality process management of production for Paladin Depot Overhaul operations; provides planning and execution for obsolescence of parts, subsystems and systems; develop and coordinate shrinking supply base mitigation strategies with item managers; provides management of Post Production Software Support (PPSS). Manages the Systems Technical Support/Sustainment Systems Technical Support (STS/SSTS) contract that provides the direct support to the program and the field.

Paladin Fire Control System (MOD 6): PFCS combines the Paladin Digital Fire Control System-Replacement (PDFCS-R) and Dynamic Reference Unit Hybrid-Replacement (DRUH-R) into one modification kit. PFCS reflects a cost reduction and streamlining effort to field the PDFCS-R and DRUH-R as a single modification to the vehicle. Costs associated with kit installations are included in the funding for the prime hardware contracts.

Secondary	/ Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	27.625	36.047	-	36.047	40.457	40.155	33.849	-

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Exhibit P-3a, Individual Modification: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 01 / 20	P-1 Line Item Number / Title: GA0400 / Howitzer, Med Sp Ft 155MM M109A6 (MOD)	Modification Number / Title: GA0400 / Paladin/FAASV Modification Program

Secondar	y Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	4.769	17.786	24.032	-	24.032	26.971	26.770	22.566	-
Total:	Quantity	-	=	-	=	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	4.769	45.411	60.079	-	60.079	67.428	66.925	56.415	-

Date: February 2015 Exhibit P-3a, Individual Modification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Modification Number / Title:

2033A / 01 / 20 GA0400 / Howitzer, Med Sp Ft 155MM M109A6 (MOD) GA0400 / Paladin/FAASV Modification Program

Models of Systems Affected: M109 Howitzer and M992 FAASV Vehicles Modification Type: Increase Performance Related RDT&E PEs:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M										
Procurement												
Modification Item 1 of 10: Prior Years Closed Mods												
A Kits												
Recurring												
Prior Closed Mods	0 / 1,816.451	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1,816.45
Subtotal: Recurring	- / 1,816.451	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- 1,816.45
Subtotal: Prior Years Closed Mods	0 / 1,816.451	- / -	- /-	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- 1,816.45
<b>Modification Item 2 of 10:</b> Paladin System Technical Support - Contr												
A Kits												
Recurring												
STS	0 / 4.110	- / 3.190	- /3.980	- /3.580	- 1 -	- /3.580	- / 3.818	- / 5.897	- /9.244	- 1 -	- / 44.270	- /78.08
Subtotal: Recurring	- /4.110	- /3.190	- /3.980	- /3.580	- / -	- /3.580	- /3.818	- /5.897	- /9.244	- / -	- /44.270	- /78.08
Subtotal: Paladin System Technical Support - Contr	0 / 4.110	- /3.190	- /3.980	- /3.580	- / -	- /3.580	- /3.818	- /5.897	- /9.244	- / -	- /44.270	- /78.08
Modification Item 3 of 10: Paladin Program Office			,									
A Kits												
Recurring												
PM Support	0 / 2.331	- /1.240	- / 1.191	- /1.211	- 1 -	- / 1.211	- /1.233	- /2.000	- /5.244	- 1 -	- / 17.960	- / 32.41
Subtotal: Recurring	- /2.331	- /1.240	- /1.191	- /1.211	- / -	- /1.211	- /1.233	- /2.000	- /5.244	- / -	- /17.960	- /32.41
Subtotal: Paladin Program Office	0 / 2.331	- /1.240	- /1.191	- /1.211	- / -	- /1.211	- /1.233	- /2.000	- /5.244	- / -	- /17.960	- /32.41
Modification Item 4 of 10: Paladin TADSS												
A Kits												
Recurring												
Training Equipment	0 / 4.002	- 1 -	- 1 -	- 1 -	- / -	- 1 -	- 1 -	- 1 -	11 / 1.286	- / -	- 1 -	11 / 5.28
Subtotal: Recurring	- /4.002	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- /1.286	- / -	- / -	- /5.28
Subtotal: Paladin TADSS	0 / 4.002	- / -	- / -	- / -	- / -	- / -	- / -	- / -	11 / 1.286	- / -	- / -	11 / 5.28
Modification Item 5 of 10: Paladin Stowage Improvements												
A Kits												

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**Exhibit P-3a, Individual Modification:** PB 2016 Army **Date:** February 2015

Appropriation / Budget Activity / Budget Sub Activity:
2033A / 01 / 20

P-1 Line Item Number / Title:
GA0400 / Howitzer, Med Sp Ft 155MM M109A6 (MOD)

GA0400 / Paladin/FAASV Modification

GA0400 / Howitzer, Med Sp Ft 155MM M109A6 (MOD)

GA0400 / Paladin/FAASV Modification
Program

Models of Systems Affected: M109 Howitzer and Modification Type: Increase Performance Related RDT&E PEs:

M992 FAASV Vehicles

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M										
Recurring			•							•		
Stowage Improvements	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	285 / 6.272	- 1 -	271 / 8.810	556 / 15.082
Subtotal: Recurring	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- /6.272	- / -	- /8.810	- /15.08
Subtotal: Paladin Stowage Improvements	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	285 / 6.272	- / -	271 / 8.810	556 / 15.08
Modification Item 6 of 10: Paladin Fire Control System												
A Kits												
Recurring												
Hardware	97 / 45.672	1 / 0.339	106 / 40.240	137 / 55.288	- 1 -	137 / 55.288	152 / 62.377	102 / 43.361	- 1 -	- 1 -	- 1 -	595 / 247.27
Subtotal: Recurring	- /45.672	- /0.339	- /40.240	- / 55.288	- / -	- / 55.288	- /62.377	- /43.361	- / -	- / -	- / -	- /247.27
Subtotal: Paladin Fire Control System	97 / 45.672	1 / 0.339	106 / 40.240	137 / 55.288	- / -	137 / 55.288	152 / 62.377	102 / 43.361	- / -	- / -	- / -	595 / 247.27
Modification Item 7 of 10: Breech Mod (MACS)												
A Kits												
Recurring												
Hardware	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	227 / 7.810	- 1 -	368 / 13.450	595 / 21.26
Subtotal: Recurring	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- /7.810	- / -	- /13.450	- /21.26
Subtotal: Breech Mod (MACS)	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	227 / 7.810	- / -	368 / 13.450	595 / 21.26
Modification Item 8 of 10: Paladin BFT-2/KGV-72												
A Kits												
Recurring												
Hardware	- / -	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- / -	- / -	246 / 10.087	- 1 -	349 / 17.520	595 / 27.60
Subtotal: Recurring	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- /10.087	- / -	- /17.520	- /27.60
Subtotal: Paladin BFT-2/KGV-72	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	246 / 10.087	- / -	349 / 17.520	595 / 27.60
Modification Item 9 of 10: New Gun Tubes w/ Lightweight Bore Evacuator												
A Kits												
Recurring												
Hardware	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	144 / 15.667	108 / 11.985	- 1 -	- 1 -	252 / 27.65
Subtotal: Recurring	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- /15.667	- /11.985	- / -	- / -	- /27.65
Subtotal: New Gun Tubes w/Lightweight Bore Evacuator	- / -	- / -	- / -	- / -	- / -	- / -	- / -	144 / 15.667	108 / 11.985	- / -	- / -	252 / 27.65

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**Exhibit P-3a, Individual Modification**: PB 2016 Army **Date**: February 2015

Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Modification Number / Title:

2033A / 01 / 20 GA0400 / Howitzer, Med Sp Ft 155MM M109A6 (MOD) GA0400 / Paladin/FAASV Modification

Program

Models of Systems Affected: M109 Howitzer and Modification Type: Increase Performance Related RDT&E PEs:

M992 FAASV Vehicles

	v	E)/ 0044	E)/ 00/15	FY 2016	FY 2016	FY 2016	E)/ 00/E	E)/ 00/0	EV 0040	E)/ 0000	То	
	Prior Years	FY 2014	FY 2015	Base	осо	Total	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)											
<b>Modification Item 10 of 10:</b> CREW II A-Kit HW and Fielding												
A Kits											-	
Recurring												
Installation Kits	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	176 / 4.487	- 1 -	266 / 6.990	442 <i>l</i> 11.477
Subtotal: Recurring	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- /4.487	- / -	- /6.990	- /11.477
Subtotal: CREW II A-Kit HW and Fielding	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	176 / 4.487	- / -	266 / 6.990	442 / 11.477
Subtotal: Procurement, All Modification Items	97 / 1,872.566	1 / 4.769	106 / 45.411	137 / 60.079	- / -	137 / 60.079	152 / 67.428	246 / 66.925	1,053 / 56.415	- / -	1,254 / 109.000	3,046 2,282.593
Installation												
Modification Item 3 of 10: Paladin Program Office	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Modification Item 6 of 10: Paladin Fire Control System	0 / 0.000	- 1 -	15 / -	25 / -	- 1 -	25 / -	164 / -	137 / -	152 / -	102 / -	- 1 -	595 / -
Modification Item 7 of 10: Breech Mod (MACS)	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	227 / -	368 / -	595 / -
Modification Item 8 of 10: Paladin BFT-2/KGV-72	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	246 / -	349 / -	595 / -
<b>Modification Item 9 of 10:</b> New Gun Tubes w/Lightweight Bore Evacuator	0 / 0.000	- 1 -	- / -	- 1 -	- 1 -	- / -	- / -	- 1 -	144 / -	108 / -	- 1 -	252 / -
Modification Item 10 of 10: CREW II A-Kit HW and Fielding	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	176 / -	266 / -	4421 -
Subtotal: Installation	0 / 0.000	- / -	15/ -	25/ -	- / -	25/ -	164/ -	137 / -	296 / -	859 / -	983 / -	2,479 / -
Total												
Total Cost (Procurement + Support + Installation)	1,872.566	4.769	45.411	60.079	-	60.079	67.428	66.925	56.415	-	109.000	2,282.593

Exhibit P-3a, Individual Modification: Pl	B 2016 Army				Date: February 2015	
Appropriation / Budget Activity / Budge 2033A / 01 / 20	t Sub Activity:	P-1 Line Item Nui GA0400 / Howitze	mber / Title: r, Med Sp Ft 155MM M1	09A6 (MOD)	Modification Number GA0400 / Paladin/FA Program	
Modification Item 1 of 10: Prior Years Closed Mods	3	•				
Manufacturer Information						
Manufacturer Name: x			Manufacturer Location: x			
Administrative Leadtime (in Months):			Production Leadtime (in M	lonths):		
Dates FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates						
Delivery Dates						
Installation Information						
Method of Implementation (Organic): x				Installation	Quantity: 0	

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Exhibit P-3a, Individual I	Modification: Pl	3 2016 Army				Date: February 2015	
Appropriation / Budget A 2033A / 01 / 20	Activity / Budge	t Sub Activity:	P-1 Line Item Nui GA0400 / Howitze	<b>nber / Title:</b> r, Med Sp Ft 155MM M1	09A6 (MOD)	Modification Number GA0400 / Paladin/FA Program	
Modification Item 2 of 10: Pala	din System Technica	al Support - Contr				•	
Manufacturer Information							
Manufacturer Name: x				Manufacturer Location: x			
Administrative Leadtime (in Mon	ths):			Production Leadtime (in M	lonths):		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							
Installation Information							
Method of Implementation (Or	ganic): N/A				Installation	Quantity: 0	

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Exhibit P-3a, Indivi	dual Modification: Pl	3 2016 Army				Date: February 201	5
Appropriation / But 2033A / 01 / 20	dget Activity / Budge	t Sub Activity:	P-1 Line Item Nu GA0400 / Howitze	mber / Title: er, Med Sp Ft 155MM N	//109A6 (MOD)	Modification Numb GA0400 / Paladin/F. Program	
Modification Item 3 of 1	0: Paladin Program Office						
Manufacturer Information	on						
Manufacturer Name: x				Manufacturer Location:	х		
Administrative Leadtime	(in Months):			Production Leadtime (in	Months):		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							

#### Installation Information

Method of Implementation: N/A

				FY 2016	FY 2016	FY 2016					То	
	Prior Years	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- /0.000	- /0.000	- / 0.000	- / 0.000	- 1 -	- /0.000	- / 0.000
FY 2014	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2015	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2016	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -

#### Installation Schedule

			FY 2	2014			FY 2	2015			FY 2016				FY 2017				FY 2	2018			FY 2	2019			FY 2	020			
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	71	72	71	71	271	556
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	71	72	71	71	271	556

UNCLASSIFIED
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			UNC	LASSIFIED			
Exhibit P-3a, Individ	dual Modification: P	B 2016 Army				Date: February 2015	j
			P-1 Line Item Nu GA0400 / Howitze	imber / Title: er, Med Sp Ft 155MM M1	09A6 (MOD)	Modification Number GA0400 / Paladin/FA	er / Title:
Modification Item 4 of 10	a, Individual Modification: PB 2016 Army on / Budget Activity / Budget Sub Activity: 20  em 4 of 10: Paladin TADSS  Information ame: TBD  Leadtime (in Months): 3  FY 2014  FY 2015  FY 2016						
Manufacturer Informatio	A, Individual Modification: PB 2016 Army on / Budget Activity / Budget Sub Activity: 20  P-1 Line Item GA0400 / How em 4 of 10: Paladin TADSS  Information ame: TBD  Leadtime (in Months): 3 FY 2014 FY 2015 FY 2016						
lanufacturer Name: TBD				Manufacturer Location: TB	BD		
Administrative Leadtime (i	in Months): 3			Production Leadtime (in M	lonths): 12		
Dates	P-1 Line II GA0400 / Im 4 of 10: Paladin TADSS Information Ime: TBD Imeadtime (in Months): 3 Image: FY 2014 Image: FY 2015 Ima		FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates						Dec 2018	
Delivery Dates						Dec 2019	
nstallation Information							
						• ** •	
lethod of Implementation	on (Organic): N/A				Installation	Quantity: 0	

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			UNCI	LASSIFIED			
Exhibit P-3a, Indivi	dual Modification: Pl	B 2016 Army				Date: February 2015	
Appropriation / Bud 2033A / 01 / 20	dget Activity / Budge	et Sub Activity:	P-1 Line Item Nu GA0400 / Howitze	Imber / Title: er, Med Sp Ft 155MM M1	09A6 (MOD)	Modification Number GA0400 / Paladin/FA Program	
Modification Item 5 of 1	0: Paladin Stowage Improv	ements	'			1	
Manufacturer Information	on						
Manufacturer Name: TBD	)			Manufacturer Location: TB	BD		
Administrative Leadtime (	(in Months): 3			Production Leadtime (in M	fonths): 12		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates						Dec 2018	
Delivery Dates						Dec 2019	
nstallation Information							
	on (Organic): Field Retrofi	t			Installation	Quantity: 0	
	(g)						

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Exhibit P-3a, Individual Modification: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 01 / 20	P-1 Line Item Number / Title: GA0400 / Howitzer, Med Sp Ft 155MM M109A6 (MOD)	Modification Number / Title: GA0400 / Paladin/FAASV Modification Program

Modification Item 6 of 10: Paladin Fire Control System

Manufacturer Informati	on						
Manufacturer Name: TBI	D			Manufacturer Location: T	BD		
Administrative Leadtime	(in Months): 3			Production Leadtime (in N	Months): 24		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Sep 2014	Dec 2014	Dec 2015	Dec 2016	Dec 2017	Dec 2018	
Delivery Dates	Sep 2016	Dec 2016	Dec 2017	Dec 2018	Dec 2019	Dec 2020	

### Installation Information

Method of Implementation: x

				FY 2016	FY 2016	FY 2016					То	
	Prior Years	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	0 / 0.000	- / 0.000	15 / 0.000	25 / 0.000	- / -	25 / 0.000	57 / 0.000	- / 0.000	- / 0.000	- 1 -	- /0.000	97 / 0.000
FY 2014	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	1/ -	- 1 -	- 1 -	- 1 -	- 1 -	1/ -
FY 2015	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	106 / -	- 1 -	- 1 -	- 1 -	- 1 -	106 / -
FY 2016	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	137 / -	- 1 -	- 1 -	- 1 -	137 / -
FY 2017	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	152 / -	- 1 -	- 1 -	152 / -
FY 2018	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	102 / -	- 1 -	102 / -
FY 2019	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	0 / 0.000	- 1 -	15 / -	25/ -	- 1 -	251 -	164 / -	137 / -	152 / -	102/ -	- 1 -	595 / -

#### Installation Schedule

Army

			FY 2	2014			FY 2	015			FY 2	2016			FY 2	017			FY 2	2018			FY 2	019			FY 2	020			
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	-	-	-	-	-	-	5	5	5	6	-	-	19	46	46	46	26	34	35	34	34	38	38	38	38	25	26	26	25	-	595
Out	-	-	-	-	-	-	5	5	5	6	-	-	19	46	46	46	26	34	35	34	34	38	38	38	38	25	26	26	25	-	595

Exhibit P-3a, Indiv	vidual Modification: Pl	3 2016 Army				Date: February 2015	5
<b>Appropriation / Bo</b> 2033A / 01 / 20	udget Activity / Budge	t Sub Activity:	P-1 Line Item Nu GA0400 / Howitze	<b>mber / Title:</b> er, Med Sp Ft 155MM M	109A6 (MOD)	Modification Number GA0400 / Paladin/FA	
Modification Item 7 of	10: Breech Mod (MACS)		·				
Manufacturer Informat	tion						
Manufacturer Name: TE	BD			Manufacturer Location: T	BD		
Administrative Leadtime	e (in Months): 3			Production Leadtime (in I	Months): 12		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates						Dec 2019	
Delivery Dates						Dec 2020	

#### Installation Information

### Method of Implementation: .

				FY 2016	FY 2016	FY 2016					То	
	Prior Years	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- /0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- /0.000	- / 0.000
FY 2014	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2015	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2016	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017	0 / 0.000	- / -	- 1 -	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- / -	- 1 -	- 1 -
FY 2018	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	2271 -	- 1 -	227 / -
FY 2020	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	368 / -	368 / -
Total	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	2271 -	368 / -	595 / -

#### Installation Schedule

111000																															
			FY 2	2014			FY 2	2015			FY 2	2016			FY 2	2017			FY 2	2018			FY 2	019			FY 2	020			
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	тс	Tot																
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	57	57	57	56	368	595
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	57	57	57	56	368	595

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Exhibit P-3a, Indivi	dual Modification: P	B 2016 Army				Date: February 2015	,
<b>Appropriation / Bu</b> 2033A / 01 / 20	dget Activity / Budge	et Sub Activity:	P-1 Line Item Nu GA0400 / Howitze	<b>mber / Title:</b> er, Med Sp Ft 155MM M ²	109A6 (MOD)	Modification Number GA0400 / Paladin/FA	
Modification Item 8 of 1	GA0400 / How Gation Item 8 of 10: Paladin BFT-2/KGV-72 Facturer Information Facturer Name: TBD Facturer Leadtime (in Months): 3  Dates FY 2014 FY 2015 FY 2016					·	
Manufacturer Information	on						
Manufacturer Name: TBD	)			Manufacturer Location: TE	BD		
Administrative Leadtime	(in Months): 3			Production Leadtime (in M	Months): 12		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates						Dec 2018	
Delivery Dates						Dec 2019	

#### installation information

Method of Implementation: Field Retrofit

				FY 2016	FY 2016	FY 2016					То	
	Prior Years	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- 1 -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- 1 -	- /0.000	- / 0.000
FY 2014	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2015	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2016	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017	0 / 0.000	- / -	- 1 -	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / -
FY 2018	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	246 / -	- 1 -	246 / -
FY 2020	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / -
To Complete	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	349 / -	349 / -
Total	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	246 / -	349 / -	595 / -

#### Installation Schedule

			FY 2	2014			FY 2	2015			FY 2	2016			FY 2	2017			FY 2	2018			FY 2	2019			FY 2	020			
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot																				
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	61	62	61	62	349	595
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	61	62	61	62	349	595

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Exhibit P-3a, Individual Modification: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Modification Number / Title:
2033A / 01 / 20	GA0400 / Howitzer, Med Sp Ft 155MM M109A6 (MOD)	GA0400 / Paladin/FAASV Modification
		Program
Modification Itom 9 of 10: New Gun Tubos w/l inhtweight Boro Evacuator		

**Modification Item 9 of 10:** New Gun Tubes w/Lightweight Bore Evacuator

Manufacturer Information	on						
Manufacturer Name: TBD	)			Manufacturer Location: T	BD		
Administrative Leadtime (	(in Months): 3			Production Leadtime (in I	Months): 12		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates					Dec 2017	Dec 2018	
Delivery Dates					Dec 2018	Dec 2019	

#### Installation Information

Method of Implementation: .

				FY 2016	FY 2016	FY 2016					То	
	Prior Years	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- / -	- /0.000	- /0.000	- / 0.000	- / 0.000	- 1 -	- /0.000	- / 0.000
FY 2014	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2015	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2016	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	144 / -	- 1 -	- 1 -	144 / -
FY 2019	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	108 / -	- 1 -	108 / -
FY 2020	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	144 / -	108 / -	- 1 -	252 / -

#### Installation Schedule

			FY 2	2014			FY 2	2015			FY 2	2016			FY 2	2017			FY 2	2018			FY 2	019			FY 2	020			
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot																
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36	36	36	36	27	27	27	27	-	252
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36	36	36	36	27	27	27	27	-	252

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Exhibit P-3a, Indiv	idual Modification: PE	3 2016 Army				Date: February 2015	
<b>Appropriation / Bu</b> 2033A / 01 / 20	dget Activity / Budge	t Sub Activity:	P-1 Line Item Nu GA0400 / Howitze	<b>mber / Title:</b> er, Med Sp Ft 155MM M	109A6 (MOD)	Modification Number GA0400 / Paladin/FA Program	
Modification Item 10 of	10: CREW II A-Kit HW and	Fielding				·	
Manufacturer Informati	on						
Manufacturer Name: TBI	D			Manufacturer Location: T	BD		
Administrative Leadtime	(in Months): 3			Production Leadtime (in I	Months): 12		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates						Dec 2018	
Delivery Dates						Dec 2019	

#### Installation Information

### Method of Implementation: .

		<b>5</b> 1/ 004 4	E)/ 00/E	FY 2016	FY 2016	FY 2016	E)/ 00/E	<b>5</b> 1/ <b>0</b> 0/0	E)/ 00/0	<b>5</b> 1/ 0000	То	
	Prior Years	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- 1 -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- 1 -	- /0.000	- / 0.000
FY 2014	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2015	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2016	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	176 / -	- 1 -	176 / -
To Complete	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	266 / -	266 / -
Total	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	176 / -	266 / -	4421 -

#### Installation Schedule

			FY 2	2014			FY 2	2015			FY 2	016			FY 2	2017			FY 2	2018			FY 2	2019			FY 2	020			
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	44	44	44	266	442
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	44	44	44	44	266	442

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 01: Tracked Combat Vehicles / BSA 20: GZ0410 / Paladin Integrated Management (PIM)

Modification of Tracked Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) : A

Other Related Program Elements: 0210609A Program Elements for Code B Items:

Line Item MDAP/MAIS Code: Item MDAP/MAIS Code(s): 466

Line item mbai /maio oode.	Itelli Mib	AI /IIIAIO OOC	ie(3). 400									
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	9	8	18	30	-	30	36	60	60	60	275	556
Gross/Weapon System Cost (\$ in Millions)	188.633	199.477	247.400	273.850	-	273.850	473.107	667.525	661.758	658.739	3,479.964	6,850.453
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	188.633	199.477	247.400	273.850	-	273.850	473.107	667.525	661.758	658.739	3,479.964	6,850.453
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	188.633	199.477	247.400	273.850	-	273.850	473.107	667.525	661.758	658.739	3,479.964	6,850.453
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	ne corresponding	g budget requests	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	20,959.222	24,934.625	13,744.444	9,128.333	-	9,128.333	13,141.861	11,125.417	11,029.300	10,978.983	12,654.415	12,320.959

#### **Description:**

Paladin Integrated Management (PIM) is an ACAT 1D Acquisition Program. The program is intended to replace the current fleet of M109 Family of Vehicles (FoV) consisting of the M109A6 Self Propelled Howitzer and the M992A2 Field Artillery Ammunition Supply Vehicle (FAASV). PIM is an Army Modernization Program that addresses a critical capability gap created by the Non-Line of Sight Cannon termination in June of 2009 as well as obsolescence and size/weight and power (SWaP) issues in the M109 FoV current Fleet. The PIM system integrates current Bradley Fighting Vehicle suspension and drive train items. Future Combat Systems (FCS) developed Electric Gun Drive systems and current fleet (M109A6) fire control systems into a new chassis that provides better force protection, survivability and mobility over the current fleet. PIM is a two vehicle system: The M109A7 Self Propelled Howitzer (SPH) and the M992A3 Carrier Ammunition Tracked (CAT.) The SPH has all characteristics listed above. The CAT utilizes all these same components and traits less those that relate directly to the cannon system. The PIM system replaces the current M109 FoV on a one for one basis, in the cannon fires battalions in the Armored Brigade Combat Team Formations and in the Echelons above Brigade (EAB). The overall intent is to increase Soldier force protection, vehicle survivability, provide an appropriate amount of SWaP capacity to add future capabilities, reduce life cycle costs and extend the life of the M109 FoV through FY 2050.

Seconda	ary Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	8	18	30	-	30	22	32	32	32
	Total Obligation Authority	199.477	247.400	273.850	-	273.850	283.864	400.515	397.055	395.243
ANG	Quantity	-	-	-	-	-	14	28	28	28
	Total Obligation Authority	-	-	-	-	-	189.243	267.010	264.703	263.496
Total:	Quantity	8	18	30	-	30	36	60	60	60
Secondary Distribution	Total Obligation Authority	199.477	247.400	273.850	-	273.850	473.107	667.525	661.758	658.739

Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 01: Tracked Combat Vehicles / BSA 20: GZ0410 / Paladin Integrated Management (PIM)

Modification of Tracked Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) : A

**Program Elements for Code B Items:** 

Other Related Program Elements: 0210609A

Line Item MDAP/MAIS Code:

Item MDAP/MAIS Code(s): 466

Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)
GZ0410 / Paladin Integrated Management (PIM)	P-5, P-5a, P-21	Α	9 / 188.633	8 / 199.477	18 / 247.400	30 / 273.850	- / -	30 / 273.850
Total Gross/Weapon System Cost			9 / 188.633	8 / 199.477	18 / 247.400	30 / 273.850	- 1 -	30 / 273.850

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

#### Justification:

FY 2016 Base Procurement in the amount of \$273.850 million supports all aspects of the PIM Low Rate Initial Production (LRIP) program. Funding also supports Government Program Management required to provide oversight on contractor production operations that include: Quality Process Management, Program Management Reviews (weekly, monthly, and quarterly), Government Furnished Property and Material Management, and engineer activities resulting from waivers/deviations/problem resolution. Funds contractor operations that sustain production operations required to acquire materials, components and enditems; the manufacturing and assembly of sub-systems; the integration, test and check-out operations that results in the production of 30 SPH and 30 CATs. The unit cost represents cost per set (1 SPH and 1 CAT). This effort also provides for "ramp-up" in production as the program transitions into Full Rate in FY 2017.

The FY 2016 funding request was reduced for \$20.000 million to account for the availability of prior year execution balances

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities. Army Acquisition Objective (AAO): 580 sets

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Exhibit P-5, Cost Analysis: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:
2033A / 01 / 20

P-1 Line Item Number / Title:
GZ0410 / Paladin Integrated Management (PIM)

Bate: February 2015

Item Number / Title [DODIC]:
GZ0410 / Paladin Integrated Management (PIM)

Management (PIM)

MDAP/MAIS Code:466

ID Code (A=Service Ready, B=Not Service Ready) : A		IAIT	AF/IVIAIS COUE.400			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Procurement Quantity (Units in Each)	9	8	18	30	-	30
Gross/Weapon System Cost (\$ in Millions)	188.633	199.477	247.400	273.850	-	273.850
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	188.633	199.477	247.400	273.850	-	273.850
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	188.633	199.477	247.400	273.850	-	273.850
(The following Resource Summary rows are for information	onal purposes only. The cor	responding budget request	s are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	20,959.222	24,934.625	13,744.444	9,128.333	-	9,128.333

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

ID Code (A-Service Boody, B-Net Service Boody) : A

	P	rior Years	5		FY 2014			FY 2015		FY	2016 Ba	se	FY	2016 OC	0	FY	2016 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)															
Flyaway Cost							'											
Recurring Cost																		
SYS ENG/ PROG MGMT (CONTRACTOR)	-	-	3.179	-	-	2.825	-	-	6.118	-	-	2.909	-	-	-	-	-	2.9
SYSTEM TECHNICAL SUPPORT	-	-	8.493	-	-	25.827	-	-	34.804	-	-	0.530	-	-	-	-	-	0.5
SYS TEST & EVALUATION (CONTRACTOR)	-	-	10.224	-	-	-	-	-	11.082	-	-	1.480	-	-	-	-	-	1.4
SYS ENG/ PROG MGMT (GOVERNMENT)	-	-	7.341	-	-	26.540	-	-	18.046	-	-	6.694	-	-	-	-	-	6.6
SYS TEST & EVALUATION (GOVERNMENT)	-	-	1.410	-	-	-	-	-	1.398	-	-	0.205	-	-	-	-	-	0.2
TRANSPORTATION	-	-	0.127	-	-	0.113	-	-	-	-	-	0.140	-	-	-	-	-	0.1
Subtotal: Recurring Cost	-	-	30.774	-	-	55.305	-	-	71.448	-	-	11.958	-	-	-	-	-	11.9
Non Recurring Cost																		
PRODUCTION FACILITIZATION	-	-	28.131	-	-	-	-	-	-	-	-	3.343	-	-	-	-	-	3.3
Subtotal: Non Recurring Cost	-	-	28.131	-	-	-	-	-	-	-	_	3.343	-	-	-	-	-	3.3
Subtotal: Flyaway Cost	-	-	58.905	-	-	55.305	-	-	71.448	-	-	15.301	-	-	-	-	-	15.3

LI GZ0410 - Paladin Integrated Management (PIM) Army

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MDAP/MAIS Code:466

 Exhibit P-5, Cost Analysis: PB 2016 Army
 Date: February 2015

 Appropriation / Budget Activity / Budget Sub Activity:
 P-1 Line Item Number / Title:
 Item Number / Title [DODIC]:

2033A / 01 / 20 GZ0410 / Paladin Integrated Management (PIM) GZ0410

GZ0410 / Paladin Integrated Management (PIM)

ID Code (A=Service Ready, B=Not Service Ready) : A

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

	F	Prior Years	6		FY 2014			FY 2015		FY	' 2016 Bas	se	F۱	/ 2016 OC	0	FY	/ 2016 Tot	al
Cost Elements	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)
Recurring Cost																		
MANUFACTURING ^(†)	-	-	90.882	11,709.375	8	93.675	7,877.111	18	141.788	7,348.267	30	220.448	-	-	_	7,348.267	30	220.44
GOVERNMENT FURNISHED EQUIPMENT (GFE)	-	-	5.468	-	-	4.860	-	-	10.841	-	-	15.955	-	-	-	-	-	15.95
THEATRE PROVIDED EQUIPMENT	-	-	1.129	-	-	1.004	-	-	-	-	-	3.686	-	-	-	-	-	3.68
RECURRING PRODUCTION - OTHER	-	-	1.375	-	-	1.222	-	-	2.515	-	-	1.258	-	-	-	-	-	1.25
ENGINEERING CHANGE ORDERS	-	-	4.804	-	-	4.271	-	-	7.312	-	-	5.539	-	-	-	-	-	5.53
Subtotal: Recurring Cost	-	-	103.658	-	-	105.032	-	-	162.456	-	-	246.886	-	-	-	-	-	246.88
Subtotal: Hardware Cost	-	-	103.658	-	-	105.032	-	-	162.456	-	-	246.886	-	-	-	-	-	246.88
Support Cost	,																	
TRAINING	-	-	1.538	-	-	1.368	-	-	3.534	-	-	1.141	-	-	-	-	-	1.14
DATA	-	-	20.288	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUPPORT EQUIPMENT	-	-	0.822	-	-	0.730	-	-	1.506	-	-	0.752	-	-	-	-	-	0.75
INITIAL SUPPORT EQUIP (ISE)	-	-	0.155	-	-	0.137	-	-	-	-	-	1.326	-	-	-	-	-	1.32
NEW EQUIP TRAINING (NET)	-	-	0.290	-	-	0.258	-	-	-	-	-	2.545	-	-	-	-	-	2.54
CONTRACTOR LOGISTICS SUPPORT (CLS)	-	-	-	-	-	-	-	-	-	-	-	0.197	-	-	-	-	-	0.19
INITIAL SPARES (REPARABLES & CONSUMABLES	-	-	2.977	-	-	2.647	-	-	8.456	-	-	5.702	-	-	-	-	-	5.70
OTHERS	-	-	-	-	-	34.000	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Support Cost	-	-	26.070	-	-	39.140	-	-	13.496	-	-	11.663	-	-	-	-	-	11.66
Gross/Weapon System Cost	20,959.222	9	188.633	24,934.625	8	199.477	13,744.444	18	247.400	9,128.333	30	273.850	-	-	-	9,128.333	30	273.85

	Secondary Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Army	Quantity	8	18	30	-	30
	Total Obligation Authority	199.477	247.400	273.850	-	273.850

LI GZ0410 - Paladin Integrated Management (PIM) Army

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Exhibit P-5, Cost Analysis: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 01 / 20	P-1 Line Item Number / Title: GZ0410 / Paladin Integrated Management (PIM)	Item Number / Title [DODIC]: GZ0410 / Paladin Integrated Management (PIM)

ID Code (A=Service Ready, B=Not Service R	ady) : <b>A</b>		MDAP/MAIS Code	<b>9:</b> 466		
Second	ary Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Total:	Quantity	8	18	30	-	30
Secondary Distribution	Total Obligation Authority	199.477	247.400	273.850	-	273.850

^(†) indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: PB 2016	Army	Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
2033A / 01 / 20	GZ0410 / Paladin Integrated Management (PIM)	GZ0410 / Paladin Integrated
		Management (PIM)

Cost Elements	0 C 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	<b>Qty</b> (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue Date
MANUFACTURING ^(†)		2014	BAE / York	SS / FPIF	TACOM, Warren, MI	Nov 2013	Sep 2015	8	11,709.375			
MANUFACTURING ^(†)		2015	BAE / York	SS / FPIF	TACOM, Warren, MI	Nov 2014	Mar 2016	18	7,877.111			
MANUFACTURING ^(†)		2016	BAE / York	SS / FPIF	TACOM, Warren, MI	Nov 2015	Mar 2017	30	7,348.267			

^(†) indicates the presence of a P-21

#### Remarks:

MDAP CODE: ACAT 1D.

FY13 quantity of 9 and FY14 quantity of 8 were awarded in the same contract. FY14 deliveries follows the FY13 deliveries.

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E	xhi	bit F	P-21, Pro	oducti	ion Sc	hedul	<b>e</b> : P	B 201	6 Arm	ıy														Date	e: Feb	oruary	2015	5			
			<b>iation</b> / I 01 / 20	Budge	et Acti	vity /	Bud	get Sı	ub Ac	tivity	:	1	<b>Line</b> 0410						emer	nt (PIN	Л)			GZ0	410 <i>I</i>	n <b>ber</b> / Palad nent (I	din Int				
				ements n Each)								Fiscal Y	ear 2014							,				Fiscal Y	ear 2015	i					
					ACCEPT									С	alendar	Year 201	4								Caler	ndar Yea	r 2015				
0 0 0		FY	SERVICE	PROC QTY	PRIOR TO 1 OCT 2013	BAL DUE AS OF 1 OCT	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	n n	A U G	S E P	0 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	n n	A U G	S E P	B A L
M	ANUI	FACTU	RING								,			,																	
	1	2014	ARMY (I)	8	-	8		Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	E
	1	2015	ARMY (II)	18	-	18														Α -	-	-	-	-	-	-	-	-	-	-	18
	1	2016	ARMY (III)	30	-	30																									30
				,	,		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	B A L

pprop	nri	41 .				•	2010	3 Arm	y														Date	: Feb	ruary	2015	)			
033A <i>l</i>	-		Budge	et Acti	vity /	Budg	jet Su	ıb Ac	tivity:			_	ltem / Pala					emen	t (PIM	1)				10 <i>I</i>	Palac	lin Int	[DOE tegrate			
			lements in Each)								Fiscal Y	ear 2016	;									F	iscal Ye	ar 2017						
м				ACCEPT PRIOR	BAL								C	alendar	Year 201	6								Calen	dar Year	2017				
F R # FY	Y	SERVICE	PROC QTY	TO 1 OCT 2015	DUE AS OF 1 OCT	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	B A L
IANUFACT	CTUF	RING																												
1 201	14	ARMY (I)	8	2	6	1	2	1	1	1																				_
1 201	15	ARMY (II)	18	-	18	-	-	-	-	-	2	1	2	1	2	1	2	2	1	2	1	1								-
1 201	16	ARMY (III)	30	-	30		A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	2	3	2	3	2	
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N U	n n	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	B A L
					·													\												_

Cost Elements (Units in Each)   Fiscal Year 2018   Fiscal Year 2019   Fiscal Year 2019	Item Number / Title:  0 / Paladin Integrated Management (PIM)  D18    Calendar Year 2018   Calendar Year 2019
Curical Floor   Floo	Calendar Year 2018           M         J         J         A         S         O         N         D         J         F         M         A         M         J         J         A         S         B           A         U         U         U         E         C         O         E         A         E         A         P         A         U         U         U         E         A
0   M   FY   SERVICE   QTY   DIE   O   N   D   J   F   M   A   M   J   J   A   S   O   N   D   J   F   M   A   M   J   J   J   J   J   J   J   J   J	M J J A S O N D J F M A M J J A S B A U U U U E A
O F V SERVICE QTY OCT AGOF C O N B A E A P A U U U U U U U U U U U U U U U U U	A U U U E C O E A E A P A U U U E A
1 2014 ARMY (I) 8 8 8 -   1 2015 ARMY (II) 18 18 -   1 2016 ARMY (III) 30 17 13 2 3 2 3 3     O N D J F M A M J J A S O N D J F M A M J J	
1 2015 ARMY (II) 18 18 - 1 2016 ARMY (III) 30 17 13 2 3 2 3 3 O N D J F M A M J J A S O N D J F M A M J J	
1 2016 ARMY (III) 30 17 13 2 3 2 3 3 3	
ONDJFMAMJJASONDJFMAMJJJ	
C   O   E   A   E   A   P   A   U   U   U   E   C   O   E   A   E   A   P   A   U   U   U   C   N   B   R   R   Y   N   L   C   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C   N   C	A   U   U   U   E   C   O   E   A   E   A   P   A   U   U   U   E   A

Exhibit P-21, Production Schedule: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
2033A / 01 / 20	GZ0410 / Paladin Integrated Management (PIM)	GZ0410 / Paladin Integrated
		Management (PIM)

		Produc	tion Rates (Each /	Month)				Procurement Lea	adtime (Months)			
MFR						Init	ial			Reo	rder	
Ref #	MFR Name - Location	MSR For 2016	1-8-5 For 2016	MAX For 2016	ALT Prior to Oct 1	ALT After Oct 1	Mfg PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Mfg PLT	Total After Oct 1
1	BAE - York	18	60	120	-	2	16	18	-	2	16	18

#### Remarks:

FY13 quanity of 9 and FY14 quanity of 8 were awarded in the same contract. FY14 deliveries follows the FY13 deliveries.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

#### Service/Agency Suffixes:

- (I) BASE
- (II) BASE
- (III) BASE

[&]quot;A" in the Delivery Schedule indicates the Contract Award Date.

Exhibit P-40, Budget Line Item Justification: PB 2016 Army **Date:** February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 01: Tracked Combat Vehicles / BSA 20: GA0570 / Improved Recovery Vehicle (M88A2 HERCULES)

Modification of Tracked Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) : A	4		Program Elei	ments for Cod	de B Items:			Other Related	d Program El	ements:		
	Prior			FY 2016	FY 2016	FY 2016					То	
Resource Summary	Years	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total
Procurement Quantity (Units in Each)	684	53	15	31	-	31	24	2	-	-	-	809
Gross/Weapon System Cost (\$ in Millions)	1,882.089	186.031	122.451	123.629	-	123.629	99.558	6.735	-	-	-	2,420.493
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	1,882.089	186.031	122.451	123.629	-	123.629	99.558	6.735	-	-	-	2,420.493
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	1,882.089	186.031	122.451	123.629	-	123.629	99.558	6.735	-	-	-	2,420.493
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	e corresponding	p budget requests	are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	2,751.592	3,510.019	8,163.400	3,988.032	-	3,988.032	4,148.250	3,367.500	-	-	-	2,991.957

#### **Description:**

The M88A2 Heavy Equipment Recovery Combat Utility Lift and Evacuation System (HERCULES) is a 70 ton armored, full tracked, diesel powered recovery vehicle based on the M88A1 chassis. The hull is armored for protection against small arms fire, artillery fragments, and anti-personnel mines. The vehicle mounts a 50 caliber machine gun for self-protection. It is configured with three winches, an improved spade, and an improved A-frame boom which enables the vehicle to have a 35 ton lift capability. AAO: 933

				FY 2016	FY 2016	FY 2016				
Seconda	ry Distribution	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	53	8	27	-	27	10	2	-	-
	Total Obligation Authority	186.031	99.100	107.532	-	107.532	39.305	6.735	-	-
ANG	Quantity	-	7	4	-	4	14	-	-	-
	Total Obligation Authority	-	23.351	16.097	-	16.097	60.253	-	-	-
Total:	Quantity	53	15	31	-	31	24	2	-	-
Secondary Distribution	<b>Total Obligation Authority</b>	186.031	122.451	123.629	-	123.629	99.558	6.735	-	-

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army Date: February 2015

### Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 01: Tracked Combat Vehicles / BSA 20: GA0570 / Improved Recovery Vehicle (M88A2 HERCULES)

Modification of Tracked Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) : A	Pro	ogram	Elements for Code	B Items:	Ot	ner Related Program I	Elements:	
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
GA0570 / Improved Recovery Vehicle (M88A2 HERCULES)	P-5, P-5a, P-21	Α	684 / 1,882.089	53 / 186.031	15 / 122.451	31 / 123.629	- / -	31 / 123.629
Total Gross/Weapon System Cost			684 / 1,882.089	53 / 186.031	15 / 122.451	31 / 123.629	- 1 -	31 / 123.629

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

#### Justification:

FY 2016 Base procurement dollars in the amount of \$123.629 million supports the vehicle production and the procurement of 31 M88A2 vehicles with M88 Family of Vehicles Operational Modifications with cutin during production. The fielded M88A1 Medium Recovery Vehicle lacks the necessary power, weight, and braking ability to safely support the recovery of the Abrams fleet by itself. Improvements in the M88A2 HERCULES fix these operational shortcomings. The increased winching and lifting capability accommodates all 70 ton Abrams variants. Without this increased capability, units must use two M88A1 Medium Recovery Vehicles to perform the necessary spectrum of recovery operations. The M88A2 procurement continues to support the supplier/vendor industrial base to mitigate any M88A2 production break.

Actual procurement quantity is 31 in FY15. The Army plans to procure an additional 16 quantity with \$72M.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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							O.	NCLAS		•									
Exhibit P-5, Cost	Analysis	s: PB 20	16 Army	1										Date: F	ebruary	2015			
<b>Appropriation / B</b> 2033A / 01 / 20	udget Ad	ctivity /	Budget	Sub Act	ivity:			<b>Numbe</b> proved Re		Vehicle (	LES)	Item Number / Title [DODIC]: GA0570 / Improved Recovery Vehicle (M88A2 HERCULES)							
ID Code (A=Service Read	y, B=Not Servi	ce Ready) : A	\						М	DAP/MAIS	Code:					<u></u> -			
F	Resource	Summa	ary			Prior Yea	ars	FY 20	)14	FY	2015	FY 2	2016 Bas	se F	Y 2016	осо	FY 2016	Total	
Procurement Quantity (Unit	ts in Each)						684		53		1	5		31		-		3	
Gross/Weapon System Co	st (\$ in Million	s)				1	,882.089		186.031		122.45	51	123	3.629		-		123.62	
Less PY Advance Procure	ment (\$ in Mil	lions)					-		-		-			-		-		-	
Net Procurement (P1) (\$ in	Millions)					1	,882.089		186.031		122.45	51	123	3.629		-		123.62	
Plus CY Advance Procure	ment (\$ in Mill	ions)					-		-		-			-		-		-	
Total Obligation Authorit	<b>y</b> (\$ in Millions	)				1	,882.089		186.031		122.45	1	123	3.629		-		123.62	
(Th	ne following F	Resource Su	ımmary row	s are for info	rmational p	urposes only	y. The corres	ponding bud	get request	s are docum	ented elsewl	nere.)				ŕ			
Initial Spares (\$ in Millions)							-		-		-			-		-		-	
Gross/Weapon System Un	nit Cost (\$ in 7	housands)				2	,751.592		3,510.019		8,163.40	0	3,988	3.032		-		3,988.03	
Note: Subtotals or Totals in	n this Exhibit	P-5 may no	t be exact o	r add. due to	rounding.										1				
		rior Years			FY 2014	_		FY 2015		FY	′ 2016 Bas	e	F	Y 2016 O	0	F	Y 2016 Tot	al	
	Hait Cast	04	Total	Unit On at	04	Total	Unit Cost	04	Total Cost	Unit Cost	Otre	Total	Unit Ocat	04	Total	Unit Coot	04	Total	
Cost Elements	Unit Cost (\$ K)	<b>Qty</b> (Each)	Cost (\$ M)	Unit Cost (\$ K)	<b>Qty</b> (Each)	Cost (\$ M)	(\$ K)	Qty (Each)	(\$ M)	(\$ K)	<b>Qty</b> (Each)	Cost (\$ M)	Unit Cost (\$ K)	<b>Qty</b> (Each)	Cost (\$ M)	Unit Cost	Qty (Each)	Cost (\$ M)	
Flyaway Cost											'				'				
Recurring Cost																			
Vehicle Manufacturing - Contractor ^(†)	2,675.591	684	1,830.104	2,887.038	53	153.013	2,900.710	31	89.922	2,958.548	31	91.715	-	-	-	2,958.548	31	91.71	
Vehicle Manufacturing - GFE	-	-	9.846	-	_	1.935	_	-	4.822	-	-	4.918	-	_	_	_	-	4.9	
Contractor																			
Engineering	-	-	7.330	-	-	17.382 3.759	1	-	15.597 5.137	-	-	13.137 6.746	-	-	-	-	-	13.13	
Program Management Transportation	-	-	1.700	-	-	1.200		-	1.003	-	-	1.023	-	-	-	-	-	1.02	
Fielding (TPF & NET)	-		4.383	-		0.985	_	-	1.171	-	-	1.195	-		-		-	1.19	
Test (Production Verification Testing)	_		1.200	-		0.020		_	0.509	_		0.519		_	_	_	_	0.5	
M88A1 Hull Reclamation	_	_	13.362	_	_	7.737	_	_	4.290	_	_	4.376	_	_	_	_	_	4.37	
Subtotal: Recurring Cost	-	-	1,882.089	-	_	186.031	-	_	122.451	_	-	123.629	_	_	-	-	-	123.62	
Subtotal: Flyaway Cost	-	-	1,882.089	-	-	186.031	-	-	122.451	-	-	123.629	-	-	-	-	-	123.62	
Gross/Weapon System Cost	2,751.592	684	1,882.089	3,510.019	53		8,163.400	15	122.451	3,988.032	31	123.629	-	-	-	3,988.032	31	123.62	
	Sec	ondary Di	stribution	,,			FV	2014		FY 2015	,	FY 2 Bas			FY 2016 OCO		FY 201 Total		
Army	0000	Qua							53	2010	8	Da:	2.	7		_	iotai	2	
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LI GA0570 - Improved Recovery Vehicle (M88A2 HERCULE... Army

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Exhibit P-5, Cost Analysis: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 01 / 20	P-1 Line Item Number / Title: GA0570 / Improved Recovery Vehicle (M88A2 HERCULES)	Item Number / Title [DODIC]: GA0570 / Improved Recovery Vehicle (M88A2 HERCULES)

ID Code (A=Service Ready, B=Not Service Read	(y) : <b>A</b>		MDAP/MAIS Code	<b>)</b> :		
Secondar	y Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
	Total Obligation Authority	186.031	99.100	107.532	-	107.532
ANG	Quantity	-	7	4	-	4
	Total Obligation Authority	-	23.351	16.097	-	16.097
Total:	Quantity	53	15	31	-	31
Secondary Distribution	Total Obligation Authority	186.031	122.451	123.629	-	123.629

^(†) indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: PB 2016 A	Army	Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 01 / 20	P-1 Line Item Number / Title: GA0570 / Improved Recovery Vehicle (M88A2 HERCULES)	Item Number / Title [DODIC]: GA0570 / Improved Recovery Vehicle (M88A2 HERCULES)

Cost Elements	0 C 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	<b>Qty</b> (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue Date
Vehicle Manufacturing - Contractor ^(†)		2014	BAE Systems / York PA	SS/FFP	TACOM	Sep 2014	Oct 2015	53	2,887.038	N		
Vehicle Manufacturing - Contractor ^(†)		2015	BAE Systems / York PA	SS/FFP	TACOM	Apr 2015	Jan 2017	31	2,900.710	N		
Vehicle Manufacturing - Contractor ^(†)		2016	BAE Systems / York PA	SS/FFP	TACOM	Apr 2016	Oct 2017	31	2,958.548	N		

^(†) indicates the presence of a P-21

#### Remarks:

FY 2014- Sep 2014 Base Contract with 2 Options - 53 Vehicles

FY 2015- Option 1 from FY14 Base Contract - Apr 2015 - 31 Vehicles. Actual procurement quantity is 31 in FY15. The Army plans to procure an additional 16 quantity with \$72M

FY 2016 - Option 2 from FY14 Base Contract - Apr 2016 - 31 Vehicles

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Ex	hik	oit F	P-21, Pr	oduct	ion Sc	hedu	le: PE	3 201	6 Arn	าy														Dat	e: Fel	oruary	/ 201	5			
			i <b>ation</b> / )1 / 20	Budge	et Act	ivity /	Budg	get S	ub Ac	ctivity	<b>/</b> :					nber/ d Reco		: Vehic	ele (M	88A2	HER	CULE	is)	GA		'Impr	oved	Recov		/ehic	le
				Iements in Each)								Fiscal `	Year 2014	4										Fiscal '	Year 2015	i					
	м				ACCEPT PRIOR	BAL									Calenda	r Year 20	14								Cale	ndar Yea	r 2015				
0 0	F R	FY	SERVICE	PROC QTY	TO 1 OCT 2013	DUE AS OF 1 OCT	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	B A L
Veh	nicle	Manuf	acturing - Co	ontractor			ı					1																			
Prio	or Ye	ars De	eliveries: 684	1																											
_	-		ARMY	53		53												Α -	-	-	-	-	-	-	-	-	-	-	-	-	53
	_		ARMY	31		31																			Α -	-	-	-	-	-	31
	1   :	2016	ARMY	31	-	31	0	N	_	<b>.</b>	F	М	-	М	٠.	+ .		s	0	N	D		F	М		М		<del>                                     </del>	_	S	31 B
							C T	0 V	D E C	A N	E B	A R	A P R	A Y	N	U L	A U G	E P	C T	0 V	E C	A N	E B	A R	A P R	A Y	N N	U L	A U G	E P	A L

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Exh	nibi	t P-21, P	roductio	n Sc	hedul	e: PB	2016	3 Arm	ıy														Date	: Feb	ruary	2015	5			
		<b>priation</b> / 01 / 20	/ Budget	Acti	vity /	Budg	et Sı	ıb Ac	tivity	:		<b>Line</b> 0570 <i>I</i>		-				le (M	88A2	HER	CULE	S)	GA0	570 <i>I</i>	Impro		[DOD Recov		ehick	е
			Elements s in Each)								Fiscal Y	ear 2016											Fiscal Ye	ar 2017						
M				ACCEPT PRIOR	BAL								С	alendar	Year 20	16			1	1				Calen	dar Year	2017				
0 F C R O #	₹	Y SERVIC	PROC	TO 1 OCT 2015	DUE AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N N	U U	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	B A L
Vehic	cle Ma	anufacturing -	Contractor			'										1														
Prior	_	s Deliveries: 6																												,
1	_	14 ARMY	53	-	53	2	3	3	3	3	3	4	4	4	4	4	4	4	4	4										-
1		15 ARMY 16 ARMY	31	-	31 31	-	-	-	-	-	-	A -	-	-	-	-	-	-	-	-	3	4	4	4	- 4	4	4	- 4		- ;
	20	10 ARIVIT	31	-	31	0 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	A U G	S E P	0 C	N O V	D E	J A	F E	M A	A P	M A	J	J	A U G	S E P	В

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Exhibit P-21, Production Scheo	ule: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity 2033A / 01 / 20	/ Budget Sub Activity:	P-1 Line Item Number / Title: GA0570 / Improved Recovery Vehicle	Item Number / Title [DODIC]: GA0570 / Improved Recovery Vehicle (M88A2 HERCULES)
Cost Elements (Units in Each)		Fiscal Year 2018	Fiscal Year 2019
M	E O N D J F F C O E A E	A   P   A   U   U   E	Calendar Year 2019
Vehicle Manufacturing - Contractor			
Prior Years Deliveries: 684			
1 2014 ARMY 53 53 1 2015 ARMY 31 31			
	1 3 3 3	3 3 3 3 3 3	
	O N D J F C O E A E T V C N B	M A M J J A S A P A U U U E	O N D J F M A M J J A S C O E A E A P A U U U E T V C N B R R Y N L G P

Exhibit P-21, Production Schedule: PB 2016 Army	Date: February 2015	
	P-1 Line Item Number / Title: GA0570 / Improved Recovery Vehicle (M88A2 HERCULES)	Item Number / Title [DODIC]: GA0570 / Improved Recovery Vehicle (M88A2 HERCULES)

	Production Rates (Each / Month)							Procurement Le	adtime (Months)			
MFR						Init	ial			Reo	rder	
Ref					ALT	ALT		Total	ALT	ALT		Total
#	MFR Name - Location	MSR For 2016	1-8-5 For 2016	MAX For 2016	Prior to Oct 1	After Oct 1	Mfg PLT	After Oct 1	Prior to Oct 1	After Oct 1	Mfg PLT	After Oct 1
1	1 BAE Systems - York PA 1 96				-	7	21	28	-	7	18	25

#### Remarks:

FY15 Quantities increased from 15 to 31 to allign with funding increase. Sept 2017: Manufacturing Production from Foreign Military Sales

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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[&]quot;A" in the Delivery Schedule indicates the Contract Award Date.

Exhibit P-40, Budget Line Item Justification: PB 2016 Army **Date:** February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 01: Tracked Combat Vehicles / BSA 20: GZ3250 / Assault Bridge (Mod)

Modification of Tracked Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) :			Program Ele	ments for Co	de B Items:			Other Relate	d Program El	ements:		
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	333.631	2.500	2.473	2.461	-	2.461	3.494	5.900	2.461	3.222	-	356.142
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	333.631	2.500	2.473	2.461	-	2.461	3.494	5.900	2.461	3.222	-	356.142
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	333.631	2.500	2.473	2.461	-	2.461	3.494	5.900	2.461	3.222	-	356.142
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	ne corresponding	g budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	48.255	-	48.255	-	-	-	-	-	440.225

### **Description:**

The Assault Bridge (MOD) budget line funds the modifications of assault bridging equipment. It is used to procure hardware, materials, and hardware installation cost required to complete the modification. Modifications are performed to correct safety deficiencies, increase mission capabilities, extend the useful life, improve supportability, upgrade existing technology, increase efficiency, improve readiness and to meet new legal and regulatory requirements. By modifying existing equipment, the Army maintains a ready, supportable inventory of equipment that meets current requirements and regulations at a cost considerably below that of buying new equipment.

Secondary Distribution		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	2.500	2.473	2.461	-	2.461	3.494	5.900	2.461	3.222
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	2.500	2.473	2.461	-	2.461	3.494	5.900	2.461	3.222

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army **Date:** February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 01: Tracked Combat Vehicles / BSA 20: GZ3250 / Assault Bridge (Mod)

Modification of Tracked Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) :		Program	Elements for Code	B Items:	0	ther Related Program		
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)			
GZ3250 / Assault Bridge Modifications (Equipment Upgrade/Technical Insertion)	P-3a		- / 333.631	- /2.500	- / 2.473	- / 2.461	- / -	- / 2.461
Total Gross/Weapon System Cost			- / 333.631	- / 2.500	- / 2.473	- / 2.461	- 1 -	- / 2.461
Exhibits Schedule			FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
GZ3250 / Assault Bridge Modifications (Equipment Upgrade/Technical Insertion)	P-3a		- / 3.494	- /5.900	- / 2.461	- / 3.222	- / -	- / 356.142
Total Gross/Weapon System Cost			- / 3.494	- / 5.900	- / 2.461	- / 3.222	- 1 -	- / 356.142

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

#### Justification:

FY 2016 Base procurement dollars in the amount of \$2.461 million supports the procurement/installation of Armored Vehicle Launch Bridge upgrades to the hydraulic and electrical system and conversions of the original Military Load Class (MLC) 60 bridge to the more capable MLC 85 version. Funding also supports the procurement and installation of the Wolverine (Heavy Assault Bridge) modifications and the upgrade to the Drivers Vision Enhancer version "A" and internal water stowage kits. Modifying existing equipment will correct safety deficiencies, increase mission capabilities, extend the useful life, improve supportability, upgrade existing technology, increase efficiency, and improve readiness.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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Exhibit P-3a, Individual Modification: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity:		Modification Number / Title:
2033A / 01 / 20	GZ3250 / Assault Bridge (Mod)	GZ3250 / Assault Bridge Modifications

2033A / 01 / 20			GZ	3250 / Assa	uit Briage (i	woa)			GZ3250	/ Assault E	sriage ivioaiti	cations
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	333.631	2.500	2.473	2.461	-	2.461	3.494	5.900	2.461	3.222	-	356.142
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	333.631	2.500	2.473	2.461	-	2.461	3.494	5.900	2.461	3.222	-	356.142
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	333.631	2.500	2.473	2.461	-	2.461	3.494	5.900	2.461	3.222	-	356.142
(The following	Resource Sum	mary rows are fo	or informational p	urposes only. Th	e corresponding	g budget requests	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	_	-	-	48.255	-	48.255	-	-	-	-	-	440.225

### **Description:**

The Assault Bridge (MOD) budget line funds the modifications of assault bridging equipment. It is used to procure hardware, materials, and hardware installation cost required to complete the modification. Modifications are performed to correct safety deficiencies, increase mission capabilities, extend the useful life, improve supportability, upgrade existing technology, increase efficiency, improve readiness and to meet new legal and regulatory requirements. By modifying existing equipment, the Army maintains a ready, supportable inventory of equipment that meets current requirements and regulations at a cost considerably below that of buying new equipment. Installation costs are included in the cost of each kit.

Armored Vehicle Launch Bridge (MOD 1): The Armored Vehicle Launch Bridge modifications include procurement/installation for improvements to the Hydraulic and Electrical Unit modification kit. Upgrades include an Instrumentation Kit including temperature and pressure gauges for the driver/operator and improvements to the hydraulic filter block package. These improvements will improve the reliability of the hydraulic system. Additionally, AVLB Bridge conversions from the MLC 60 to the MLC 85 configuration will be procured to provide the AVLB units with current required crossing capability for the maneuver force. Installation costs are included in the cost of each kit.

Wolverine (MOD 2): Modifications to the Wolverine program include modifications to the fixed girder bolt which will prevent excessive fatigue and failure with the girder bolts and will support the launcher system on the hull; upgrade to the water stowage which increases the capacity of water in the vehicle; an upgrade to the latest Abrams FOV approved Drivers Vision Enhancer version "A" and an upgrade to the Total Integrated Engine Revitalization (TIGER) engine for commonality with all systems using an Abrams chassis.

Assault Breacher Vehicle (MOD 3): Modifications to the Assault Breacher Vehicle program includes a modification to the Full Width Mine Plow. The modification includes replacing the existing tine tips with a tine adaptor and replaceable tip. The new tip is held in place by a roll pin. This modification will strengthen the tine and will reduce the mean time to repair. It will also extend the service life of the tines.

Secondary Distribution		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	2.500	2.473	2.461	-	2.461	3.494	5.900	2.461	3.222
Total:	Quantity	-	-	-	-	-	-	-	-	-

LI GZ3250 - Assault Bridge (Mod) Army UNCLASSIFIED
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Exhibit P-3a, Individual Modification: PB 2016 Army			Date: Februar	y 2015	
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 01 / 20	P-1 Line Item Number GZ3250 / Assault Bridg		Modification GZ3250 / Assa		
	=>< 00.40	 =>/.00/.0			

				FY 2016	FY 2016	FY 2016				
Seconda	ry Distribution	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020
Secondary Distribution	Total Obligation Authority	2.500	2.473	2.461	-	2.461	3.494	5.900	2.461	3.222

LI GZ3250 - Assault Bridge (Mod) Army UNCLASSIFIED
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Exhibit P-3a, Individual Modification: Pl	B 2016 Arm	ny							Date: Feb	ruary 2015		
Appropriation / Budget Activity / Budge 2033A / 01 / 20	t Sub Acti	vity:	_	<b>tem Numb</b> Assault Brid					Modificati GZ3250 /			cations
<b>Models of Systems Affected:</b> Armored V Launch Bridge, Wolverine	ehicle/	Modifi Inserti		e: Equipme	ent Upgrad	de/Technica	al Re	lated RDT	&E PEs:			
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ A										
Procurement												
<b>Modification Item 1 of 3:</b> Armored Vehicle Launch Bridge												
A Kits												_
Recurring												
Installation Kits	- 1 -	6 / 2.500	3 / 0.950	3 / 1.288	- 1 -	3 / 1.288	12 / 2.039	15 / 5.285	13 / 2.461	20 / 3.222	- 1 -	72 <i>I</i> 17.74
Subtotal: Recurring	- / -	- /2.500	- /0.950	- /1.288	- / -	- /1.288	- /2.039	- /5.285	- /2.461	- /3.222	- / -	- /17.74
Subtotal: Armored Vehicle Launch Bridge	- / -	6 / 2.500	3 / 0.950	3 / 1.288	- / -	3 / 1.288	12 / 2.039	15 / 5.285	13 / 2.461	20 / 3.222	- / -	72 / 17.74
Modification Item 2 of 3: Wolverine												_
A Kits												_
Recurring												
Installation Kits	- / -	- 1 -	5 / 1.523	26 / 0.707	- 1 -	26 / 0.707	20 / 0.435	30 / 0.615	- 1 -	- 1 -	- 1 -	81 / 3.28
Subtotal: Recurring	- / -	- / -	- /1.523	- /0.707	- / -	- /0.707	- /0.435	- /0.615	- / -	- / -	- / -	- /3.28
Subtotal: Wolverine	- / -	- / -	5 / 1.523	26 / 0.707	- / -	26 / 0.707	20 / 0.435	30 / 0.615	- / -	- / -	- / -	81 / 3.28
Modification Item 3 of 3: Assault Breacher Vehicle												
A Kits												
Recurring												
Installation Kits	- 1 -	- 1 -	- 1 -	22 / 0.466	- 1 -	22 / 0.466	48 / 1.020	- 1 -	- 1 -	- 1 -	- 1 -	70 / 1.48
Subtotal: Recurring	- / -	- / -	- / -	- /0.466	- / -	- /0.466	- /1.020	- / -	- / -	- / -	- / -	- /1.48
Subtotal: Assault Breacher Vehicle	- / -	- / -	- / -	22 / 0.466	- / -	22 / 0.466	48 / 1.020	- / -	- / -	- / -	- / -	70 / 1.48
Subtotal: Procurement, All Modification Items	- / -	6/2.500	8 / 2.473	51 / 2.461	- / -	51 / 2.461	80 / 3.494	45 / 5.900	13 / 2.461	20 / 3.222	- / -	223 / 22.51
Installation			<u> </u>									
Modification Item 1 of 3: Armored Vehicle Launch Bridge	0 / 0.000	- 1 -	6/ -	31 -	- 1 -	31 -	3/ -	12 / -	15 / -	33 / -	- 1 -	721 -
Modification Item 2 of 3: Wolverine	0 / 0.000	- 1 -	- 1 -	5/ -	- 1 -	5/ -	261 -	201 -	30 / -	- 1 -	- 1 -	81 / -
Modification Item 3 of 3: Assault Breacher Vehicle	0 / 0.000	- 1 -	- 1 -	221 -	- 1 -	221 -	48 / -	- 1 -	- 1 -	- 1 -	- 1 -	701 -
Subtotal: Installation	0 / 0.000	- / -	6/ -	30 / -	- / -	30 / -	77/ -	32 / -	45/ -	33 / -	- / -	223 / -
Total												
Total Cost (Procurement + Support + Installation)	333.631	2.500	2.473	2.461		2.461	3.494	5.900	2.461	3.222	_	356.14

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Exhibit P-3a, Indivi	dual Modification: Pl	B 2016 Army				Date: February 2015	j
<b>Appropriation / Bu</b> 2033A / 01 / 20	dget Activity / Budge	et Sub Activity:	P-1 Line Item Num GZ3250 / Assault B			Modification Number GZ3250 / Assault Bridge	
Modification Item 1 of 3	: Armored Vehicle Launch E	Bridge	·			·	
Manufacturer Information	on						
Manufacturer Name: Vari	ous			Manufacturer Location: Va	arious		
Administrative Leadtime	(in Months): 8			Production Leadtime (in M	Months): 7		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	May 2014	May 2015	May 2016	May 2017	May 2018	May 2019	May 2020
Delivery Dates	Dec 2014	Dec 2015	Dec 2016	Dec 2017	Dec 2018	Dec 2019	Dec 2020

#### Installation Information

Method of Implementation: Various

motrica of implementation various												
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- 1 -	- /0.000	- /0.000	- / 0.000	- / 0.000	- / 0.000	- /0.000	- /0.000
FY 2014	0 / 0.000	- 1 -	6/ -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	6/ -
FY 2015	0 / 0.000	- 1 -	- 1 -	3/ -	- 1 -	3/ -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	3/ -
FY 2016	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	3/ -	- 1 -	- 1 -	- 1 -	- 1 -	3/ -
FY 2017	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	12 / -	- 1 -	- 1 -	- 1 -	12/ -
FY 2018	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	15 / -	- 1 -	- 1 -	15/ -
FY 2019	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	13/ -	- 1 -	13 / -
FY 2020	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	20 / -	- 1 -	201 -
To Complete	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	0 / 0.000	- 1 -	6/ -	3/ -	- 1 -	3/ -	31 -	12 / -	15 / -	33 / -	- / -	721 -

### Installation Schedule

			FY 2	2014			FY 2	2015			FY 2	2016			FY 2	2017			FY 2	2018			FY 2	2019			FY 2	2020			
	PYS	Q1	Q2	Q3	Q4	TC	Tot																								
In	-	-	-	6	-	-	-	3	-	-	-	3	-	-	-	12	-	-	-	15	-	-	-	13	-	-	-	20	-	-	72
Out	-	-	-	-	-	6	-	-	-	3	-	-	-	3	-	-	-	12	-	-	-	15	-	-	-	13	-	-	20	-	72

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Exhibit P-3a, Indiv	vidual Modification: Pl	3 2016 Army				Date: February 2015	5
<b>Appropriation / Bu</b> 2033A / 01 / 20	udget Activity / Budge	t Sub Activity:	P-1 Line Item Num GZ3250 / Assault B			Modification Numb GZ3250 / Assault Br	
Modification Item 2 of	3: Wolverine						
Manufacturer Informat	tion						
Manufacturer Name: Va	rious			Manufacturer Location: V	/arious		
Administrative Leadtime	(in Months): 8			Production Leadtime (in	Months): 8		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates		May 2015	May 2016	May 2017	May 2018		
Delivery Dates		Dec 2015	Dec 2016	Dec 2017	Dec 2018		

#### Installation Information

Method of Implementation: Various

motrica of implomentation various												
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- 1 -	- /0.000	- /0.000	- / 0.000	- / 0.000	- / 0.000	- /0.000	- / 0.000
FY 2014	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2015	0 / 0.000	- 1 -	- 1 -	5/ -	- 1 -	5/ -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	5/ -
FY 2016	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	26 / -	- 1 -	- 1 -	- 1 -	- 1 -	26 / -
FY 2017	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	201 -	- 1 -	- 1 -	- 1 -	20 / -
FY 2018	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	30 / -	- 1 -	- 1 -	30 / -
FY 2019	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	0 / 0.000	- 1 -	- 1 -	5/ -	- 1 -	5/ -	26 / -	20 / -	30 / -	- 1 -	- / -	81 / -

### Installation Schedule

			FY 2	2014			FY 2	2015			FY 2	2016			FY 2	2017			FY 2	2018			FY 2	2019	-		FY 2	2020			
	PYS	Q1	Q2	Q3	Q4	TC	Tot																								
In	-	-	-	-	-	-	-	5	-	-	-	26	-	-	-	20	-	-	-	30	-	-	-	-	-	-	-	-	-	-	81
Out	-	-	-	-	-	-	-	-	-	5	-	-	-	26	-	-	-	20	-	-	-	30	-	-	-	-	-	-	-	-	81

LI GZ3250 - Assault Bridge (Mod) Army

Exhibit P-3a, Indiv	idual Modification: PE	3 2016 Army				Date: February 2015	5
<b>Appropriation / Bu</b> 2033A / 01 / 20	dget Activity / Budge	t Sub Activity:	P-1 Line Item Nui GZ3250 / Assault			Modification Numb GZ3250 / Assault Br	
Modification Item 3 of 3	3: Assault Breacher Vehicle						
Manufacturer Informat	ion						
Manufacturer Name: Pea	arson LTD			Manufacturer Location: No	ewcastle, UK		
Administrative Leadtime	(in Months): 6			Production Leadtime (in N	Months): 6		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates			Mar 2016	Mar 2017			
Delivery Dates			Sep 2016	Sep 2017			

## Installation Information

Method of Implementation: Various

memora or impromentation randad												
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- 1 -	- /0.000	- /0.000	- / 0.000	- / 0.000	- / 0.000	- /0.000	- / 0.000
FY 2014	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2015	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2016	0 / 0.000	- 1 -	- 1 -	221 -	- 1 -	221 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	221 -
FY 2017	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	48 / -	- 1 -	- 1 -	- 1 -	- 1 -	48 / -
FY 2018	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / -
FY 2019	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	0 / 0.000	- 1 -	- 1 -	221 -	- 1 -	221 -	48 / -	- / -	- / -	- 1 -	- / -	70 / -

#### Installation Schedule

			FY 2	2014			FY 2	2015			FY 2	016			FY 2	2017			FY 2	2018			FY 2	2019			FY 2	020			
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	тс	Tot
In	-	-	-	-	-	-	-	-	-	-	22	-	-	-	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	70
Out	-	-	-	-	-	-	-	-	-	-	-	-	22	-	-	-	48	-	-	-	-	-	-	-	-	-	-	-	-	-	70

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 01: Tracked Combat Vehicles / BSA 20: G82925 / Assault Breacher Vehicle

Modification of Tracked Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) :			Program Ele	ments for Co	de B Items:			Other Relate	d Program El	ements:		
	Prior			FY 2016	FY 2016	FY 2016					То	
Resource Summary	Years	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total
Procurement Quantity (Units in Each)	91	15	7	-	-	-	-	-	-	-	-	113
Gross/Weapon System Cost (\$ in Millions)	332.810	62.951	36.583	2.975	-	2.975	2.952	-	-	-	-	438.271
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	_
Net Procurement (P1) (\$ in Millions)	332.810	62.951	36.583	2.975	-	2.975	2.952	-	-	-	-	438.271
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	332.810	62.951	36.583	2.975	-	2.975	2.952	-	-	-	-	438.271
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	ne correspondin	g budget request	s are document	ed elsewhere.)	Ť	į.		
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	3,657.253	4,196.733	5,226.143	-	-	-	-	-	-	-	-	3,878.504

### **Description:**

The Assault Breacher Vehicle (ABV) is a combined program with the United States Marine Corps (USMC). It is a tracked combat engineer vehicle for the Marine Air Ground Task Force and the Army Armored Brigade Combat Team (ABCT). It is designed to breach minefields and barrier obstacles to enable the tanks and infantry of the ABCT to maintain pace in offensive combat operations. The ABV provides crew protection and vehicle survivability equal to the M1A1 Abrams tank hull and has the speed and mobility to keep pace with the heavy maneuver force. The ABV is assigned to engineer companies in ABCTs. Its hull is an overhauled M1A1 Abrams tank hull with modifications for its new mission. Its mission equipment includes two Linear Demolition Charge Systems (modified Mine Clearing Line Charge (MICLC) systems), interchangeable Engineer Breaching System hardware consisting of a Full Width Mine Plow and a Combat Dozer Blade, a Lane Marking System to automatically mark a cleared path behind the ABV, and an integrated day/night vision system.

Army Acquisition Objective (AAO) ABV: 129

Secondar	y Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	15	7	-	-	-	-	-	-	-
	Total Obligation Authority	62.951	36.583	2.975	-	2.975	2.952	-	-	-
Total:	Quantity	15	7	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	62.951	36.583	2.975	-	2.975	2.952	-	-	-

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army **Date:** February 2015 Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 01: Tracked Combat Vehicles / BSA 20: G82925 / Assault Breacher Vehicle

Modification of Tracked Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready):	Pro	gram	Elements for Code	B Items:	Ot	her Related Program I	Elements:	
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)				
G82925 / Assault Breacher Vehicle	P-5, P-5a, P-21		91 / 332.810	15 / 62.951	7 / 36.583	- / 2.975	- / -	- / 2.975
Total Gross/Weapon System Cost			91 / 332.810	15 / 62.951	7 / 36.583	- / 2.975	- 1 -	- / 2.975

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

#### Justification:

FY 2016 Base procurement dollars in the amount of \$2.975 million support the System Engineering/Program Management and fielding. The ABV gives the Army and Marine Corps a tracked armored capability to breach minefields, reduce barrier obstacles, and mark cleared lanes for following heavy combat forces while maintaining pace with them throughout high intensity combat operations. The ABV is fabricated at Anniston Army Depot.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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Exhibit P-5, Cost Analysis: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:

2033A / 01 / 20

Date: February 2015

Item Number / Title [DODIC]:

G82925 / Assault Breacher Vehicle

ID Code (A=Service Ready, B=Not Service Ready):		N	DAP/MAIS Code:			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Procurement Quantity (Units in Each)	91	15	7	-	-	-
Gross/Weapon System Cost (\$ in Millions)	332.810	62.95	36.583	2.975	-	2.975
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	332.810	62.95	36.583	2.975	-	2.975
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	332.810	62.95	36.583	2.975	-	2.975
(The following Resource Summary rows are for information	onal purposes only. The cor	responding budget reques	sts are documented elsewher	re.)		3
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	3,657.253	4,196.73	5,226.143	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

	P	rior Years	;		FY 2014			FY 2015		FY	' 2016 Bas	se	FY	2016 OC	0	FY	2016 Tot	tal
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Tota Cos (\$ M
Flyaway Cost																		,
Recurring Cost																		•
Hardware ^(†)	3,500.000	91	318.500	2,899.000	15	43.485	2,899.000	7	20.293	-	-	-	-	-	-	-	-	
Full Width Mine Plow	-	-	-	287.000	8	2.296	381.000	4	1.524	-	-	-	-	-	-	-	-	
2. Combat Dozer Blade	-	-	-	140.000	4	0.560	187.000	2	0.374	-	-	-	-	-	-	-	-	
3. High Lift Adapter	-	-	-	167.000	15	2.505	211.000	7	1.477	-	-	-	-	-	-	-	-	
Lane Marking     System	-	-	-	165.000	15	2.475	209.900	7	1.469	-	_	-	-	-	-	-	-	
5. Linear Demolition Control System	-	-	-	150.000	15	2.250	172.000	7	1.204	-	-	-	-	-	-	-	-	
6. Integrated Vision System	-	-	-	280.000	15	4.200	415.000	7	2.905	-	-	-	-	-	-	-	-	
7. Hull Integration Kit	-	-	-	16.000	15	0.240	16.000	7	0.112	-	-	-	-	-	-	-	-	
8. Embedded Diagnostic Kit	-	-	-	35.000	15	0.525	75.000	7	0.525	-	-	-	-	-	-	-	-	
Fielding	-	-	4.310	-	-	2.215	-	-	2.352	-	-	1.000	-	-	-	-	-	
System Engineering/ Program Management	-	-	10.000	-	-	2.200	-	-	2.748	-	-	1.975	-	-	-	-	-	
Data	-	-	-	-	-	-	-	-	1.600	-	-	-	-	-	-	-	-	
Subtotal: Recurring Cost	-	-	332.810	-	-	62.951	-	-	36.583	-	-	2.975	-	-	-	-	-	
Subtotal: Flyaway Cost	-	-	332.810	_	-	62.951	-	_	36.583	-		2.975	_	_	_	- 1	_	

LI G82925 - Assault Breacher Vehicle Army UNCLASSIFIED
Page 3 of 8

Exhibit P-5, Cost Analysis: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:

2033A / 01 / 20

Date: February 2015

P-1 Line Item Number / Title:

G82925 / Assault Breacher Vehicle

G82925 / Assault Breacher Vehicle

ID Code (A=Service Ready, B=Not Service Ready):

MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

rtoto: oubtotalo or rotalo :			re bo ondoe o		,													
	F	Prior Years	6		FY 2014			FY 2015		F	Y 2016 Ba	se	F'	Y 2016 OC	0	F	Y 2016 Tot	:al
	Unit Cost	Qty	Total Cost	Unit Cost	Qtv	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qtv	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qtv	Total Cost
Cost Elements	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)
Gross/Weapon System Cost	3,657.253	91	332.810	4,196.733	15	62.951	5,226.143	7	36.583	-	-	2.975	-	-	-	-		2.975

Secondar	y Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Army	Quantity	15	7		-	-
	Total Obligation Authority	62.951	36.583	2.975	-	2.975
Total:	Quantity	15	7	=	-	-
Secondary Distribution	Total Obligation Authority	62.951	36.583	2.975	-	2.975

^(†) indicates the presence of a P-5a

LI G82925 - Assault Breacher Vehicle Army

Exhibit P-5a, Procurement History and Planning: PB 2016 A	rmy	Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 01 / 20	P-1 Line Item Number / Title: G82925 / Assault Breacher Vehicle	Item Number / Title [DODIC]: G82925 / Assault Breacher Vehicle

Cost Elements	0 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	<b>Qty</b> (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue Date
Hardware ^(†)		2014	Anniston Army Depot / Anniston	MIPR	TACOM, Warren, MI	May 2014	May 2015	15	2,899.000	Υ	Jan 2007	Jan 2007
Hardware ^(†)		2015	Anniston Army Depot / Anniston	MIPR	TACOM, Warren, MI	Jun 2015	Jun 2016	7	2,899.000	Υ	Jan 2007	Jan 2007

^(†) indicates the presence of a P-21

LI G82925 - Assault Breacher Vehicle Army

Ext	nibit I	P-21, Pr	oducti	on Sc	hedul	e: Pl	3 201	6 Arm	ıy														Date	: Feb	ruary	2015	5			
		riation / 01 / 20	Budge	et Acti	vity /	Bud	get Sı	ıb Ac	tivity	:	1		Item / Assa														[DOE eache		icle	
			lements in Each)								Fiscal Y	ear 2014	ļ						,				Fiscal Y	ear 2015						
				ACCEPT									C	alendar	Year 201	4								Calen	dar Year	2015				
D F		SERVICE	PROC QTY	PRIOR TO 1 OCT 2013	BAL DUE AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N N	n 1	A U G	A B S	0 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	O C >	S E P	
Hard	ware	'															,													
Prior	Years D	eliveries: 91																												
1	2014	ARMY (IV)	15	-	15								Α -	-	-	-	-	-	-	-	-	-	-	-	2	2	1	1	1	
1	2015	ARMY (V)	7	-	7																					Α -	-	-	-	
	,	,			,	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A	N N	Ŋ	A U G	S E P	0 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	A U G	S E P	

													UN	ICL	ASSI	FIED	)													
nib	it	P-21, P	roduc	tion Sc	hedul	le: PE	3 201	6 Arn	ny														Date	e: Fel	oruary	201	5			
				get Acti	ivity /	Budg	get Sı	ıb Ad	ctivity	:																			nicle	
				i							Fiscal Y	ear 2016	3										Fiscal Y	ear 2017						
								1						Calenda	r Year 20	16			1	1		(		Cale	ndar Yea	r 2017	,		1	
1	FY	SERVIC		TO 1	DUE AS OF 1 OCT	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	B A L
ware	e																				<u> </u>					<u> </u>				
Yea	ars [	Deliveries: 9																												
2	2014	ARMY (IV	1:	5 7	8	1	1	1	1	1	1	1	1																	-
2	2015	ARMY (V)		7 -	7	-	-	-	-	-	-	-	-	1	1	1	1	1	1	1										-
		1				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	J U	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	N N	J U L	A U G	S E P	B A L
1	war Yea	FY ware Years I 2014	Cost (Unit	Cost Elements (Units in Each)  FY SERVICE PROCURY Ware  Years Deliveries: 91  2014 ARMY (IV) 1	Cost Elements (Units in Each)	3A / 01 / 20  Cost Elements (Units in Each)  ACCEPT PRIOR BAL TO 1 DUE O N D J DUE OCT AS OF C O E A A SOF C O E A A SOF C O E A A SOF C O N D D DUE O N D D D DUE O N D D D D D DUE O N D D D D D D D D D D D D D D D D D D	Cost Elements	P-1   G82   G83   G83   G84   G85   G85	P-1 Line G82925   P-1 Line G	P-21, Production Schedule: PB 2016 Army   P-1 Line Item     SA / 01 / 20	P-21, Production Schedule: PB 2016 Army   P-1 Line Item Num G82925 / Assault E	P-21, Production Schedule: PB 2016 Army   P-1 Line Item Number / G82925 / Assault Breach   G82925 / Assault Breach   G82925 / Assault Breach   PFISCAI Year 2016   PROC OCT AS OF C O E A E A E A P A U U WAITE   PROC OCT AS OF C O E A E A E A P A U U WAITE   PROC OCT AS OF C O E A E A E A P A U U WAITE   PROC OCT AS OF C O E A E A E A P A U U U U U U U U U U U U U U U U U	P-21, Production Schedule: PB 2016 Army   P-1 Line Item Number / Title: G82925 / Assault Breacher Ve   G82925 / Assault Br	P-1 Line Item Number / Title: G82925 / Assault Breacher Vehicle   G82925 / Assault Breacher Vehicle	P-21, Production Schedule: PB 2016 Army   P-1 Line Item Number / Title: G82925 / Assault Breacher Vehicle   G82925 / Assault Breacher Ve	P-21, Production Schedule: PB 2016 Army   P-1 Line Item Number / Title: G82925 / Assault Breacher Vehicle   G82925 / Assault Breacher Ve	Strict   Production   Schedule: PB 2016 Army   P-1 Line   Item   Number / Title:   G82925 / Assault   Breacher   Vehicle	P-21, Production Schedule: PB 2016 Army   P-1 Line Item Number / Title:   G82925 / Assault Breacher Vehicle   G82925 / Assault Breacher	P-21, Production Schedule: PB 2016 Army   P-3	Date	Date: Feb   Propriation   Budget Activity   Budget Sub Activity:   Balget Sub Activity:   G82925   Assault Breacher Vehicle   G82925	Date: February  Propriation / Budget Activity / Budget Sub Activity:  3A / 01 / 20    P-1 Line Item Number / Title: G82925 / Assault Breacher Vehicle   G82925 / Assault Breac	Date: February 201  Propriation / Budget Activity / Budget Sub Activity: 3A / 01 / 20    P-1 Line Item Number / Title: G82925 / Assault Breacher Vehicle   G82925 / Assault Br	Date: February 2015  P-21, Production Schedule: PB 2016 Army  Popriation / Budget Activity / Budget Sub Activity:  3A / 01 / 20    P-1 Line Item Number / Title: G82925 / Assault Breacher Vehicle   G82925 / Assa	Date: February 2015    P-21, Production Schedule: PB 2016 Army   P-1 Line Item Number / Title:   G82925 / Assault Breacher Vehicle   G8292	Date: February 2015   Date: February 2015				

Exhibit P-21, Production Schedule: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
2033A / 01 / 20	G82925 / Assault Breacher Vehicle	G82925 / Assault Breacher Vehicle

		Produc	tion Rates (Each /	Month)				Procurement Le	adtime (Months)			
MFR	<b>\</b>					Initi	al			Reo	rder	
Ref	l .	MSR For 2016	1-8-5 For 2016	MAX For 2016	ALT Prior to Oct 1	ALT After Oct 1	Mfg PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Mfg PLT	Total After Oct 1
1	Anniston Army Depot - Anniston	1	12	36	-	10	12	22	-	9	12	21

#### Remarks:

Production rates are yearly.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

#### Service/Agency Suffixes:

(IV) Base

(V) Base

LI G82925 - Assault Breacher Vehicle Army

[&]quot;A" in the Delivery Schedule indicates the Contract Award Date.

Exhibit P-40, Budget Line Item Justification: PB 2016 Army **Date:** February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 01: Tracked Combat Vehicles / BSA 20: G80571 / M88 FOV MODS

Modification of Tracked Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) :			Program Ele	ments for Co	de B Items:			Other Relate	d Program El	ements:		
	Prior			FY 2016	FY 2016	FY 2016					То	
Resource Summary	Years	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	67.486	28.469	1.975	14.878	-	14.878	14.865	14.863	16.594	-	-	159.130
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	67.486	28.469	1.975	14.878	-	14.878	14.865	14.863	16.594	-	-	159.130
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	67.486	28.469	1.975	14.878	-	14.878	14.865	14.863	16.594	-	-	159.130
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	ne corresponding	g budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	_
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

#### **Description:**

The M88 Fleet Modification Program applies Materiel Developer and Combat Developer approved modifications to the fielded M88 family of vehicles (FOV). These improvements include Blue Force Tracking and the M88 FOV modifications to maintain operational readiness rates, improve vehicle safety and operation, and minimize the effects of component obsolescence, while increasing commonality. Operational Modification Kits will be procured for the M88 FOV. Specific modifications include an automatic fire extinguishing system, upgraded electrical circuit panel, improved operational and task lighting, a driver's vision enhancer for optimal night operation, enhanced vehicle diagnostics tied to the vehicle's interactive electronic technical manuals, and an improved metal cutting tool to reduce recovery time in combat situations.

Secondar	y Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	15.566	1.806	14.878	-	14.878	14.865	14.863	16.594	=
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	12.903	0.169	-	-	-	-	-	-	-
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	28.469	1.975	14.878	-	14.878	14.865	14.863	16.594	-

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 01: Tracked Combat Vehicles / BSA 20: G80571 / M88 FOV MODS

Modification of Tracked Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) :	F	rogran	Elements for Code	B Items:	Oth	er Related Program I	Elements:	
Exhibits Schedule	·		Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)
G80571 / M88 FOV Field upgrade (Increase Performance)	P-3a		- / 67.486	- / 28.469	- / 1.975	- / 14.878	- / -	- / 14.878
Total Gross/Weapon System Cost			- / 67.486	- / 28.469	- / 1.975	- / 14.878	- 1 -	- / 14.878
Exhibits Schedule			FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)
G80571 / M88 FOV Field upgrade (Increase Performance)	P-3a		- / 14.865	- / 14.863	- / 16.594	- / -	- / -	- / 159.130
Total Gross/Weapon System Cost			- / 14.865	- / 14.863	- / 16.594	- / -	- 1 -	- / 159.130

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

#### Justification:

FY 2016 base procurement dollars in the amount of \$14.878 Million supports field Safety and operational modification fixes. Modification fixes include automatic fire extinguishing system enhancements, C4ISR (command, control, communications, computers, intelligence, surveillance and reconnaissance) integration efforts, hydraulic system safety enhancements, engine reliability improvements, recovery equipment enhancements, upgraded electrical circuit panel, improved operational and task lighting, a driver's vision enhancer for optimal night operation, enhanced vehicle diagnostics tied to the vehicle's interactive electronic technical manuals, and an improved metal cutting tool to reduce recovery time in combat situations. Modifications support enhancements in operational safety, maintainability, and network capability for the M88 fleet of vehicles.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L.110-181) this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

Exhibit P-3a, Individual Modification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:
2033A / 01 / 20

Date: February 2015

Modification Number / Title:
G80571 / M88 FOV MODS

G80571 / M88 FOV Field upgrade

2033A / 01 / 20			G8	05/1/ M88	FOV MODS	<b>i</b>			G80571	/ M88 FO\	/ Field upgra	ide
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Resource Summary	Itais	F1 2014	F1 2015	Dase	000	IOlai	F1 2017	F1 2010	F1 2019	F1 2020	Complete	IOlai
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	67.486	28.469	1.975	14.878	-	14.878	14.865	14.863	16.594	-	-	159.130
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	67.486	28.469	1.975	14.878	-	14.878	14.865	14.863	16.594	-	-	159.130
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	67.486	28.469	1.975	14.878	-	14.878	14.865	14.863	16.594	-	-	159.130
(The following	Resource Sum	mary rows are fo	r informational	purposes only. Th	ne corresponding	g budget request	s are documente	ed elsewhere.)			1	
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	_	-	-	-	-	-	-

### **Description:**

Supports field Safety and operational modification fixes. Modification fixes include automatic fire extinguishing system enhancements, C4ISR (command, control, communications, computers, intelligence, surveillance and reconnaissance) integration efforts, hydraulic system safety enhancements, engine reliability improvements, recovery equipment enhancements, upgraded electrical circuit panel, improved operational and task lighting, a driver's vision enhancer for optimal night operation, enhanced vehicle diagnostics tied to the vehicle's interactive electronic technical manuals, and an improved metal cutting tool to reduce recovery time in combat situations. Modifications support enhancements in operational safety, maintainability, and network capability for the M88 fleet of vehicles. Field installation costs are included in the contractor cost and cannot be separated.

Second	dary Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	15.566	1.806	14.878	-	14.878	14.865	14.863	16.594	-
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	12.903	0.169	-	-	-	-	-	-	-
Total:	Quantity	-	-	-	-	-	-	-	-	=
Secondary Distribution	Total Obligation Authority	28.469	1.975	14.878	-	14.878	14.865	14.863	16.594	-

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LI G80571 - M88 FOV MODS Army

Exhibit P-3a, Individual Modification: F	PB 2016 Arm	ıy							Date: Feb	ruary 2015	,	
Appropriation / Budget Activity / Budg 2033A / 01 / 20	et Sub Acti	vity:	<b>P-1 Line I</b> G80571 / I							ion Numbe M88 FOV I	er / Title: Field upgra	de
Models of Systems Affected: M88		Modifi	cation Typ	e: Increas	e Performa	ance	Re	lated RDT	&E PEs:			
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)											
Procurement												
Modification Item 1 of 1: M88 FOV Field Upgrades												
A Kits												
Recurring												
M88 FOV Mod Kit & Install	628 / 67.486	232 / 28.469	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / -	- 1 -	860 / 95.955
Program Mgt	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /5.264	- /3.579	- 1 -	- 1 -	- /8.843
Field Safety & Operational Fixes STS	- 1 -	- 1 -	- / 1.975	- / 14.878	- 1 -	- / 14.878	- / 14.865	- / 9.599	- / 13.015	- / -	- / -	- / 54.332
Subtotal: Recurring	- /67.486	- / 28.469	- /1.975	- /14.878	- / -	- /14.878	- /14.865	- /14.863	- /16.594	- / -	- / -	- /159.130
Subtotal: M88 FOV Field Upgrades	628 / 67.486	232 / 28.469	- /1.975	- /14.878	- / -	- /14.878	- /14.865	- /14.863	- /16.594	- / -	- / -	860 / 159.130
Subtotal: Procurement, All Modification Items	628 / 67.486	232 / 28.469	- /1.975	- /14.878	- / -	- /14.878	- /14.865	- /14.863	- /16.594	- / -	- / -	860 / 159.130
Installation												
Modification Item 1 of 1: M88 FOV Field Upgrades	83 / 0.000	545 / -	232 / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	860 / -
Subtotal: Installation	83 / 0.000	545 / -	232 / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	860 / -

14.878

14.878

14.865

P-1 Line #11

14.863

16.594

159.130

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Total Cost (Procurement + Support + Installation)

67.486

28.469

1.975

Total

Exhibit P-3a, Indiv	idual Modification: Pl	3 2016 Army				Date: February 201	5
<b>Appropriation / Bu</b> 2033A / 01 / 20	dget Activity / Budge	t Sub Activity:	<b>P-1 Line Item Nu</b> G80571 / M88 FC			Modification Numb	
Modification Item 1 of 1	1: M88 FOV Field Upgrades						
Manufacturer Informati	on						
Manufacturer Name: BA	E			Manufacturer Location: Y	/ork,PA		
Administrative Leadtime	(in Months): 6			Production Leadtime (in	Months): 12		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	ontract Dates Mar 2014						
Delivery Dates	Mar 2015						

### Installation Information

Method of Implementation: Contractor installed in the field

				FY 2016	FY 2016	FY 2016					То	
	Prior Years	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	83 / 0.000	545 / 0.000	- / 0.000	- / 0.000	- 1 -	- / 0.000	- /0.000	- / 0.000	- / 0.000	- 1 -	- /0.000	628 / 0.000
FY 2014	0 / 0.000	- 1 -	232 / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	232 / -
FY 2015	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / -
FY 2016	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / -
FY 2020	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	83 / 0.000	545 / -	232 / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	860 / -

## Installation Schedule

			FY 2	2014			FY 2	2015			FY 2	2016			FY 2	2017			FY 2	2018			FY 2	2019			FY 2	2020			
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	628	34	66	66	66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	860
Out	83	77	156	156	156	34	66	66	66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	860

**UNCLASSIFIED** 

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 01: Tracked Combat Vehicles / BSA 20: GZ3001 / Joint Assault Bridge

Modification of Tracked Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) : E	3		Program Ele	ments for Cod	de B Items: 06	654804A		Other Relate	d Program El	ements:		
	Prior			FY 2016	FY 2016	FY 2016					То	
Resource Summary	Years	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total
Procurement Quantity (Units in Each)	-	-	4	4	-	4	13	19	28	30	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	18.458	2.002	39.362	33.455	-	33.455	85.478	119.040	168.281	188.193	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	18.458	2.002	39.362	33.455	-	33.455	85.478	119.040	168.281	188.193	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	18.458	2.002	39.362	33.455	-	33.455	85.478	119.040	168.281	188.193	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	ne corresponding	g budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	9,840.500	8,363.750	-	8,363.750	6,575.231	6,265.263	6,010.036	6,273.100	Continuing	Continuing

### **Description:**

The Joint Assault Bridge (JAB) replaces the existing M48A5/M60A2 chassis Armored Vehicle Launch Bridge (AVLB) to meet current maneuver force survivability, suitability, and supportability thresholds. The JAB is an M1A1 Abrams Chassis-based engineer vehicle with a Heavy M1A2 Abrams suspension that launches and retrieves the 18.3 meter AVLB Bridge which supports Military Load Class (MLC) 85. AVLB bridges will be upgraded to MLC 85 standard as part of the JAB program at Anniston Army Depot. The system will be employed with Army Armored Brigade Combat Teams (ABCTs) within the Brigade Engineer battalions (BEBs), Engineer Mobility Augmentation Companies (MACs), as well as the Marines. The JAB is currently in the Engineering and Manufacturing Development Phase with two variant system designs being evaluated In Accordance With (IAW) user requirements. Milestone C and Type Classification - Limited Procurement Decision is planned for fourth quarter 2015. The production acquisition strategy encourages establishment of a public/private partnership with Anniston Army Depot (ANAD)/ Developmental Test completion is planned for October 2017, and Initial Operational Test completion is planned for March 2018 to support a Full Rate Production Decision in mid-FY18.

The FY 16 funding request was reduced for \$1.602 million to account for the availability of prior year execution balances

JAB AAO: 337

	Secondary Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	4	4	-	4	13	6	4	4
	Total Obligation Authority	2.002	39.362	33.455	-	33.455	85.478	36.806	24.281	25.000
ANG	Quantity	-	-	-	-	-	-	6	12	14
	Total Obligation Authority	-	-	-	-	-	-	37.267	72.000	85.893
AR	Quantity	-	-	-	-	-	-	7	12	12

Exhibit P-40, Budget Line Item Justification: PB 2016 Army Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

2033A: Procurement of W&TCV, Army / BA 01: Tracked Combat Vehicles / BSA 20:

P-1 Line Item Number / Title:

GZ3001 / Joint Assault Bridge

Modification of Tracked Combat Vehicles

ID Code (A=Service Ready, B=	Not Service Ready) : B	Pr	ogram Elements	for Code B Item	<b>s</b> : 0654804A		Other Related Pro	gram Elements:		
Secondar	y Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
	Total Obligation Authority	-	-	-	-	-	-	44.967	72.000	77.300
Total:	Quantity	-	4	4	-	4	13	19	28	30
Secondary Distribution	Total Obligation Authority	2.002	39.362	33.455	-	33.455	85.478	119.040	168.281	188.193

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army **Date:** February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 01: Tracked Combat Vehicles / BSA 20: GZ3001 / Joint Assault Bridge

Modification of Tracked Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) : B	Pro	gram	Elements for Code	<b>B Items</b> : 0654804A		Other Related Program I	Elements:	
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Co (Each) I (\$ M)	st Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)
GZ3001 / Joint Assault Bridge	-5, P-5a, P-21	В	- / 18.458	- /2.002	4 / 39.362	4 / 33.455	- / -	4 / 33.455
Total Gross/Weapon System Cost			- / 18.458	- / 2.002	4 / 39.362	4 / 33.455	- 1 -	4 / 33.455

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

#### Justification:

FY 2016 Base Procurement dollars in the amount of \$33.455 million procures 4 Joint Assault Bridges in support of Active Army requirements. The JAB fills a critical shortage in recently established BEB formations. The new JAB chassis provides a system that offers the Combatant Commander enhanced survivability and mobility compared to the legacy M60 AVLB and equivalent to the Abrams Legacy Fleet while also providing improved sustainability. The current Acquisition Strategy supports a public private partnership between the winning contractor and Anniston Army Depot.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

							U	NCLASS	IFIEL	)								
Exhibit P-5, Cost	Analysis	s: PB 20	)16 Army											Date: Fe	ebruary 2	2015		
<b>Appropriation / B</b> 2033A / 01 / 20	udget A	ctivity /	Budget	Sub Act	ivity:			<b>Number</b> nt Assault								<b>Fitle [DOI</b> Assault Br		
ID Code (A=Service Read	ly, B=Not Servi	ce Ready) :	В			'			M	AP/MAIS	Code:							
F	Resource	Summ	ary		F	Prior Yea	ars	FY 201	4	FY 2	2015	FY 2	2016 Bas	e F	Y 2016 (	ОСО	FY 2016	Total
Procurement Quantity (Uni	its in Each)						-		-			4		4		-		
Gross/Weapon System Co		s)					18.458		2.002		39.30	62	33	.455		-		33.45
Less PY Advance Procure	ment (\$ in Mil	lions)					-		-		-			-		-		_
Net Procurement (P1) (\$ in	Millions)						18.458		2.002		39.30	62	33	.455		-		33.45
Plus CY Advance Procure	ment (\$ in Mill	lions)					-		_		_			-		-		
Total Obligation Authorit	<b>y</b> (\$ in Millions	:)					18.458		2.002		39.30	62	33	.455		-		33.45
(T)	he following F	Resource S	ummary row	s are for info	ormational p	ırposes only	. The corres	ponding budge	t request	are docume	nted elsew	here.)				·		
Initial Spares (\$ in Millions)							-		-		-			-		-		
Gross/Weapon System Ur	nit Cost (\$ in 7	Thousands)					-		-		9,840.50	00	8,363	.750		-		8,363.75
												·		·				
Note: Subtotals or Totals i	n this Exhibit	P-5 may n	ot be exact o	r add, due to	o rounding.								_					
	Prior Years			FY 2014			FY 2015		FY	2016 Bas	e	FY	2016 OC	0	FY	2016 Tota	al	
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
Hardware ^(†)	-	-	18.458	-	-	-	5,200.000	4	20.800	5,200.000	4	20.800	-	-	-	5,200.000	4	20.80
Bridge Upgrades	-	-	-	-	-	-	400.000	4	1.600	400.000	4	1.600	-	-	-	400.000	4	1.60
System Engineering/ Program Management	-	-	-	-	-	2.002	-	-	2.000	-	-	2.000	-	-	-	-	-	2.00
Fielding	-	-	-	-	-	-	-	-	2.000	-	-	2.000	-	-	-	-	-	2.00
Subtotal: Recurring Cost	-	-	18.458	-	-	2.002	-	-	26.400	-	-	26.400	-	-	-	-	-	26.40
Non Recurring Cost					1										·			
Logistics Products	-	-	-	-	-	-	-	-	12.962	-	-	7.055	-	-	-	-	-	7.05
Subtotal: Non Recurring Cost	-	-	-	-	-	-	-	-	12.962	-	-	7.055	-	-	-	-	-	7.05
Subtotal: Flyaway Cost	-	-	18.458	-	-	2.002	-	-	39.362	-	-	33.455	-	-	-	-	-	33.45
Gross/Weapon System Cost	-	-	18.458	-	-	2.002	9,840.500	4	39.362	8,363.750	4	33.455	-	-	-	8,363.750	4	33.45
												FY 2	016		FY 2016		FY 201	6
	Sec		istribution				FY	2014		FY 2015		Bas	se		oco		Total	
Army		-	antity	alle e elle e				- 0.000			4		4			-		
Total		_	al Obligation A	utnority				2.002			39.362 <b>4</b>		33.455 <b>4</b>			-		33.45
Total: Secondary Distribution			antity al Obligation A	Authority		-		2.002			39.362		33.455			-		33.45
		101	a. Obligation A	adilonty				2.002	1		JJ.JUZ		33.433	1		-		JJ.45

LI GZ3001 - Joint Assault Bridge Army

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Exhibit P-5, Cost Analysis: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 01 / 20	P-1 Line Item Number / Title: GZ3001 / Joint Assault Bridge	Item Number / Title [DODIC]: GZ3001 / Joint Assault Bridge
ID Code (A=Service Ready, B=Not Service Ready) : B	MDAP/MAIS Code:	'
2033A / 01 / 20	GZ3001 / Joint Assault Bridge	GZ3001 / Joint Assault Bridge

LI GZ3001 - Joint Assault Bridge Army

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Exhibit P-5a, Procurement History and Planning: PB 2016 A	Army	Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity:						
2033A / 01 / 20	GZ3001 / Joint Assault Bridge	GZ3001 / Joint Assault Bridge				

Cost Elements	0 C 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	<b>Qty</b> (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue Date
Hardware ^(†)		2015	TBD / TBS	C / TBD	TACOM, Warren, MI	Sep 2015	Dec 2016	4	5,200.000	N		
Hardware ^(†)		2016	TBD / TBS	C / TBD	TACOM, Warren, MI	Dec 2015	Feb 2017	4	5,200.000	N		

^(†) indicates the presence of a P-21

#### Remarks:

Anticipate a public private partnership with Annistion Army Depot providing overhauled M1A1 Abrams Chassis.

LI GZ3001 - Joint Assault Bridge Army

Ex	hibit	P-2	1, Pro	ducti	ion Sc	hedu	e: PE	3 201	6 Arm	ıy														Date	: Feb	oruary	2015	5			
		oriati / 01 /		Budge	et Activ	vity /	Budg	get Sı	ıb Ac	tivity	:		<b>Line</b> 3001														<b>Title</b> Assa				
	·	Cost Elements (Units in Each) Fiscal Year 2015									,									Fiscal Y	ear 2016										
		ACCEPT PRIOR BAL									(	Calendar	Year 201	5								Caler	ndar Year	r 2016							
0 0	F R	SE	ERVICE	PROC QTY	PRIOR TO 1 OCT 2014	BAL DUE AS OF 1 OCT	0 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	A U G	S E P	0 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	A U G	S E P	B A L
Har	dware																		,				,								-
	1 201	5 ARM	RMY	4	-	4												Α -	-	-	-	-	-	-	-	-	-	-	-	-	4
	1 201	6 ARM	RMY	4	-	4															A -	-	-	-	-	-	-	-	-	-	4
		O N D J C O E A T V C N						F E B	M A R	A P R	M A Y	J U	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	B A L			

Ex	hik	bit P	-21, Pro	duct	ion Sc	hedu	le: PE	3 201	6 Arm	ıy														Date	e: Feb	oruary	2015	5			
-	-	-	<b>ation / I</b> 11 / 20	Budge	et Acti	vity /	Budç	get Sı	ıb Ac	tivity	:		<b>Line</b> 3001 /															[DOI			
			Cost Elements (Units in Each)									Fiscal Y	ear 2017											Fiscal Y	ear 2018						
			ACCEPT BAIL										(	Calendar	Year 201	7								Caler	ndar Year	2018					
0 0	R	FY	SERVICE	PROC QTY	PRIOR TO 1 OCT 2016	BAL DUE AS OF 1 OCT	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	n n	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	A U G	S E P	B A L
Har	dwa	re																,													
	1	2015	ARMY	4	-	4	-	-	1	1	1	1																			-
	1 :	2016	ARMY	4	-	4	-	1				1	1	1																	-
Ì	•						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 J	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	B A L

LI GZ3001 - Joint Assault Bridge Army

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Exhibit P-21, Production Schedule: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
2033A / 01 / 20	GZ3001 / Joint Assault Bridge	GZ3001 / Joint Assault Bridge

		Produc	tion Rates (Each /	Month)				Procurement Lea	adtime (Months)			
MFR						Init	ial			Reo	rder	
Ref					ALT	ALT		Total	ALT	ALT		Total
#	MFR Name - Location	MSR For 2016	1-8-5 For 2016	MAX For 2016	Prior to Oct 1	After Oct 1	Mfg PLT	After Oct 1	Prior to Oct 1	After Oct 1	Mfg PLT	After Oct 1
1	TBD - TBS	1	2	3	-	12	14	26	-	3	14	17

[&]quot;A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Exhibit P-40, Budget Line Item Justification: PB 2016 Army Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 01: Tracked Combat Vehicles / BSA 20: GA0700 / M1 Abrams Tank (MOD)

Modification of Tracked Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) : A	4		Program Ele	ments for Cod	de B Items:			Other Relate	d Program Ele	ements:		
	Prior			FY 2016	FY 2016	FY 2016					То	
Resource Summary	Years	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	5,021.591	178.100	237.023	367.939	-	367.939	489.437	606.014	451.773	496.647	16,622.398	24,470.922
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	5,021.591	178.100	237.023	367.939	-	367.939	489.437	606.014	451.773	496.647	16,622.398	24,470.922
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	5,021.591	178.100	237.023	367.939	-	367.939	489.437	606.014	451.773	496.647	16,622.398	24,470.922
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	ne corresponding	g budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	8,176.422	-	8,176.422	-	-	-	-	-	216,556.832

### **Description:**

The Abrams Tank Fleet Modification Program applies Materiel Developer and Combat Developer approved modifications to the fielded Abrams family of vehicles either through field modifications at the unit or through application during vehicle recapitalization. Common Abrams modifications include Vehicle Health Management, Blue Force Tracking, Mounted Family of Computer System (MFoCs) and Power Train Improvement & Integration Optimization Program (i.e. Total Integrated Engine Revitalization (TIGER) and Transmission Enterprise) which provide more reliability, durability, and a single standard for the vehicle's power train. Survivability improvements include frontal and side armor upgrades. Key safety improvements include the loaders tray modification, ammunition rack upgrades, and Rear View Sensing System (RVSS).

The Abrams program must execute a series of Engineering Change Proposals (ECPs) to address capability gaps on the tank fleet. These technology upgrades will be integrated through a recapitalization program between Anniston Army Depot and General Dynamics Land Systems (GDLS). ECP 1A addresses interoperability on the new network and system shortfalls in electrical power to enable integration of approved directed requirements, survivability improvements and an electronics refresh to address obsolescence and significantly improve sustainability. Specifically the upgrades include an updated Handheld Manpack Small (HMS) communication system, a new 1.000 amp generator, power management distribution system (a new slip ring, battery monitoring system, and an Auxiliary Power Unit (APU)), the integration kit for the Counter Radio-Controlled IED Electronic Warfare (CREW/Duke3), Next Generation Armor, Ammunition Data Link (ADL) to enable the system to fire a smart round currently under development, and the upgrade of six (6) line replaceable units (LRUs) to line replaceable modules (LRMs).

Secondar	y Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	178.100	237.023	367.939	-	367.939	489.437	606.014	451.773	496.647
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	178.100	237.023	367.939	-	367.939	489.437	606.014	451.773	496.647

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LI GA0700 - M1 Abrams Tank (MOD) Army

P-1 Line #13

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army **Date:** February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 01: Tracked Combat Vehicles / BSA 20: GA0700 / M1 Abrams Tank (MOD) Modification of Tracked Combat Vehicles

ID Code  (A=Service  Ready,  B=Not  Service  Ready) : A	Pr	ogran	n Elements for Code	B Items:	Oth	ner Related Program	Elements:	
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)
GA0700 / Mods (Increase Performance)	P-3a		- /5,021.591	- / 178.100	- /237.023	- / 367.939	- / -	- /367.939
Total Gross/Weapon System Cost			- / 5,021.591	- / 178.100	- / 237.023	- / 367.939	- / -	- / 367.939
Exhibits Schedule			FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)			
GA0700 / Mods (Increase Performance)	P-3a		- / 489.437	- / 606.014	- /451.773	- / 496.647	- / 16,622.398	- / 24,470.922
Total Gross/Weapon System Cost			- / 489.437	- / 606.014	- / 451.773	- / 496.647	- / 16,622.398	- / 24,470.922

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

#### Justification:

FY 2016 base procurement dollars in the amount of \$367.939 million support the procurement and field application of the following: Ammunition Data Link (ADL), Vehicle Health Management and Embedded Training (VEM), and Commander's Remote Operated Weapon Station Low Profile (CROWS-LP). Begins ECP 1A hardware procurement for installation during vehicle recapitalization in FY 2017. Funding will continue the support of the Total Integrated Engine Revitalization (TIGER) and Transmission Enterprise programs, Direct Support Electrical System Test Sets (DSESTS) and upgrades to Training Aids, Devices, Simulators and Simulations (TADSS). This funding supports optimizing the production facility and equipment at the Joint Systems Manufacturing Center, Lima OH and Allison Transmission to support the start of future production to produce efficiently at low volumes. Qualification of an alternate source of supply for the transmission and other tank components will be analyzed. Government and contractor salaries will be funded from this line

In accordance with Section 1815 of the FY2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

Exhibit P-3a, Individual Modification: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Modification Number / Title:
2033A / 01 / 20	GA0700 / M1 Abrams Tank (MOD)	GA0700 / Mods

2033A / 01 / 20	GA0700 / M1 Abrams Tank (MOD)							GA0700 / Mods				
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	5,021.591	178.100	237.023	367.939	-	367.939	489.437	606.014	451.773	496.647	16,622.398	24,470.922
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	5,021.591	178.100	237.023	367.939	-	367.939	489.437	606.014	451.773	496.647	16,622.398	24,470.922
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	5,021.591	178.100	237.023	367.939	-	367.939	489.437	606.014	451.773	496.647	16,622.398	24,470.922
(The following	Resource Sum	mary rows are fo	or informational p	ourposes only. Th	ne corresponding	g budget request	s are documente	ed elsewhere.)			·	
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	8,176.422	-	8,176.422	-	-	-	-	-	216,556.832

### **Description:**

Modifications to the Abrams Family of Vehicles. Supports the procurement and field application of the following: Ammunition Data Link (ADL), Vehicle Health Management and Embedded Training (VEM), and Commander's Remote Operated Weapon Station Low Profile (CROWS-LP). Begins ECP 1A hardware procurement for installation during vehicle recapitalization in FY 2017. Funding will continue the support of the Total Integrated Engine Revitalization (TIGER) and Transmission Enterprise programs, Direct Support Electrical System Test Sets (DSESTS) and upgrades to Training Aids, Devices, Simulators and Simulations (TADSS). This funding supports optimizing the production facility and equipment at the Joint Systems Manufacturing Center, Lima OH and Allison Transmission to support the start of future production to produce efficiently at low volumes. Qualification of an alternate source of supply for the transmission and other tank components will be analyzed. Government and contractor salaries will be funded from this line.

Abrams Field Upgrades (MOD 2): Provides funding for components and labor for required safety and other field related modifications. These modifications correct or alleviate operational deficiencies, improve reliability and maintainability, correct faulty performance or quality, reduce logistical support requirements, standardize equipment and training devices, prevent injury or damage to equipment, and meet environmental protection standards identified during testing, training exercises or in combat. Field modifications include Blue Force Tracking (BFT) 2 and Mounted Family of Computer System (MFoCS), Ammunition Data Link (ADL), Vehicle Health Management and Embedded Training (VEM), Handheld Manpack Small (HMS) and Commander's Remote Operated Weapon Station Low Profile (CROWS-LP). Installation of hardware is generally conducted on a unit-by-unit basis by several field modification teams and is subject to availability. Installation costs are included in the contractor costs and cannot be broken out.

Engineering Change Proposal (ECP) 1A (MOD3): Funding for Engineering Change Proposal (ECP) 1A includes the procurement and application of Army Directed requirements and Space Weight and Power-Cooling (SWAP-C) buyback components during the recapitalization (RECAP) of the Abrams tank. Each vehicle will be overhauled to a zero hour/zero mile condition and then reassembled with the following additional hardware: Handheld Manpack Small (HMS), Power Generation/Distribution improvements including Battery Monitoring System (BMS), 1000 Amp Generator, Slip Ring, Counter Remote Controlled Improvised Explosive Device Electronic Warfare (CREW) III integration, Next Generation Armor, Ammunition Data Link (ADL) integration to enable firing of programmable munitions, and Under Armor Auxiliary Power Unit (UAAPU). Procurement of ECP 1A Hardware kits will begin in FY 2016. Vehicle induction, ECP kit application, and vehicle recapitalization will begin in FY 2017.

Armor (MOD 4): Armor is provided by the Department of Energy (DOE). The armor facility was maintained at a sustainable level to maintain the industrial base and minimize the loss of skilled labor. In that regard, FY15 funding supported the procurement of various classified armor components that could be configured to support both current and future production/recapitalization requirements. FY16 and beyond procures full Next Generation Armor packages which will be applied during ECP 1A vehicle recapitalization.

Program/Engineering Support (MOD 5): This modification line funds contractor and government program/project managers' salaries, benefits, TDY, office automation, administration, and supplies. These funds also provide for dedicated functional support from the Tank Automotive Command (TACOM), Army Research and Development Command (ARDEC), Anniston Army Depot (ANAD), Joint Systems Manufacturing Center (JSMC), Abrams Material Fielding Team at Ft. Hood, Texas, and other government sites. Additionally, this modification line funds System Technical Support (STS) from General Dynamics Land Systems (GDLS), General Dynamics Canada (GDC), Raytheon, and DRS Technologies. Formerly, these costs were funded in the Abrams Upgrade production line.

Exhibit P-3a, Individual Modification: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Modification Number / Title:
2033A / 01 / 20	GA0700 / M1 Abrams Tank (MOD)	GA0700 / Mods

Power Pack Improvement & Integration Optimization (MOD 6): This modification reduces the Operating and Support (O&S) cost of the Abrams Tank power train. It equips the Abrams fleet with more reliability/durability, fuel efficiency and provides a single overhaul standard for the vehicle's power train. This modification line funds System Technical Support (STS) from Honeywell for the TIGER engine and Allison Transmission. Qualification of an alternate source of supply for the transmission will be analyzed.

Training Devices (MOD 7): Provides funding for Training Aids, Devices, Simulators and Simulations (TADSS) in support of the Abrams family of vehicles. System training devices are required to remain current with upgraded fleet configuration/capabilities. TADSS include Maintenance Trainers, Gunnery Trainer Tech Refresh, Common Drivers Trainer Upgrades, Desktop Trainer Lesson modifications, Abrams Common Software Library modifications and Through Sight Video (TSV). Contractor dates will vary by item and cannot be predicted. Includes non-recurring engineering for hardware and software changes, procurement cost of the hardware associated with modifications to existing training devices, and field installation at the unit.

Line Optimization for Low Volume Production (MOD 8): This funding will be used to study, develop, and implement efficient manufacturing processes at the Joint Systems Manufacturing Center (JSMC) Lima, OH in preparation for Abrams future production. Internal restructuring is required on the production line to optimize manufacturing with increased efficiency at the lower manufacturing rates forecasted for the Abrams ECP (M1A2 SEP v3) production. This will include relocating several machines and establishing new manufacturing lines and layouts, allowing the build of the newest Abrams variant at a lower volume while still maintaining surge production capability.

				FY 2016	FY 2016	FY 2016				
Secondary	/ Distribution	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	178.100	237.023	367.939	-	367.939	489.437	606.014	451.773	496.647
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	178.100	237.023	367.939	-	367.939	489.437	606.014	451.773	496.647

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LI GA0700 - M1 Abrams Tank (MOD) Army

Exhibit P-3a, Individual Modification: PB 2016 Army Date: February 2015 Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Modification Number / Title: 2033A / 01 / 20 GA0700 / M1 Abrams Tank (MOD) GA0700 / Mods

Models of Systems Affected: Abrams Family of Modification Type: Increase Performance Related RDT&E PEs:

Vehicles												
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)											
Procurement												
Modification Item 1 of 8: Prior Year Closed Mods												
A Kits												
Non-Recurring												
Other	0 / 2,842.059	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / -	- 1 -	- 1 -	- 2,842.059
Subtotal: Non-Recurring	- / 2,842.059	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- 2,842.059
Subtotal: Prior Year Closed Mods	0 / 2,842.059	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- 2,842.059
Modification Item 2 of 8: Abrams Field Upgrades												
A Kits												
Recurring												
CROWS-LP B Kits	- 1 -	- 1 -	- 1 -	149 / 20.511	- 1 -	149 / 20.511	270 / 19.944	540 / 40.686	90 / 6.917	90 / 7.055	- 1 -	1,139 / 95.113
VEM	- 1 -	- 1 -	- 1 -	90 / 5.015	- 1 -	90 / 5.015	270 / 15.346	540 / 31.206	270 / 15.966	270 / 16.286	- 1 -	1,440 / 83.819
Ammunition Data Link (ADL)	- 1 -	- 1 -	315 / 13.923	90 / 26.337	- / -	90 / 26.337	330 / 18.087	600 / 33.640	330 / 18.818	330 / 19.195	- 1 -	1,995 / 130.000
Handheld Manpack Small (HMS) A Kit	- 1 -	- 1 -	- / -	- / -	- / -	- / -	- 1 -	150 / 3.138	330 / 7.087	330 / 7.229	- 1 -	810 / 17.454
Safety/Operational Mods	0 / 23.450	- 1 -	- / 19.822	- 1 -	- / -	- / -	- 1 -	- 1 -	- / -	- 1 -	- 1 -	- / 43.272
Support Equipment and TPF	0 / 37.043	- / 14.590	- / 16.720	- / 12.299	- / -	- / 12.299	- / 12.545	- / 12.796	- / 13.052	- / 13.313	- 1 -	- / 132.358
Subtotal: Recurring	- /60.493	- /14.590	- /50.465	- /64.162	- / -	- /64.162	- /65.922	- /121.466	- /61.840	- /63.078	- / -	- /502.016
Non-Recurring								•				,
Installation Kits	0 / 283.400	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- <i>I</i> 4,577.270	4,860.670
CROWS-LP Engineering Support	- 1 -	- /6.283	- / -	- 1 -	- / -	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /6.283
Subtotal: Non-Recurring	- /283.400	- /6.283	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 4,577.270	- 4,866.953
Subtotal: Abrams Field Upgrades	0 / 343.893	- /20.873	315 / 50.465	329 / 64.162	- / -	329 / 64.162	870 / 65.922	1,830 / 121.466	1,020 / 61.840	1,020 / 63.078	- / 4,577.270	5,384 i 5,368.969
Modification Item 3 of 8: Engineering Change Proposal (ECP) 1A												
A Kits												
Recurring												
ECP Modification Kits	- 1 -	- 1 -	- 1 -	45 / 114.712	- 1 -	45 / 114.712	60 / 135.273	60 / 137.804	60 / 134.536	60 / 139.721	1,326 <i>l</i> 4,789.507	1,611 5,451.553
Subtotal: Recurring	- / -	- / -	- / -	- /114.712	- / -	- /114.712	- /135.273	- /137.804	- /134.536	- /139.721	- / 4,789.507	- 5,451.55

LI GA0700 - M1 Abrams Tank (MOD) Army

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Exhibit P-3a, Individual Modification: PB 2016 Army Date: February 2015 Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Modification Number / Title: 2033A / 01 / 20 GA0700 / M1 Abrams Tank (MOD) GA0700 / Mods

Models of Systems Affected: Abrams Family of Modification Type: Increase Performance Related RDT&E PEs:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ A										
Subtotal: Engineering Change Proposal (ECP) 1A	- / -	- / -	- / -	45 / 114.712	- / -	45 / 114.712	60 / 135.273	60 / 137.804	60 / 134.536	60 / 139.721	1,326 / 4,789.507	1,611 5,451.55
Modification Item 4 of 8: Armor								I			,	<u> </u>
A Kits												
Recurring												
Armor Sets	70 / 97.980	20 / 28.500	24 / 34.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	114 / 160.48
Next Generation Armor	- 1 -	- 1 -	- 1 -	45 / 66.967	- / -	45 / 66.967	60 / 89.156	60 / 89.423	60 / 89.691	60 / 89.960	1,326 <i>I</i> 2,712.868	1,611 3,138.06
Subtotal: Recurring	- /97.980	- /28.500	- /34.000	- /66.967	- / -	- /66.967	- /89.156	- /89.423	- /89.691	- /89.960	- / 2,712.868	- 3,298.54
Non-Recurring							,	,			,	
Installation Kits	821 / 526.800	- 1 -	- 1 -	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	821 / 526.80
Subtotal: Non-Recurring	- / 526.800	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / 526.80
Subtotal: Armor	891 / 624.780	20 / 28.500	24 / 34.000	45 / 66.967	- / -	45 / 66.967	60 / 89.156	60 / 89.423	60 / 89.691	60 / 89.960	1,326 / 2,712.868	2,546 3,825.34
Modification Item 5 of 8: Program/Engineering Support						,		,	,	,	,	
A Kits												
Recurring												
System Technical Support	0 / 117.846	- /56.622	- <i>I</i> 73.999	- / 52.226	- / -	- / 52.226	- /66.752	- / 68.484	- / 61.657	- / 63.696	- / 1,597.363	- 2,158.64
Government Program Support	0 / 3.180	- /38.023	- /30.853	- /30.630	- 1 -	- /30.630	- / 33.206	- / 33.710	- / 33.434	- / 33.433	- / 1,583.124	- 1,819.59
Contractor Program Support	0 / 2.102	- /8.507	- /3.098	- /2.214	- / -	- /2.214	- /2.254	- / 2.295	- / 2.336	- / 2.687	- / 99.396	- / 124.88
Government Test Support	- 1 -	- /2.942	- /3.767	- / 6.739	- / -	- / 6.739	- /5.958	- /8.713	- /4.392	- / 13.125	- / 192.824	- / 238.46
Subtotal: Recurring	- /123.128	- /106.094	- /111.717	- /91.809	- / -	- /91.809	- /108.170	- /113.202	- /101.819	- /112.941	- / 3,472.707	- 4,341.58
							1 100 170	- / 113.202	- /101.819	- / 112.941	,	
Subtotal: Program/Engineering Support	0 / 123.128	- /106.094	- /111.717	- /91.809	- / -	- /91.809	- /108.170	- /113.202	- 7101.819	7 772.577	3,472.707	4,341.58
Subtotal: Program/Engineering Support  Modification Item 6 of 8: Power Pack Improvement & Integration Optimization	0 / 123.128	- /106.094	- /111.717	- /91.809	- /-	- /91.809	- /108.170	- 7113.202	- 7101.619	7772.577	3,472.707	4,341.58
Modification Item 6 of 8: Power Pack Improvement &	0 / 123.128	- /106.094	- /111.717	- /91.809	- / -	- /91.809	- /108.170	- 7713.202	- 7101.819	7.112.577	3,472.707	4,341.58
Modification Item 6 of 8: Power Pack Improvement & Integration Optimization	0 / 123.128	- /106.094	- /111.717	- /91.809	- /-	- /91.809	- /108.170	- ////	- 7101.619	,,,,,	3,472.707	- 4,341.58
Modification Item 6 of 8: Power Pack Improvement & Integration Optimization  A Kits	0/123.128	- /106.094 - /17.505	- /111.717 - /16.260	- /91.809 - /8.200	- / -	- /91.809 - /8.200	- /108.170	- / 26.794	- /15.420	- /5.400	3,472.707	
Modification Item 6 of 8: Power Pack Improvement & Integration Optimization  A Kits  Recurring												- / 158.19 - / 158.19

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Exhibit P-3a, Individual Modification: PB 2016 Army Date: February 2015 Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Modification Number / Title: 2033A / 01 / 20 GA0700 / M1 Abrams Tank (MOD) GA0700 / Mods

Models of Systems Affected: Abrams Family of Vehicles Modification Type: Increase Performance Related RDT&E PEs:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M										
Installation Kits	2,691 / 930.300	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	2,691 / 930.300
Subtotal: Non-Recurring	- /930.300	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- /930.30
Subtotal: Power Pack Improvement & Integration Optimization	2,691 / 988.632	- /17.505	- /16.260	- /8.200	- /-	- /8.200	- /20.280	- /26.794	- /5.420	- /5.400	- / -	2,691 1,088.49
Modification Item 7 of 8: Training Devices												
A Kits												
Recurring												
Training Equipment Modifications	0 / 99.099	- /5.128	- / 11.501	- /9.482	- 1 -	- / 9.482	- / 20.595	- / 63.640	- /6.002	- / 34.098	- 1 -	- / 249.54
Subtotal: Recurring	- /99.099	- /5.128	- /11.501	- /9.482	- / -	- /9.482	- /20.595	- /63.640	- /6.002	- /34.098	- / -	- /249.54
Subtotal: Training Devices	0/99.099	- /5.128	- /11.501	- /9.482	- / -	- /9.482	- /20.595	- /63.640	- /6.002	- /34.098	- / -	- / 249.54
<b>Modification Item 8 of 8:</b> Line Optimization for Low Volume Production												
A Kits												
Recurring												
Production Line Optimization	- 1 -	- 1 -	- / 13.080	- / 12.607	- 1 -	- / 12.607	- / 14.967	- / 10.850	- / 10.688	- / 9.991	- 1 -	- 172.18
Subtotal: Recurring	- / -	- / -	- /13.080	- /12.607	- / -	- /12.607	- /14.967	- /10.850	- /10.688	- /9.991	- / -	- /72.18
Subtotal: Line Optimization for Low Volume Production	- / -	- / -	- /13.080	- /12.607	- / -	- /12.607	- /14.967	- /10.850	- /10.688	- /9.991	- / -	- /72.18
Subtotal: Procurement, All Modification Items	3,582 / 5,021.591	20 / 178.100	339 / 237.023	419 / 367.939	- / -	419 / 367.939	990 / 454.363	1,950 / 563.179	1,140 / 409.996	1,140 / 455.189	2,652 / 15,552.352	12,232 23,239.73
nstallation												
Modification Item 3 of 8: Engineering Change Proposal (ECP) 1A	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	45 / 35.074	60 / 42.835	60 / 41.777	60 / 41.458	1,386 / 1,070.046	1,611 1,231.19
Modification Item 4 of 8: Armor	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	451 -	60 / -	60 / -	60 / -	1,386 / -	1,611 / -
Subtotal: Installation	0 / 0.000	- / -	- / -	- / -	- / -	- / -	90 / 35.074	120 / 42.835	120 / 41.777	120 / 41.458	2,772 / 1,070.046	3,222 1,231.19
- Total												
Total Cost (Procurement + Support + Installation)	5.021.591	178.100	237.023	367.939		367.939	489.437	606.014	451.773	496.647	16,622.398	24.470.92

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LI GA0700 - M1 Abrams Tank (MOD) Army

			UNCI	_ASSIFIED			
Exhibit P-3a, Indivi	dual Modification: P	B 2016 Army				Date: February 2015	
Appropriation / Bud 2033A / 01 / 20	dget Activity / Budge	et Sub Activity:	P-1 Line Item Nu GA0700 / M1 Abr	mber / Title: ams Tank (MOD)		Modification Number GA0700 / Mods	er / Title:
Modification Item 1 of 8:	: Prior Year Closed Mods					•	
lanufacturer Information	on						
anufacturer Name: x				Manufacturer Location: x			
dministrative Leadtime (	in Months):			Production Leadtime (in M	fonths):		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
ontract Dates							
elivery Dates							
nstallation Information							
lethod of Implementation	on (Organic): x				Installation (	Quantity: 0	

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			UNC	LASSIFIED			
Exhibit P-3a, Indivi	dual Modification: P	PB 2016 Army				Date: February 2015	5
<b>Appropriation / Bud</b> 2033A / 01 / 20	dget Activity / Budg	et Sub Activity:	P-1 Line Item Nu GA0700 / M1 Abr	imber / Title: rams Tank (MOD)		Modification Numb GA0700 / Mods	er / Title:
Modification Item 2 of 8	: Abrams Field Upgrades		•			•	
Manufacturer Information	on						
Manufacturer Name: Vari	ous			Manufacturer Location: Va	arious		
Administrative Leadtime (	(in Months):			Production Leadtime (in M	Months):		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							
Installation Information							
Method of Implementati	ion (Organic): Contractor	Teams			Installation (	Quantity: 0	
					<del>'</del>		

Exhibit P-3a, Indiv	vidual Modification: Pl	B 2016 Army				Date: February 2015	5					
<b>Appropriation / B</b> 2033A / 01 / 20	udget Activity / Budge	et Sub Activity:	P-1 Line Item Num GA0700 / M1 Abrar			Modification Numb GA0700 / Mods	er / Title:					
Modification Item 3 of 8: Engineering Change Proposal (ECP) 1A												
Manufacturer Information												
Manufacturer Name: Ge	eneral Dynamics and Annisto	n Army Depot		Manufacturer Location: A	NAD, AL and JSMC Lima	id JSMC Lima, OH						
Administrative Leadtime	e (in Months): 6			Production Leadtime (in I	Months): 18							
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020					
Contract Dates			Mar 2016	Mar 2017	Mar 2018	Mar 2019	Mar 2020					
Delivery Dates			Sep 2017	Sep 2018 Sep 2019 Sep 2020 S								

#### Installation Information

Method of Implementation: X

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	0 / 0.000	- /0.000	- / 0.000	- / 0.000	- 1 -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
FY 2014	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2015	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2016	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	45 / 35.074	- 1 -	- 1 -	- 1 -	- 1 -	45 / 35.074
FY 2017	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	60 / 42.835	- 1 -	- 1 -	- 1 -	60 / 42.835
FY 2018	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	60 / 41.777	- 1 -	- 1 -	60 / 41.777
FY 2019	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	60 / 41.458	- 1 -	60 / 41.458
FY 2020	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	60 / 40.591	60 / 40.591
To Complete	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	1,326 <i>l</i> 1,029.455	1,326 <i>I</i> 1,029.455
Total	0 / 0.000	- 1 -	- 1 -	- / -	- 1 -	- 1 -	45 / 35.074	60 / 42.835	60 / 41.777	60 / 41.458	1,386 / 1,070.046	1,611 / 1,231.190

## Installation Schedule

			FY 2	2014			FY 2	2015			FY 2	016			FY 2	017			FY 2	2018			FY 2	019			FY 2	020			
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	12	12	12	15	15	15	15	15	15	15	15	15	15	15	1,401	1,611
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	11	12	12	14	15	15	15	15	15	15	15	15	1,436	1,611

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Exhibit P-3a, Indi	vidual Modification: P	B 2016 Army				Date: February 2015	5
<b>Appropriation / B</b> 2033A / 01 / 20	udget Activity / Budge	et Sub Activity:	P-1 Line Item Nu GA0700 / M1 Abr			Modification Numb GA0700 / Mods	er / Title:
Modification Item 4 of	f 8: Armor		•			•	
Manufacturer Informa	ation						
Manufacturer Name: D	epartment of Energy			Manufacturer Location: V	arious		
Administrative Leadtim	e (in Months): 7			Production Leadtime (in N	Months): 12		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates		Apr 2015	Apr 2016	Apr 2017 Apr 20		Apr 2019	Apr 2020
Delivery Dates		Apr 2016	Apr 2017	Apr 2018	Apr 2019	Apr 2020	Apr 2021

#### Installation Information

Method of Implementation: X

mound or impromountation /												
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- 1 -	- /0.000	- /0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
FY 2014	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2015	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2016	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	45 / -	- 1 -	- 1 -	- / -	- 1 -	45 / -
FY 2017	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	60 / -	- 1 -	- 1 -	- 1 -	60 / -
FY 2018	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	60 / -	- 1 -	- 1 -	60 / -
FY 2019	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	60 / -	- 1 -	60 / -
FY 2020	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	60 / -	60 / -
To Complete	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	1,326 / -	1,326 / -
Total	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	45 / -	60 / -	60 / -	60 / -	1,386 / -	1,611 / -

## Installation Schedule

			FY 2	2014	-		FY 2	2015			FY 2	2016			FY 2	2017			FY 2	2018			FY 2	019			FY 2	020			
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	тс	Tot																
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	12	12	12	15	15	15	15	15	15	15	15	15	15	15	1,401	1,611
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	11	12	12	14	15	15	15	15	15	15	15	15	1,436	1,611

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Exhibit P-3a, Indivi	dual Modification: PE	3 2016 Army				Date: February 2015	
<b>Appropriation / Bud</b> 2033A / 01 / 20	dget Activity / Budge	t Sub Activity:	P-1 Line Item Nu GA0700 / M1 Abra			Modification Number GA0700 / Mods	er / Title:
Modification Item 5 of 8	: Program/Engineering Sup	port					
Manufacturer Information	on						
Manufacturer Name: x				Manufacturer Location: x			
Administrative Leadtime (	in Months): 1			Production Leadtime (in N	fonths): 1		
Dates	FY 2014	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	
Contract Dates	Oct 2013	Oct 2014	Oct 2015	Oct 2016	Oct 2017	Oct 2018	Oct 2019
Delivery Dates	Nov 2013	Nov 2014	Nov 2015	Nov 2016	Nov 2017	Nov 2018	Nov 2019
Installation Information							
Method of Implementati	on (Organic): x				Installation	Quantity: 0	

			UNCL	_ASSIFIED			
Exhibit P-3a, Indivi	dual Modification: Pl	3 2016 Army				Date: February 2015	5
<b>Appropriation / Buo</b> 2033A / 01 / 20	dget Activity / Budge	t Sub Activity:	P-1 Line Item Nu GA0700 / M1 Abr			Modification Number GA0700 / Mods	er / Title:
Modification Item 6 of 8.	Power Pack Improvement	& Integration Optimiza	tion				
Manufacturer Information	on						
Manufacturer Name: Hon	eywell and Allison Transmis	ssion		Manufacturer Location: Ph	noenix, AZ and Indiana	polis, IN	
Administrative Leadtime (	in Months): 6			Production Leadtime (in M	fonths): 1		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	GA0700 / M1 A  Lation Item 6 of 8: Power Pack Improvement & Integration Optimization  Locturer Information  Locturer Name: Honeywell and Allison Transmission  Locturer Name: Honeywell and Allison Transmission		Mar 2016	Mar 2017	Mar 2018	Mar 2019	Mar 2020
Delivery Dates	Apr 2014	Apr 2015	Apr 2016	Apr 2017	Apr 2018	Apr 2019	Apr 2020
Installation Information  Method of Implementati		upport			Installation	Quantity: 0	

			UNCI	ASSIFIED			
Exhibit P-3a, Indiv	idual Modification: P	B 2016 Army				Date: February 2015	
<b>Appropriation / Bu</b> 2033A / 01 / 20	dget Activity / Budg	et Sub Activity:	P-1 Line Item Nu GA0700 / M1 Abr			Modification Number GA0700 / Mods	er / Title:
Modification Item 7 of 8	8: Training Devices					1	
Manufacturer Informati	ion						
Manufacturer Name: PE	O Simulation, Training, and	Instrumentation		Manufacturer Location: Or	rlando, FL		
Administrative Leadtime	(in Months):			Production Leadtime (in M	Months):		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							
nstallation Informatior	ı						
lethod of Implementat	tion (Organic): Contractor	Support			Installation (	Quantity: 0	

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LI GA0700 - M1 Abrams Tank (MOD) Army

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			UNCI	LASSIFIED			
Exhibit P-3a, Indiv	vidual Modification: F	PB 2016 Army				Date: February 2015	)
Appropriation / B 2033A / 01 / 20	udget Activity / Budg	et Sub Activity:	P-1 Line Item Nu GA0700 / M1 Abr	imber / Title: rams Tank (MOD)		Modification Number GA0700 / Mods	er / Title:
Modification Item 8 of	8: Line Optimization for Lov	v Volume Production	Į.			ļ	
Manufacturer Informa	tion						
Manufacturer Name: X				Manufacturer Location: Jo	oint Systems Manufactu	ring Center Lima, OH	
dministrative Leadtime	e (in Months):			Production Leadtime (in N	Months):		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							
stallation Information	on						
ethod of Implementa	ation (Organic): Various				Installation (	Quantity: 0	

LI GA0700 - M1 Abrams Tank (MOD) Army UNCLASSIFIED
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Exhibit P-40, Budget Line Item Justification: PB 2016 Army Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 01: Tracked Combat Vehicles / BSA 20: GA0750 / Abrams Upgrade Program

Modification of Tracked Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) : A	A		Program Elei	ments for Co	de B Items:			Other Relate	d Program El	<b>ements:</b> 0203	3735A	
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	1,605	-	-	-	-	-	-	-	-	-	-	1,605
Gross/Weapon System Cost (\$ in Millions)	8,839.107	90.000	120.000	-	-	-	-	-	-	-	-	9,049.107
Less PY Advance Procurement (\$ in Millions)	2,064.494	-	-	-	-	-	-	-	-	-	-	2,064.494
Net Procurement (P1) (\$ in Millions)	6,774.613	90.000	120.000	-	-	-	-	-	-	-	-	6,984.613
Plus CY Advance Procurement (\$ in Millions)	2,064.494	-	-	-	-	-	-	-	-	-	-	2,064.494
Total Obligation Authority (\$ in Millions)	8,839.107	90.000	120.000	-	-	-	-	-	-	-	-	9,049.107
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Tl	ne corresponding	g budget request	s are document	ed elsewhere.)	Ť	į.		
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	_
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	5,507.232	-	-	-	-	-	-	-	-	-	-	5,638.073

## **Description:**

The purpose of this program is to upgrade M1/M1A1 tanks to the M1A2 System Enhancement Package (SEP) configuration in order to enhance tank survivability, the automotive power pack, computer systems, and night vision capabilities. The M1A2 SEP incorporates improved microprocessors; color flat panel displays and memory capacity; Soldier-Machine Interface (SMI); and a new operating system designed to run the Common Operating Environment (COE) software. Other improvements include frontal and side armor for enhanced crew survivability. Both the Gunner's Primary Sight (GPS) and the Commander's Independent Thermal Viewer (CITV) on the M1A2 SEP tank include the improved thermal ranging capabilities of the Block 1 2nd Generation Forward Looking Infra-Red (FLIR) technology. The M1A2 SEP is also equipped with the Total Integrated Engine Revitalization (TIGER) engine and upgraded transmission for improved reliability and durability. The Abrams Upgrade Program will continue to be utilized to modify and upgrade the Abrams M1A2SEP v2 tank to avoid a break in production and maintain an engineering production and depot maintenance capability for heavy combat vehicle manufacturing, transmission manufacturing capability, and FLIR manufacturing to support the industrial base. Efforts to develop leaner Abrams production processes and optimize facilities to facilities to facilitate lower manufacturing rates in the future will also be initiated. In FY15 PM Abrams is assessing an opportunity to implement a limited pilot program to produce the next version M1A2 Sep v3 tank in lieu of producing additional M1A2 Sep v2 tanks.

Secondary	/ Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	90.000	120.000	-	-	-	-	-	-	-
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	90.000	120.000	-	-	-	-	-	-	-

**UNCLASSIFIED** Page 1 of 8

Exhibit P-40, Budget Line Item Justification: PB 2016 Army **Date:** February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 01: Tracked Combat Vehicles / BSA 20: GA0750 / Abrams Upgrade Program

Modification of Tracked Combat Vehicles

Progra	m Elements for Code	B Items:	Oth	ner Related Program I	Elements: 0203735A	
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
	Uliantity / Iotal Cost	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
, P-21 A	1,605 / 8,839.107	- / 90.000	- /120.000	- / -	- / -	- / -
	1,605 / 8,839.107	- / 90.000	- /120.000	- 1 -	- 1 -	- / -
	ID CE	Prior Years  ID Quantity / Total Cost (Each) / (\$ M)  I, P-21 A 1,605 / 8,839.107	ID   Quantity / Total Cost   Quantity / Total Cost   (Each) / (\$M)   (Each) / (\$M)   (Each) / (\$M)	Prior Years   FY 2014   FY 2015	Prior Years   FY 2014   FY 2015   FY 2016 Base	Prior Years   FY 2014   FY 2015   FY 2016 Base   FY 2016 OCO

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding

#### Justification:

There is no FY 2016 funding.

In accordance with Section 1815 of the FY2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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Exhibit P-5, Cost	<b>Analysis</b>	: PB 20	16 Army										I	Date: Fe	ebruary	2015		
<b>Appropriation / B</b> 2033A / 01 / 20	udget Ad	ctivity / I	Budget	Sub Acti	vity:		<b>ine Item</b> 750 / Abr									Title [DO		am
ID Code (A=Service Read	ly, B=Not Servi	ce Ready) : A							М	DAP/MAIS	Code:							
F	Resource	Summa	ary			Prior Yea	ars	FY 20	)14	FY	2015	FY	2016 Bas	e F	Y 2016	осо	FY 2016	Total
Procurement Quantity (Uni	ts in Each)						1,605		-		-			-		-		
Gross/Weapon System Co	ost (\$ in Million	s)				8	,839.107		90.000		120.00	00		-		-		
Less PY Advance Procure	ment (\$ in Mill	lions)				2	,064.494		-		-			-		-		
Net Procurement (P1) (\$ in	Millions)					6	,774.613		90.000		120.00	00		-		-		
Plus CY Advance Procure	ment (\$ in Mill	ions)				2	,064.494		-		-			-		-		
Total Obligation Authorit	y (\$ in Millions	)				8	,839.107		90.000		120.00	00		-		-		
(TI	ne following F	Resource Su	mmary row	s are for info	rmational _l	ourposes only	. The corres	ponding bud	lget request	s are docume	ented elsew	here.)						
Initial Spares (\$ in Millions)							-		-		-			-		-		-
Gross/Weapon System Ur	nit Cost (\$ in T	housands)				5	,507.232		-		-			-		-		
Note: Subtotals or Totals in																		
	Р	rior Years	i		FY 2014			FY 2015		FY	2016 Bas	e	FY	2016 OC	0	F'	Y 2016 Tot	:al
Cost Elements	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost							1											T
Basic Vehicle ^(†)	5,507.232	1,605	8,839.107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Industrial Base Mitigation Support	_	_	_	_	_	90.000	_	-	120.000	_	_	-	_	-	_	_	_	
Subtotal: Recurring Cost	-	-	8,839.107	-	-	90.000	-	-	120.000	-	-	-	-	-	-	-	-	
Subtotal: Flyaway Cost	-	-	8,839.107	-	-	90.000	-	-	120.000	-	-	-	-	-	-	-	-	
Gross/Weapon System Cost	5,507.232	1,605	8,839.107	-	-	90.000	-	-	120.000	-	-	-	-	-	-	-	-	
	Seco	ondary Dis	stribution				FY	2014		FY 2015		FY 2 Ba		I	FY 2016 OCO		FY 20 ⁻ Tota	
Army		Quar	ntity								-		-			-		

Total:

Secondary Distribution

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90.000

90.000

120.000

120.000

Total Obligation Authority

Total Obligation Authority

Quantity

^(†) indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: PB 2016	Army	Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
2033A / 01 / 20	GA0750 / Abrams Upgrade Program	GA0750 / Abrams Upgrade Program

Cost Elements	0 C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	<b>Qty</b> (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue Date
Basic Vehicle ^(†)		2012	GDLS / Sterling Heights, MI	SS/FFP	TACOM-Warren	Feb 2012	Jan 2013	67	3,237.000	N		
Basic Vehicle ^(†)		2013	GDLS / Sterling Heights, MI	SS/FFP	TACOM-Warren	Jan 2014	Apr 2015	12	5,134.000			

^(†) indicates the presence of a P-21

#### Remarks:

There is no 2016 funding.

GDLS-Prime Contractor, Sterling Heights, MI Manufactured at JSMC, Lima, OH

FY15 (6 Qty): Anticipated Undefinitized Change Order (UCA) Aug 2015. Anticipated Definitization March 2016 First delivery Feb 2017

FY14 (6 Qty): Anticipate contract award: July 2015. First delivery: Aug 2016.

FY13 (12 Qty): Undefinitized Change Orders (UCA) awarded: Jan 2014. Definitization: Sep 2014. First Delivery: Apr 2015.

FY12 (67 Qty) Have 2 different Award Dates and 2 different First Delivery Dates

- 1. 21 qty: Award Date: Feb 2012 and First Delivery Date: Jan 2013
- 2. 46 Qty: Award Date: Mar 2013 and First Delivery Date: Jul 2013

Ξxh	ibit	P-21, P	roduct	ion Sc	hedul	e: PE	3 201	6 Arm	ıy														Date	: Feb	ruary	2015	5			
		oriation 01 / 20	Budg	et Acti	vity /	Budç	get Sı	ıb Ac	tivity	<b>'</b>				<b>Num</b> ams L				า									[DOI pgrad	OIC]: e Pro	gram	
			Elements s in Each)								Fiscal Y	ear 2012										ı	Fiscal Ye	ar 2013						
				ACCEPT PRIOR									C	alendar	Year 201	2								Calen	dar Year	2013				
0 F C R 0 #		SERVICI	PROC QTY	TO 1 OCT 2011	BAL DUE AS OF 1 OCT	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	B A L
Basic	Vehic	le									ı																ı			
Prior	Years	Deliveries: 15	26																											
1	2012	2 ARMY	67	-	67					A -	-	-	-	-	-	-	-	-	-	-	1	4	4	4	4	4	3	4	4	ı
1	2013	3 ARMY	12	-	12																									
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N N	J U	A U G	S E P	O C T	N O V	D E C	N	F E B	M A R	A P R	M A Y	J U	U U	A U G	S E P	A L

xh	ibit	P-21, P	roduct	ion Sc	hedul	e: PE	3 201	6 Arm	ıy														Date	e: Feb	ruary	2015	5			
		riation <i>i</i> 01 / 20	Budge	et Acti	vity /	Budg	jet Su	ıb Ac	tivity:							<b>Title:</b> de Pro	ogram	l						<b>Num</b> 1750 /					gram	
			Elements in Each)								Fiscal Y	ear 2014											Fiscal Y	ear 2015						
Π	M ACCEPT PRIOR BAL										С	alendar	Year 201	4	<u> </u>							Caler	dar Year	2015						
OF CR H		SERVICE	PROC	TO 1 OCT 2013	DUE AS OF 1 OCT	0 C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N N J	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	B A L
	Vehic			J.												ı							I.					I.		
Prior	_	Deliveries: 15	_					r																						
1	201	2 ARMY	67	32	35	4	4	3	2	2	2	2	2	2	2	2	2	2	2	2										
1	201	3 ARMY	12	-	12				A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	2	2	1	1	
						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	U U	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	A L

Appropriation / Bo 2033A / 01 / 20 Cost Elen (Units in E		ivity /	Budge	t Sul	b Act	tivity														Date	: Feb	oruary	2015	)		
	monte					uvity	:		_		<b>Num</b> ams L				า						<b>Num</b> 750 /					gram
(Units in E								Fiscal Y	ear 2016											Fiscal Ye	ear 2017					
	ACCEPT PRIOR BAL									C	alendar	Year 201	16								Calen	dar Yea	2017			
D F C R	TO 1 PROC OCT QTY 2015	DUE AS OF 1 OCT	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 L	A U G	S E P
Basic Vehicle	'				<u> </u>				,					'			'									
Prior Years Deliveries: 1526																										
1 2012 ARMY 1 2013 ARMY	67 6 12	7 - 9 3	1	1	1																					-
1 2010 /1111111	12		O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U	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

Exhibit P-21, Production Schedule: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 01 / 20	P-1 Line Item Number / Title: GA0750 / Abrams Upgrade Program	Item Number / Title [DODIC]: GA0750 / Abrams Upgrade Program

		Produc	tion Rates (Each /	Month)				Procurement Lea	adtime (Months)		-	
MFR						Init	ial			Reo	rder	
Ref					ALT	ALT		Total	ALT	ALT		Total
#	MFR Name - Location	MSR For 2016	1-8-5 For 2016	MAX For 2016	Prior to Oct 1	After Oct 1	Mfg PLT	After Oct 1	Prior to Oct 1	After Oct 1	Mfg PLT	After Oct 1
1	GDLS - Sterling Heights, MI	1	120	336	-	3	15	18	-	4	15	19

#### Remarks:

FY15 (6 Qty): Anticipated UCA Award Date: Aug 2015. Anticipated Definitization Date: Mar 2016. First delivery Date: Feb 2017.FY14 (6 Qty): Anticipated Award Date: Aug 2015. First delivery date: Aug 2016.FY13 (12 Qty): UCA Award Date: July 2014, Definitization Date: Sep 2014, First Delivery Date: April 2015FY12 (67 Qty): Award Date: Mar 2013 and First Delivery Date: July 2013GDLS-Prime Contractor, Sterling Heights, MI. Manufactured at JSMC, Lima, OHJan 2014-May 2015 Manufacturing Production from Foreign Military Sales

"A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army	Date: February 2015

# Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 01: Tracked Combat Vehicles / BSA 30: GA0050 / Production Base Support (TCV-WTCV) Support Equipment & Facilities

P-1 Line #15

ID Code (A=Service Ready, B=Not Service Ready) :			Program Ele	ments for Cod	de B Items:			Other Relate	d Program El	ements:		
	Prior			FY 2016	FY 2016	FY 2016					То	
Resource Summary	Years	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	371.423	1.544	6.478	6.479	-	6.479	6.981	6.949	6.869	1.995	-	408.718
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	371.423	1.544	6.478	6.479	-	6.479	6.981	6.949	6.869	1.995	-	408.718
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	371.423	1.544	6.478	6.479	-	6.479	6.981	6.949	6.869	1.995	-	408.718
(The following	Resource Sumr	mary rows are fo	or informational p	urposes only. Th	ne corresponding	g budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

## **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 and Modernization to Government-owned equipment and real property used in the production of Weapons and Tracked Combat Vehicles. The program also provides funding for Layaway of Industrial Facilities (LIF) and for the redistribution of equipment no longer required for production of Army systems. This effort supports the Abrams RESET, Systems Enhancement Package (SEP) Programs and Spin-Out Framework. Funding is required for the preservation, Packing, Crating, Handling, and Transportation (PCH&T) of equipment excess to production, where such actions do not constitute substantial or complete shutdown or excessing of U.S. Army Tank-Automotive and Armaments Command (TACOM) production equipment. This program also funds projects to prevent unnecessary deterioration, perform maintenance, cover storage expenses of idle items of Government-owned equipment, and unplanned repairs to active equipment as situations arise.

The FY 16 funding request was reduced for \$.297 (GA2001) million to account for the availability of prior year execution balances

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 01: Tracked Combat Vehicles / BSA 30: GA0050 / Production Base Support (TCV-WTCV) Support Equipment & Facilities

ID Code (A=Service Ready, B=Not Service Ready) :	Pr	ogram	Elements for Code B	Items:	Ot	her Related Program E	lements:	
Project Schedule	•		Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Project	Exhibits	ID CD	Total Cost (\$ M)	Total Cost (\$ M)	Total Cost (\$ M)	Total Cost (\$ M)	Total Cost (\$ M)	Total Cost (\$ M)
Production Support			-	1.544	6.478	6.479	-	6.479
Production Base Support - Lima			-	0.567	5.501	5.367	-	5.367
Production Base Support - Lima	P25		-	0.567	5.501	5.367	-	5.367
Production Base Support - Scranton			-	0.377	0.377	0.512	-	0.512
Production Base Support - Scranton	P25		-	0.377	0.377	0.512	-	0.512
TACOM LCMC Production Base Spt Program			-	0.600	0.600	0.600	-	0.600
TACOM LCMC Production Base Spt Program	P25		-	0.600	0.600	0.600	-	0.600
Total Gross/Weapon System Cost			-	1.544	6.478	6.479	-	6.479

*For the P-17 and P-25, the Project column displays a three-level indentation: Project Category (e.g., Environmental), followed by the Facility, followed by the Project Name. Exhibits with no Project Category are included under the "Uncategorized" category. For the P-26, the Project column displays a two-level indentation: Project Type (e.g., Inactive Plants, Inactive Lines at Contractor Plants and Inactive Lines at Active Plants), followed by the Facility. Note also that although all P-17, P-25 and P-26 projects are shown in the project schedule, not all projects will have a corresponding exhibit. A P-17 or P-25 exhibit is only included if data beyond the Project Number, Project Title and Cost are included (for example: for the P-17, Description, Manufacturer, etc.; for the P-25, Narrative Explanation, Cost Elements, Principle Milestones, etc.). A P-26 exhibit is only included if data beyond Project Type and Total Cost are included (for example, Description, Contractor, Maintenance/Recurring/Environmental/Other costs, etc.).

#### Justification:

FY 2016 Base procurement dollars in the amount of \$6.479 million supports the procurement, repair, replacement and modernization of Government-owned Industrial Plant Equipment (IPE) and facilities associated with the manufacture of track and wheeled vehicles. The manufacturing sites are both Government-owned and contractor-owned, located across the United States. This request also supports emergency repairs to prevent production interruptions or loss of resources, as well as addressing threats to security, worker safety, and environmental issues. Projects include repair and rehab of machining centers, rehab of underground utilities and sewers, repair and upgrade of building electrical controls, and resurfacing of deteriorating asphalt and concrete surfaces. At the other locations, most projects address planned rehab or emergency repair of Government-owned machining centers and other Government IPE. These projects help prevent increased costs due to obsolete or nonoperational equipment, and also address environmental and safety deficiencies. TACOM's Industrial Base uses funds to establish, modernize and/or replace Army owned industrial facilities and equipment used in direct support of increased WTCV production requirements (PIF Projects, Parts obsolescence, supplier non-availability, Foreign Dependency, and Single Source Failure issues) throughout the Industrial Base, and direct manufacturing support of the Organic Base. Funding supports Active Component.

"In accordance with section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses and providing military support to civil authorities".

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Exhibit P-25, Production Sup	port and In	dustrial F	acilities Co	ost Analys	sis: PB 20	16 Army	Da	ate: February 2015
Appropriation / Budget Activi 2033A / 01 / 30	ity / Budge	t Sub Acti	vity:			P-1 Line Item Number / T GA0050 / Production Base		CV)
Project Title: Production Base	Support - L	.ima				Project Number: U6037	Project Categor	y: Production Support
End Item Supported Model:						J	Annual Capacit	y Before / After (1-8-5): /
Cost Elements (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	Facility Name: Production Base Facility Location: Lima, OH		
A. Construction Cost	0.567	5.501	5.367	-	5.367	Facility Type (GOGO, GOCO, C	<b>000):</b> G000	
B. Equipment Cost	-	-	-	-	-	Principal Milestones		Month & Year
C. Equipment Installation Cost	-	-	-	-	-	Concept Design Complete:		
D. Contractor Support Cost	-	-	-	-	-	Final Design Complete:		
E. Corps of Engineers Support Cost	-	-	-	-	-	Initial/Final Project Award: Construction Complete:		
F. Other In-House Support Cost	-	-	-	-	-	Equipment Installation Complete:		
G. Total Facility Project Cost	-	-	-	-	-	Prove Out Begins:		
H. Other Costs	-	-	-	-	-	Prove Out Complete:	Related Pro	ierts
						1	. tolutou i i o	,,ooto

5.367

Project

Number

Title

**Narrative Explanation:** 

**Total Project Cost** 

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0.567

5.501

5.367

Compl

Date

Start Date

Facing

Value

FY & Appn

Exhibit P-25, Production Sup	port and In	dustrial F	acilities Co	ost Analys	is: PB 20	16 Army		Date: February 2015		
Appropriation / Budget Activi 2033A / 01 / 30	ity / Budge	t Sub Acti	vity:			P-1 Line Item Number / To GA0050 / Production Base		VTCV)		
Project Title: Production Base	Support - S	Scranton				Project Number: U6040	Project Categ	ory: Production Support		
End Item Supported Model:						,	Annual Capa	city Before / After (1-8-5): /		
Cost Elements (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	Facility Name: Production Base Facility Location: Scranton, PA	Support - Scranton			
A. Construction Cost	0.377	0.377	0.512	-	0.512	Facility Type (GOGO, GOCO, C	OCO): COCO			
B. Equipment Cost	-	-	-	-	-	Principal Milestones		Month & Year		
C. Equipment Installation Cost	-	-	-	-	-	Concept Design Complete:				
D. Contractor Support Cost	-	-	-	-	-	Final Design Complete: Initial/Final Project Award:				
Corne of Engineers Connect Cost						initial/Final Froject Award.				

0.512

Construction Complete:

Number

Title

Equipment Installation Complete: Prove Out Begins: Prove Out Complete: **Related Projects Project** Compl Value

(\$ M)

FY & Appn

**Narrative Explanation:** 

E. Corps of Engineers Support Cost

-

0.377

0.377

0.512

F. Other In-House Support Cost

G. Total Facility Project Cost

H. Other Costs

Total Project Cost

**UNCLASSIFIED** 

Start Date

Date

Facing

Exhibit P-25, Production Sup	port and Ir	dustrial F	16 Army	Date: February 2015			
Appropriation / Budget Activ 2033A / 01 / 30	rity / Budge	t Sub Activ	vity:			P-1 Line Item Number / T GA0050 / Production Base	
Project Title: TACOM LCMC	Production E	Base Spt Pi	rogram			Project Number: U4282	Project Category: Production Support
End Item Supported Model:						1	Annual Capacity Before / After (1-8-5): /
Cost Elements (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	Facility Name: TACOM LCMC P Facility Location: TACOM	. •
A. Construction Cost	0.600	0.600	0.600	-	0.600	Facility Type (GOGO, GOCO, C	<b>0CO)</b> : GOGO
B. Equipment Cost	-	-	-	-	-	Principal Milestones	Month & Year
C. Equipment Installation Cost	_	_	Concept Design Complete:				

0.600

Final Design Complete:

Construction Complete:
Equipment Installation Complete:

Number

Initial/Final Project Award:

Title

Prove Out Begins:
Prove Out Complete:

Related Projects

Project Value Compl

(\$ M)

Facing

Start Date

Date

FY & Appn

Narrative Explanation:

D. Contractor Support Cost

E. Corps of Engineers Support Cost

-

0.600

-

0.600

0.600

F. Other In-House Support Cost

G. Total Facility Project Cost

H. Other Costs

Total Project Cost

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

G02200 / Mortar Systems

Vehicles / BSA 10: Weapons & Other Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) : I	В		Program Eler	ments for Cod	de B Items:			Other Relate	d Program El	ements:		
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	330.963	5.310	5.012	4.991	7.030	12.021	-	-	-	-	-	353.306
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	330.963	5.310	5.012	4.991	7.030	12.021	-	-	-	-	-	353.306
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	330.963	5.310	5.012	4.991	7.030	12.021	-	-	-	-	-	353.306
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	ne corresponding	g budget requests	s are document	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	9.108	-	9.108	-	-	-	-	-	220.128

## **Description:**

Mortar Systems includes the production of 60mm Light Weight M224/A1; 81mm Light Weight M252/A1; and 120mm M120A1/M121 Mortar Weapon Systems and associated equipments to include procurement of the M326 Mortar Stowage Kit and M1101 trailer that are used with the M120A1 120mm towed mortar system. The Mortar Stowage Kit system enables rapid emplacement and displacement of the M120A1 from the M1101 Trailer.

Secondar	y Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	3.810	3.512	3.491	7.030	10.521	-	-	-	-
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	1.500	1.500	1.500	-	1.500	-	-	-	-
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	5.310	5.012	4.991	7.030	12.021	-	-	-	-

LI G02200 - Mortar Systems
Army

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P-1 Line #16

Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

G02200 / Mortar Systems

Vehicles / BSA 10: Weapons & Other Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) : B	Pro	gram	Elements for Code	B Items:	Oth	er Related Program I	Elements:	
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) I (\$ M)					
G02202 / Mtr Wpn Sys	P-5, P-5a, P-21	В	- / 330.963	- / 5.310	- / 5.012	- /4.991	- /7.030	- / 12.021
Total Gross/Weapon System Cost			- / 330.963	- / 5.310	- / 5.012	- / 4.991	- / 7.030	- / 12.021

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

#### Justification:

FY 2016 Base procurement dollars in the amount of \$4.991 million supports the procurement of 48 M1101 Trailers and production support costs for the acquisition, engineering, warehousing/storage/staging, logistics, transportation, fielding and new equipment training of 120MM, 81MM and 60MM mortar weapon systems. The system support funds are essential to meet US Army fielding requirements of the lightweight 60mm & 81mm mortars and the 120MM mortars to 40 Infantry Combat Teams, nine Stryker Brigade Combat Teams, seven Special Forces Brigades and a Ranger Regiment. Fielding and Training of these modifications will be performed through FY 2016 base funding.

FY 2016 OCO procurement dollars in the amount of \$7.030 million supports the replacement of 41 M224A1 and 37 M120 combat losses and washouts from combat operations.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L.110-181) this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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Date: February 2015 Exhibit P-5, Cost Analysis: PB 2016 Army Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Item Number / Title [DODIC]: 2033A / 02 / 10 G02200 / Mortar Systems G02202 / Mtr Wpn Sys

FY 2014

**Prior Years** 

MDAP/MAIS Code:

FY 2015

**FY 2016 Base** 

**FY 2016 OCO** 

FY 2016 Total

_						
Procurement Quantity (Units in Each)	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	330.963	5.310	5.012	4.991	7.030	12.021
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	330.963	5.310	5.012	4.991	7.030	12.021
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	330.963	5.310	5.012	4.991	7.030	12.021
(The following Resource Summary rows are for information	onal purposes only. The cor	responding budget request	s are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-

Gross/Weapon System Unit Cost (\$ in Thousands) 9.108 9.108

Note: Subtotals or	Totals in th	is Exhibit P-	-5 may not be	e exact or	r add, due to	o rounding.

**Resource Summary** 

ID Code (A=Service Ready, B=Not Service Ready) : B

	P	rior Years	5		FY 2014			FY 2015		FY	' 2016 Bas	se	FΥ	2016 OC	0	FY	2016 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)															
Flyaway Cost								'					,					,
Recurring Cost																		
Aiming Post Lights ^(†)	-	-	-	1.000	1,076	1.076	-	-	-	-	-	-	-	-	-	-	-	-
Range Indicator ^(†)	-	-	-	0.626	201	0.126	-	-	-	-	-	-	-	-	-	-	-	-
Round Counters ^(†)	-	-	-	-	-	-	1.000	650	0.650	-	-	-	-	-	-	-	-	-
60mm Cannon Tubes ^(†)	-	-	-	-	-	_	-	-	-	-	-	-	25.000	41	1.025	25.000	41	1.02
120mm Cannon Tubes ^(†)	-	-	-	-	-	-	-	-	-	-	-	-	29.000	37	1.073	29.000	37	1.07
M1101 Trailers ^(†)	-	_	-	-	_	-	-	-	_	13.000	48	0.624	-	-	-	13.000	48	0.62
60mm Mortar System ^(†)	-	-	-	-	-	-	-	-	-	-	-	-	42.000	41	1.722	42.000	41	1.72
120mm Mortar System ^(†)	-	-	-	-	-	-	-	-	-	-	-	-	57.000	37	2.109	57.000	37	2.10
Production Engineering	-	-	330.963	-	-	2.000	-	-	2.000	-	-	2.059	-	-	0.291	-	-	2.35
Fielding	-	-	-	-	-	0.300	-	-	0.600	-	-	0.550	-	-	-	-	-	0.55
Proof and Acceptance	-	-	-	-	-	0.293	-	-	0.392	-	-	0.390	-	-	0.205	-	-	0.59
Government ILS	-	-	-	-	-	0.350	-	-	0.350	-	-	0.350	-	-	-	-	-	0.35
Staging / Transportaion	-	-	-	-	-	0.450	-	-	0.500	-	-	0.500	-	-	-	-	-	0.50
Operations and New Equipment Training	-	-	-	-	-	0.440	-	-	0.520	-	-	0.518	-	-	-	-	-	0.51

LI G02200 - Mortar Systems Army

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Exhibit P-5, Cost Analysis: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:
2033A / 02 / 10

Date: February 2015

Item Number / Title [DODIC]:
G02200 / Mortar Systems

G02202 / Mtr Wpn Sys

ID Code (A=Service Ready, B=Not Service Ready) : B

MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

	F	Prior Years	s		FY 2014			FY 2015		FY	′ 2016 Ba	se	F	/ 2016 OC	0	F۱	2016 Tot	tal
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)															
FAT	-	-	-	-	-	0.132	-	-	-	-	-	-	-	-	0.605	-	-	0.605
81 MM Re-work / Slip rate	-	-	-	-	-	0.143	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	330.963	-	-	5.310	-	-	5.012	-	-	4.991	-	-	7.030	-	-	12.021
Subtotal: Flyaway Cost	-	-	330.963	-	-	5.310	-	-	5.012	-	-	4.991	-	-	7.030	-	-	12.021
Gross/Weapon System Cost	-	-	330.963	-	-	5.310	-	-	5.012	9.108	-	4.991	-	-	7.030	9.108	-	12.021

Secondar	y Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Army	Quantity	-	-	-	-	-
	Total Obligation Authority	3.810	3.512	3.491	7.030	10.521
ANG	Quantity	-	-	-	-	-
	Total Obligation Authority	1.500	1.500	1.500	-	1.500
Total:	Quantity	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	5.310	5.012	4.991	7.030	12.021

^(†) indicates the presence of a P-5a

LI G02200 - Mortar Systems Army UNCLASSIFIED
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Exhibit P-5a, Procurement History and Planning: PB 2016 A	Army	Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
2033A / 02 / 10	G02200 / Mortar Systems	G02202 / Mtr Wpn Sys

	0			Method/Type or		Award	Date of First	04.		Specs Avail	 RFP Issue
Cost Elements	o	FY	<b>Contractor and Location</b>	Funding Vehicle	Location of PCO	Date	Delivery	<b>Qty</b> (Each)	Unit Cost	_	Date
Aiming Post Lights		2014	Connectec / Irvine, CA	C/FP	Picatinny Arsenal, NJ	Sep 2014	Jul 2015	1,076	1.000	Υ	
Range Indicator		2014	Connectec / Irvine, CA	C/FP	Picatinny Arsenal, NJ	Jan 2015	Mar 2016	201	0.626	Υ	
Round Counters		2015	TBS2 / TBD2	C/FP	Picatinny Arsenal, NJ	Jun 2015	Aug 2016	650	1.000	Y	
60mm Cannon Tubes	1	2016	WVA / Watervliet Arsenal, NY	MIPR	Watervliet Arsenal, NY	Mar 2016	Mar 2017	41	25.000	Υ	
120mm Cannon Tubes	1	2016	WVA / Watervliet Arsenal, NY	MIPR	Watervliet Arsenal, NY	Mar 2016	Mar 2017	37	29.000	Υ	
M1101 Trailers		2016	PM LTV / Warren, MI	C/FP	Warren, MI	Apr 2016	Dec 2016	48	13.000	Υ	
60mm Mortar System ^(†)	1	2016	TBS1 / TBD1	C/FP	Picatinny Arsenal, NJ	Jun 2016	Oct 2017	41	42.000	Y	
120mm Mortar System ^(†)	1	2016	TBS1 / TBD1	C/FP	Picatinny Arsenal, NJ	Jun 2016	Oct 2017	37	57.000	Y	

^(†) indicates the presence of a P-21

Exhi	bit P	-21, Pro	oducti	on Sc	hedul	e: PE	3 201	6 Arm	ıy														Date	e: Feb	oruary	/ 2015	5			
		<b>ation</b> / 2 / 10	Budge	et Acti	vity /	Budç	get Sı	ıb Ac	tivity	:	1		Item / Mort											Nun 202 /			[DOI	DIC]:		
			ements n Each)								Fiscal Y	ear 2014			,								Fiscal Y	ear 2015						
				ACCEPT									C	alendar	Year 201	4								Caler	ndar Yea	r 2015				
0 F C R O #	FY	SERVICE	PROC QTY	PRIOR TO 1 OCT 2013	BAL DUE AS OF 1 OCT	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	B A L
60mm	Mortar S	System																												
<b>√</b> 1	2016	ARMY	41	-	41																									
120mm	n Mortar	System	,																											
✓ 2	2016	ARMY	37	-	37																									
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Exl	hibit	P-21	, Pro	ducti	on Sc	hedul	le: Pl	3 201	6 Arm	ıy														Date	: Feb	ruary	2015	5			
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Mortar	System		,																										
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1000 2000 N	FY ortar \$2016 Mortar	Cost E (Units)	Cost Elements (Units in Each)  FY SERVICE QTY  Ortar System  Wortar System  Wortar System	Cost Elements (Units in Each)	A / 1 0 2 / 1 10   Cost Elements (Units in Each)   ACCEPT   PRIOR   TO 1   DUE   O N D J   DUE   O N D E A A SOF C O DE A	Cost Elements (Units in Each)	P-1   G0   Cost Elements (Units in Each)   ACCEPT   PRIOR   TO 1   DUE   O N D J F M   FY   SERVICE   QTY   2017   1 OCT   T   V   C N B R   R   Ortar System   Co16   ARMY   41   -   41   20   21   O N D J F M   C O D E A E A E A E A E A E A E A E A E A E	P-1 Line G02200   Cost Elements (Units in Each)   PROC OCT AS OF C O E A E A P P   SERVICE QTY 2017 1 OCT T V C N B R R   OCT   System   CO16   ARMY   41   -     41   20   21     O N D J F M A P   OCT   OCT	P-1 Line Item   G02200 / Mort	P-1 Line Item Num G02200 / Mortar System	P-1 Line Item Number / G02200 / Mortar Systems	P-1 Line Item Number / Title: G02200 / Mortar Systems	P-1 Line Item Number / Title: G02200 / Mortar Systems   G02200 / Mortar Systems	P-1 Line Item Number / Title: G02200 / Mortar Systems   G02200 / Mortar System   G02200	P-1 Line Item Number / Title:   G02200 / Mortar Systems   G02200 / Mortar System   G022	P-1 Line Item Number / Title:   G02200 / Mortar Systems   G02200 / Mortar System   G016   ARMY   G01   ARMY	P-1 Line Item Number / Title:   G02200 / Mortar Systems   G02200 / Mortar Systems	P-1 Line Item Number / Title:   G02200 / Mortar Systems   G02200 / Mortar System   G016   ARMY   A	P-1 Line Item Number / Title:   G02200 / Mortar Systems   G02	P-1 Line Item Number / Title:   G02202 / G0220	P-1 Line Item Number / Title:   G02202 / Mtr V	P-1 Line Item Number / Title:   G02202 / Mtr Wpn S	P-1 Line Item Number / Title:   G02202 / Mtr Wpn Sys   G02202 / Mt	P-1 Line Item Number / Title:   G02202 / Mtr Wpn Sys   G02202 / Mt	P-1 Line Item Number / Title:   G02202 / Mtr Wpn Sys   G02202 / Mt				

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Exhibit P-21, Production Schedule: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:
2033A / 02 / 10

Date: February 2015

Item Number / Title [DODIC]:
G02200 / Mortar Systems

G02202 / Mtr Wpn Sys

		Produc	tion Rates (Each /	Month)				Procurement Le	adtime (Months)			
MFR						Init	al			Reor	der	
Ref					ALT	ALT		Total	ALT	ALT		Total
#	MFR Name - Location	MSR For 2016	1-8-5 For 2016	MAX For 2016	Prior to Oct 1	After Oct 1	Mfg PLT	After Oct 1	Prior to Oct 1	After Oct 1	Mfg PLT	After Oct 1
1	TBS1 - TBD1	35	60	100	6	9	16	25	3	9	16	25
2	TBS1 - TBD1	35	60	100	6	9	16	25	3	9	16	25

[&]quot;A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

LI G02200 - Mortar Systems

Army

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army

**Date:** February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

G01501 / XM320 Grenade Launcher Module (GLM)

Vehicles / BSA 10: Weapons & Other Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) : A	Program Elements for Code B Items:					Other Related Program Elements:						
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	161.269	22.449	28.390	26.294	-	26.294	29.367	28.722	27.484	25.275	-	349.250
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	161.269	22.449	28.390	26.294	-	26.294	29.367	28.722	27.484	25.275	-	349.250
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	161.269	22.449	28.390	26.294	-	26.294	29.367	28.722	27.484	25.275	-	349.250
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	ne correspondin	g budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	3.169	-	3.169	-	-	-	-	-	217.601

#### **Description:**

The M320 Grenade Launcher Module (GLM) is a 40mm low-velocity grenade launching weapon system that is a direct replacement to all M203 series of grenade launchers on M16 Rifles and M4 Carbines. A modular system that mounts under the barrel of the rifle or carbine. It can also be used as a stand-alone configuration. The M320 GLM has an integrated leaf sight and improved safety features. It also has a side-loading unrestricted breech to permit the system to fire longer 40mm low-velocity projectiles (NATO standard and non-standard). The M320 GLM is more reliable and safer because it uses a more modern double-action trigger/firing system. The new pistol grip design eliminates the need to use the magazine as a hand grip. The latest innovations in lightweight material composites improve durability. Procurement of Laser Range Finder (LRF) and Grenadier Sighting System (GSS) are delivered as system components, one each per system.

The FY 2016 funding request was reduced for \$3.140 million to account for the availability of prior year execution balances

Secondary Distribution		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	17.636	21.890	17.523	-	17.523	29.367	28.722	27.484	25.275
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	3.608	4.870	5.472	-	5.472	-	-	-	-
AR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	1.205	1.630	3.299	-	3.299	-	-	-	-
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	22.449	28.390	26.294	-	26.294	29.367	28.722	27.484	25.275

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army

**Date:** February 2015

# Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

G01501 / XM320 Grenade Launcher Module (GLM)

Vehicles / BSA 10: Weapons & Other Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) : A			Elements for Code	B Items:	C	Other Related Program Elements:			
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO FY 2016 Total		
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	
G01501 / XM320 Grenade Launcher Module (GLM)	-5, P-5a, P-21	Α	- / 161.269	- / 22.449	- / 28.390	- / 26.294	- / -	- / 26.294	
Total Gross/Weapon System Cost			- / 161.269	- / 22.449	- / 28.390	- / 26.294	- 1 -	- / 26.294	

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

#### Justification:

FY 2016 Base procurement dollars in the amount of \$26.294 million supports the Active Army, National Guard (NG) and Army Reserve (AR) by procuring 8,297 M320A1 Grenade Launcher Modules (GLMs) to replace the outdated M203 family of GLMs. One major component integrated to the grenade launching system is the Laser Range Finder (LRF), which enhances preparation for combat and combat employment of grenadiers concerning range-to-target determination and first round hit probability. The GLM system provides deploying units an improved capability over the M203 grenade launcher and enables the Warfighter to more accurately engage the enemy in both daylight and darkness. The M320 is a safer, more reliable grenade launcher that reduces aiming error and increases first-round hit probability. The M320 GLM 40mm ammunition is loaded from the side thus providing easier access and permitting use of a wider range of ammunition as compared to the M203, originally fielded beginning in the mid 1970s.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L.110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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Exhibit P-5, Cost Analysis: PB 2016 Army

Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

2033A / 02 / 10

P-1 Line Item Number / Title:

G01501 / XM320 Grenade Launcher Module (GLM)

Item Number / Title [DODIC]:

G01501 / XM320 Grenade Launcher

Module (GLM)

Module (GLI

ID Code (A=Service Ready, B=Not Service Ready) : A		IVID	AP/IVIAIS Code:			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	161.269	22.449	28.390	26.294	-	26.294
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	161.269	22.449	28.390	26.294	-	26.294
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	161.269	22.449	28.390	26.294	-	26.294
(The following Resource Summary rows are for information	onal purposes only. The corre	esponding budget requests	are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	3.169	-	3.169

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

	P	rior Years	3		FY 2014			FY 2015		F۱	' 2016 Bas	se	FY	′ 2016 OC	0	FY	2016 Tot	.al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)									
Flyaway Cost																		
Recurring Cost																		
1. M320A1 Grenade Launcher (GL) ^(†)	2.491	52,609	131.069	1.822	6,793	12.380	2.078	8,959	18.616	2.146	8,297	17.802	-	-	-	2.146	8,297	17.80
2. Laser Range Finder (LRF) ^(†)	-	-	12.483	0.449	12,844	5.764	0.520	8,959	4.658	0.457	8,297	3.789	-	-	-	0.457	8,297	3.78
3. Tool Set/ASL	6.136	147	0.902	0.417	513	0.214	0.484	448	0.217	0.492	478	0.235	-	-	-	0.492	478	0.23
4. Arms Racks	16.304	148	2.413	1.171	613	0.718	1.196	448	0.536	1.034	580	0.600	-	-	-	1.034	580	0.60
5. Program Management	-	-	0.539	-	-	1.200	-	-	1.988	-	-	1.950	-	-	-	-	-	1.95
6. Engineering, Test, and Evaluation Spt	-	-	6.171	-	-	0.600	-	-	0.700	-	-	0.705	-	-	-	-	-	0.70
7. Integrated Logistics Support (ILS)	-	-	1.577	-	-	0.144	-	-	0.145	-	-	0.148	-	-	-	-	-	0.14
8. Total Package Fielding (TPF)	-	-	2.849	-	-	0.295	-	-	0.310	-	-	0.315	-	-	-	-	-	0.31
9. New Equipment Training (NET)	-	-	3.286	-	-	0.730	-	-	0.800	-	-	0.750	-	-	-	-	-	0.75
10. RIA Program Management Spt	-	-	-	-	-	0.404	-	-	0.420	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	161.269	-	-	22.449	-	-	28.391	-	-	26.300	-	-	-	-	-	26.30
Subtotal: Flyaway Cost	-	-	161.269	-	-	22.449	-	-	28.391	-	-	26.300	-	-	-	-	-	26.30

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Exhibit P-5, Cost Analysis: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:
2033A / 02 / 10

P-1 Line Item Number / Title:
G01501 / XM320 Grenade Launcher Module (GLM)

G01501 / XM320 Grenade Launcher Module (GLM)

Date: February 2015

Item Number / Title [DODIC]:
G01501 / XM320 Grenade Launcher Module (GLM)

MDAP/MAIS Code:

ID Code (A=Service Ready, B=Not Service Ready) : A

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

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	F	Prior Years	S		FY 2014			FY 2015	-	F	′ 2016 Ba	se	F	Y 2016 OC	0	F	Y 2016 Tot	al
Cost Elements	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost		Total Cost
Gross/Weapon System	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)
Cost	-	-	161.269	-	-	22.449	-	-	28.390	3.169	-	26.294	-	-	-	3.169	- '	26.294

				FY 2016	FY 2016	FY 2016
,	Secondary Distribution	FY 2014	FY 2015	Base	OCO	Total
Army	Quantity	-	-	-	-	-
	Total Obligation Authority	17.636	21.890	17.523	-	17.523
ANG	Quantity	-	-	-	-	-
	Total Obligation Authority	3.608	4.870	5.472	-	5.472
AR	Quantity	-	-	-	-	-
	Total Obligation Authority	1.205	1.630	3.299	-	3.299
Total:	Quantity	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	22.449	28.390	26.294	-	26.294

^(†) indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:

2033A / 02 / 10

P-1 Line Item Number / Title:

G01501 / XM320 Grenade Launcher Module (GLM)

G01501 / XM320 Grenade Launcher Module (GLM)

	0			Method/Type or		Award	Date of First	Qty	Unit Cost	Specs Avail	Date Revision	RFP Issue
Cost Elements	0	FY	Contractor and Location	Funding Vehicle	Location of PCO	Date	Delivery	(Each)	(\$ K)	Now?	Available	Date
1. M320A1 Grenade Launcher (GL)		2013	Heckler & Koch Defense, Inc / Ashburn, VA	SS/FFP	ACC Picatinny, Picatinny, NJ	Jan 2014	Jun 2014	5,641	2.109	N		
1. M320A1 Grenade Launcher (GL) ^(†)		2014	Heckler & Koch Defense, Inc / Ashburn, VA	SS / FFP	ACC-Picatinny, Picatinny, NJ	May 2014	Nov 2014	2,804	1.822	N		
1. M320A1 Grenade Launcher (GL) ^(†)		2014	TBD1 / TBD1	C / FFP	ACC-Picatinny, Picatinny, NJ	Jun 2015	Mar 2016	3,989	1.822	N		
1. M320A1 Grenade Launcher (GL) ^(†)		2015	TBD1 / TBD1	C / FFP	ACC-Picatinny, Picatinny, NJ	Jun 2015	Mar 2016	8,959	2.078	N		
1. M320A1 Grenade Launcher (GL) ^(†)		2016	TBD1 / TBD1	C / FFP	ACC-Picatinny, Picatinny, NJ	Nov 2015	Oct 2016	8,297	2.146	N		
2. Laser Range Finder (LRF)		2014	Bushnell Outdoor Products / Overland, KS	SS/FFP	DLA Troop Command, Phila., PA	May 2014	Nov 2014	12,844	0.449	N		
2. Laser Range Finder (LRF)		2015	Bushnell Outdoor Products / Overland, KS	SS/FFP	DLA Troop Support, Phila., PA	Mar 2015	Sep 2015	8,959	0.520	N		
2. Laser Range Finder (LRF)		2016	Bushnell Outdoor Products / Overland, KS	SS/FFP	DLA Troop Support, Phila., PA	Nov 2015	May 2016	8,297	0.457	N		

^(†) indicates the presence of a P-21

#### Remarks:

The Grenadier Sighting System (GSS) is currently being developed under the Small Arms Improvement Project S63 in PE 0604601A Infantry Support Weapons. The GSS procurement phase is scheduled to start in FY18. Rock Island Arsenal is being qualified as a second source in FY16, with a production decision to follow.

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			Cost El	ements housands	)							Fiscal Ye	ear 2016											Fiscal Ye	ear 2017						
					ACCEPT									Ca	lendar Y	ear 201	6								Calen	dar Year	2017				
O F C F O #	2	FY SEI	RVICE	PROC QTY	PRIOR TO 1 OCT 2015	BAL DUE AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N U	T O L	A U G	S E P	O C T	< 0 Z	D E C	J A N	F E B	M A R	A P R	M A Y	N N	n n	A U G	S E P	
1. M	320/	1 Grenade	e Launch	er (GL)							'											\					'				
Prior	Yea	rs Deliveri	es: 4696	8																											
1	2	014 ARM	1Y	2.804	2.804	-																									
2	2	014 ARM		3.989	-	3.989	-	-	-	-	-	.541	.541	.543	.413	.650		.651													_
2	+	015 ARM		8.959	-	8.959	-	-	-	-	-	.325	.325	.325	.475	.537	.588	.750	.787	.850	.950	1.037	2.010								_
2	_	016 ARM		8.297	-	8.297		Α -	-	-	-	-	-	-	-	-	-	-	.350	.300	.300	.200	-	1.000	1.046	1.046	1.046	1.000	1.005	1.004	_
2	2	016 AF	<b>‡</b> )	5.000	-	5.000		A -	-	-	-	-	-	-	-	-	-	-	.450	.450	.450	.450	-	.500	.450	.450	.450	.450	.450	.450	
2	2	016 Tota	I	13.297	-	13.297		-	-	-	-	-	-	-	-	-	-	-	.800	.750	.750	.650	-	1.500	1.496	1.496	1.496	1.450	1.455	1.454	
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N N	J 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	N N	U U	A U G	S E P	

Exhibit P-21, Production Schedule: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:
2033A / 02 / 10

P-1 Line Item Number / Title:
G01501 / XM320 Grenade Launcher Module (GLM)

G01501 / XM320 Grenade Launcher Module (GLM)

Date: February 2015

Item Number / Title [DODIC]:
G01501 / XM320 Grenade Launcher Module (GLM)

		Produc	tion Rates (Each /	Month)				Procurement Le	adtime (Months)			
MF	R					Init	tial			Reo	order	
Re	f				ALT	ALT		Total	ALT	ALT		Total
#	MFR Name - Location	MSR For 2016	1-8-5 For 2016	MAX For 2016	Prior to Oct 1	After Oct 1	Mfg PLT	After Oct 1	Prior to Oct 1	After Oct 1	Mfg PLT	After Oct 1
	1 Heckler & Koch Defense, Inc											
	- Ashburn, VA	3,600	9,000	18,000	3	16	3	19	3	8	6	14
	2 TBD1 - TBD1	3,600	9,000	24,000	6	9	9	18	6	2	11	13

^(‡) Delivery rows marked with this symbol indicate that they are funded through a separate Line Item. See the respective components' exhibits for details, including the full delivery schedule. "A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

G01506 / Precision Sniper Rifle

Vehicles / BSA 10: Weapons & Other Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) : [	3		Program Ele	ments for Cod	de B Items: 06	604601A		Other Relate	d Program El	ements:		
	Prior			FY 2016	FY 2016	FY 2016					То	
Resource Summary	Years	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	-	-	1.984	-	1.984	0.792	3.171	9.917	15.859	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	-	-	-	1.984	-	1.984	0.792	3.171	9.917	15.859	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	-	-	1.984	-	1.984	0.792	3.171	9.917	15.859	Continuing	Continuing
(The following	Resource Sum	mary rows are fo	or informational p	ourposes only. Th	e corresponding	g budget request:	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	22.545	-	22.545	-	-	-	-	Continuing	Continuing

### **Description:**

Precision Sniper Rifle (PSR) will become the primary anti-personnel Sniper Weapon System (SWS) in all Army Sniper Teams. It is a multi-caliber, bolt-action sniper rifle, which is effective against personnel targets at extreme ranges. The PSR provides increased probability of hit over the current M2010 configuration at distances up to twelve-hundred (1200) meters, which enhances the sniper role in supporting combat operations and improves sniper survivability. The PSR provides extended effective range by three-hundred (300) meters over M2010 out to 1500 meters, which will increase stand-off distances ensuring overmatch against enemy counter sniper engagements and increase sniper capability. The PSR includes a sound suppressor and day/night optics, which allows snipers to effectively engage enemy snipers, as well as crew served and indirect fire weapons virtually undetected in any light condition. The Precision Sniper Rifle (PSR) is a New Start in FY2016

Seconda	ary Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	1.984	-	1.984	0.792	2.181	7.441	12.781
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	-	-	-	-	0.990	2.476	2.970
AR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	-	-	-	-	-	-	0.108
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	-	-	1.984	-	1.984	0.792	3.171	9.917	15.859

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LI G01506 - Precision Sniper Rifle Army

Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

Vehicles / BSA 10: Weapons & Other Combat Vehicles

P-1 Line Item Number / Title: G01506 / Precision Sniper Rifle

ID Code (A=Service Ready, B=Not Service Ready) : B	P	rogram	Elements for Code	<b>B Items:</b> 0604601A	C	Other Related Program	Elements:	
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)				
G01506 / Precision Sniper Rifle	P-5, P-5a	В	- / -	- / -	- / -	- / 1.984	- / -	- / 1.984
Total Gross/Weapon System Cost			- 1 -	- 1 -	- 1 -	- / 1.984	- 1 -	- / 1.984

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

#### Justification:

FY 2016 Base procurement dollars in the amount of \$1.984 million supports the Active Army through procurement of eighty-eight (88) Precision Sniper Rifles (PSR). PSR will become the primary anti-personnel Sniper Weapon System (SWS) in all Army Sniper Teams. It is a multi-caliber, bolt-action sniper rifle, which is effective against personnel targets at extreme ranges. The PSR provides increased probability of hit over the current M2010 configuration at distances up to twelve-hundred (1200) meters, which enhances the sniper role in supporting combat operations and improves sniper survivability. The PSR provides extended effective range by three-hundred (300) meters over M2010 out to 1500 meters, which will increase stand-off distances ensuring overmatch against enemy counter sniper engagements and increase sniper capability.

AAO: 2.675

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

LI G01506 - Precision Sniper Rifle

Army

Pa

							U	NOLAG		,								
Exhibit P-5, Cost	Analysi	s: PB 20	16 Army	/									I	Date: F	ebruary 2	2015		
<b>Appropriation / B</b> 2033A / 02 / 10	Budget A	ctivity /	Budget	Sub Act	ivity:			n Numbe							umber / 1 6 / Precis			
ID Code (A=Service Read	dy, B=Not Serv	ice Ready) : <b>E</b>	3						М	DAP/MAIS	S Code:							
F	Resource	e Summ	ary			Prior Ye	ars	FY 20	014	FY	2015	FY 2	2016 Bas	e	FY 2016 (	осо	FY 2016	Total
Procurement Quantity (Un	its in Each)						-		-		-			-		-		-
Gross/Weapon System C	ost (\$ in Millior	ns)					-		-		-		1	.984		-		1.984
Less PY Advance Procure	ement (\$ in Mi	Ilions)					-		-		-			-		-		-
Net Procurement (P1) (\$ ii	n Millions)						-		-		-		1	.984		-		1.984
Plus CY Advance Procure	ement (\$ in Mi	llions)					-		-		-			-		-		-
Total Obligation Authori	<b>ty</b> (\$ in Million:	s)					-		-		-		1	.984		-		1.984
(T	he following	Resource S	ummary rov	vs are for info	rmational p	ourposes on	ly. The corre	sponding bud	dget reques	ts are docum	ented elsewl	here.)						
Initial Spares (\$ in Millions)							-		-		-			-		-		-
Gross/Weapon System U	nit Cost (\$ in	Thousands)					-		-		-		22	2.545		-		22.545
Note: Subtotals or Totals			_	or add, due to		_	1			T								
	Prior Years			FY 2014	1		FY 2015	T	FY	/ 2016 Bas		FY	′ 2016 C		F	Y 2016 Tot	1	
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost			'			'	,				'		,		'		'	
Recurring Cost																		1
Precision Sniper Rifle ^(†)	-	-	-	-	-	-	-	-	-	15.909	88	1.400	-	-	-	15.909	88	1.400
Engineering Support	-	-	-	-	-	-	-	-	-	-	-	0.150	-	-	-	-	-	0.150
Integrated Logistics Support (ILS)	-	-	-	-	-	-	-	-	-	-	-	0.084	-	-	-	-	-	0.084
Total Package Fielding (TPF)	-	-	-	-	-	-	-	-	-	-	-	0.175	-	-	-	-	-	0.175
New Equipment Training (NET)	-	-	_	-	-	_	_	_	_	-	-	0.175	-	-	_	-	_	0.175
Subtotal: Recurring Cost	-	-	-	-	-	-	-	-	-	-	-	1.984	-	-	-	-	-	1.984
Subtotal: Flyaway Cost	-	-	-	-	-	-	-	-	-	-	-	1.984	-	-	-	-	-	1.984
Gross/Weapon System Cost	-	-	-	-	-	-	-	-	-	22.545	-	1.984	-	-	-	22.545	-	1.984
											1			Ţ		<u> </u>		
	Sec	ondary Di	istributior	1			FY	2014		FY 2015		FY 2 Bas			FY 2016 OCO		FY 20 ⁻ Tota	
Army		Qua	antity						-		-		-			-		-
			al Obligation A	Authority					-		-		1.984	1		-		1.984
Total: Secondary Distribution			antity	A 41 14					-		-		-			-		-
		Tota	al Obligation	Authority					-		-		1.984	•		-		1.984

LI G01506 - Precision Sniper Rifle Army

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P-1 Line #18

Exhibit P-5, Cost Analysis: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 10	P-1 Line Item Number / Title: G01506 / Precision Sniper Rifle	Item Number / Title [DODIC]: G01506 / Precision Sniper Rifle
ID Code (A=Service Ready, B=Not Service Ready) : B	MDAP/MAIS Code:	
2033A / 02 / 10	G01506 / Precision Sniper Rifle	G01506 / Precision Sniper Rifle

LI G01506 - Precision Sniper Rifle Army

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Exhibit P-5a, Procurement History and Planning: PB 2016	Army		Date: F	ebruary 2015		
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Num	ber / Title:	Item Nu	ımber / Title [DC	DDIC]:	
2033A / 02 / 10	G01506 / Precision	Sniper Rifle	G01506	I Precision Snip	er Rifle	

Cost Elements	0 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue Date
Precision Sniper Rifle		2016	TBD / TBD	C / FFP	ACC-New Jersey Picatinny, NJ	lan 2016	Apr 2016	88	15.909	N		

#### Remarks:

The PSR will be a Government Off The Shelf (GOTS) solution; therefore, a P21 Delivery Schedule is not required for this submission.

Exhibit P-40, Budget Line Item Justification: PB 2016 Army

**Date:** February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

G01507 / COMPACT SEMI-AUTOMATIC SNIPER SYSTEM

Vehicles / BSA 10: Weapons & Other Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) : I	3		Program Eler	ments for Cod	de B Items: 06	604601A		Other Relate	d Program El	ements:			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-	
Gross/Weapon System Cost (\$ in Millions)	-	-	0.148	1.488	-	1.488	-	-	-	-	-	1.636	
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-	
Net Procurement (P1) (\$ in Millions)	-	-	0.148	1.488	-	1.488	-	-	-	-	-	1.636	
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-	
Total Obligation Authority (\$ in Millions)	-	-	0.148	1.488	-	1.488	-	-	-	-	-	1.636	
(The following	Resource Sum	mary rows are fo	or informational p	urposes only. Th	e corresponding	g budget requests	s are document	ed elsewhere.)	,				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-	
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-	
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	8.601	-	8.601	-	-	-	-	-	1.019	

### **Description:**

The Compact Semi-Automated Sniper System (CSASS) is a compact and lighter weight 7.62 Semi-Automatic Sniper System (SASS) with a shorter barrel, collapsible buttstock, new suppressor, new optic and slightly modified receiver. The CSASS provides a more full-spectrum and versatile weapon to sniper teams, which improves accuracy, reliability, and longevity without sacrificing performance.

Secondary	y Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	0.148	1.488	-	1.488	-	-	-	-
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	-	0.148	1.488	-	1.488	-	-	-	-

#### Justification:

FY 2016 base procurement dollars in the amount of \$1.488 million supports the active army with production of 173 CSASS. The CSASS addresses capability gaps by reducing load, improved ergonomics, survivability and portability in accordance with preplanned product improvements and objective requirements.

AAO: 3,643

In accordance with Section 1815 of the FY2008 National Defense Authorization Act (P.L.110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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Exhibit P-40, Budget Line Item Justification	n: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Su 2033A: Procurement of W&TCV, Army / BA 02 Vehicles / BSA 10: Weapons & Other Combat	2: Weapons and Other Combat	P-1 Line Item Num G01507 / COMPAC	ber / Title: T SEMI-AUTOMATIC SNIPER SYSTEM
ID Code (A=Service Ready, B=Not Service Ready) : B	Program Elements for Code	<b>B Items:</b> 0604601A	Other Related Program Elements:

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

G13501 / Carbine

Vehicles / BSA 10: Weapons & Other Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) : A	4		Program Elei	ments for Cod	de B Items:			Other Related Program Elements:				
	Prior			FY 2016	FY 2016	FY 2016					То	
Resource Summary	Years	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	19.469	21.254	20.616	34.460	-	34.460	38.194	39.432	42.156	27.041	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	19.469	21.254	20.616	34.460	-	34.460	38.194	39.432	42.156	27.041	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	19.469	21.254	20.616	34.460	-	34.460	38.194	39.432	42.156	27.041	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	ne corresponding	g budget requests	are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	0.800	-	0.800	-	-	-	-	Continuing	Continuing

### **Description:**

This funding is used to procure carbine weapons for the Army. The carbine is more compact than the M16 Rifle series since it uses a shorter barrel and collapsible stock. Currently the Army uses the M4 and M4A1 Carbines. These carbines are 5.56mm, gas operated, air-cooled, selective-rate, shoulder fired small arms weapons. The M4 mode of fire is safe/semi-automatic/3-round burst and the M4A1 mode of fire is the same as the M4 but provides full automatic capability instead of the 3-round burst (safe/semi-automatic/full automatic). The M4A1 Carbine is produced with a heavier barrel to accommodate and sustain a higher rate of fire using the full automatic mode of fire, and an ambidextrous selector. The M4/M4A1 Carbine also includes a combat optic, back-up iron sight, and the adapter rail system to attach accessories and components.

Second	ary Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	21.254	14.225	16.934	-	16.934	31.746	31.719	33.969	22.679
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	6.391	11.665	-	11.665	4.292	3.293	3.496	2.904
AR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	5.861	-	5.861	2.156	4.420	4.691	1.458
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	21.254	20.616	34.460	-	34.460	38.194	39.432	42.156	27.041

Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

G13501 / Carbine

Vehicles / BSA 10: Weapons & Other Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) : A	Pro	ogran	Elements for Code	B Items:	Ot	Other Related Program Elements:				
Exhibits Schedule		Prior Years		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total		
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)					
G13503 / M4A1 CARBINE	P-5, P-5a, P-21	Α	- / 19.469	- / 21.254	- / 20.616	- / 34.460	- / -	- / 34.460		
Total Gross/Weapon System Cost			- / 19.469	- / 21.254	- / 20.616	- / 34.460	- 1 -	- / 34.460		

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

#### Justification:

FY 2016 Base procurement dollars in the amount of \$34.460 million supports the Active Army by purchasing 43,074 M4A1 Carbines for Active Army and National Guard with a backup iron sight, and adapter rail system. The M4A1 Carbine is produced with a heavier barrel to accommodate and sustain a higher rate of fire using the full automatic mode of fire, and an ambidextrous selector. The purchase of the carbines enhances current capability allowing the Soldier to engage targets in full automatic mode of fire at a higher sustained rate of fire as compared to the M4 Carbine.

AAO: 850,000

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

Exhibit P-5, Cost Analysis: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:

2033A / 02 / 10

Date: February 2015

Item Number / Title [DODIC]:
G13501 / Carbine

G13503 / M4A1 CARBINE

ID Code  (A=Service Ready, B=Not Service Ready): A		М	OAP/MAIS Code:			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	19.469	21.254	20.616	34.460	-	34.460
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	19.469	21.254	20.616	34.460	-	34.460
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	19.469	21.254	20.616	34.460	-	34.460
(The following Resource Summary rows are for	informational purposes only. The cor	responding budget request	s are documented elsewher	re.)		
Initial Spares (\$ in Millions)	_	_	_	_	_	_

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

Gross/Weapon System Unit Cost (\$ in Thousands)

	P	rior Years			FY 2014			FY 2015		FY	2016 Bas	е	FY	2016 OC	0	FY	2016 Tota	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)															
Flyaway Cost											-							
Recurring Cost																		
1. M4A1 Carbine ^(†)	0.811	24,000	19.469	0.641	28,964	18.577	0.663	21,865	14.501	0.715	43,074	30.807	-	-	-	0.715	43,074	30.80
Colt's Royalty     payment	-	-	-	-	-	0.335	-	-	0.252	-	-	0.520	-	-	-	-	-	0.52
3. M4A1 Rebaseline Test	-	-	-	-	-	-	-	-	1.800	-	-	-	-		-	-	-	-
Program     Management	-	-	-	-	-	1.243	-	-	1.495	-	-	1.498	-	-	-	-	-	1.49
<ol><li>Engineering, Test, &amp; Evaluation Spt</li></ol>	-	-	-	-	-	0.477	-	-	0.895	-	-	0.835	-	-	-	-	-	0.83
5. Integrated Logistics Support (ILS)	-	-	-	-	-	0.197	-	-	0.146	-	-	0.150	-	-	-	-	-	0.15
6. Total Package Fielding (TPF)	-	-	-	-	-	0.425	-	-	0.255	-	-	0.500	-	-	-	-	-	0.50
7. RIA First Article Testing	-	-	-	-	-	-	-	-	1.272	-	-	0.150	-	-	-	-	-	0.15
Subtotal: Recurring Cost	-	-	19.464	-	-	21.243	-	-	20.611	-	-	34.451	-	-	-	-	-	34.45
Subtotal: Flyaway Cost	-	-	19.464	-	-	21.243	-	-	20.611	-	-	34.451	-	-	-	-	-	34.45
Gross/Weapon System Cost	-	-	19.469	-	-	21.254	-	-	20.616	0.800	-	34.460	-		-	0.800	-	34.46

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0.800

0.800

Exhibit P-5, Cost Analysis: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:
2033A / 02 / 10

Date: February 2015

Item Number / Title [DODIC]:
G13501 / Carbine

G13503 / M4A1 CARBINE

ID Code (A=Service Ready, B=Not Service Ready)	dy) : <b>A</b>		MDAP/MAIS Code:						
Secondar	y Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total			
Army	Quantity	-	-	-	-	-			
	Total Obligation Authority	21.254	14.225	16.934	-	16.934			
ANG	Quantity	-	-	-	-	-			
	Total Obligation Authority	-	6.391	11.665	-	11.665			
AR	Quantity	-	-	-	-	-			
	Total Obligation Authority	-	-	5.861	-	5.861			
Total:	Quantity	-	-	-	-	-			
Secondary Distribution	Total Obligation Authority	21.254	20.616	34.460	-	34.460			

^(†) indicates the presence of a P-5a

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 P-1 Line #20

Exhibit P-5a, Procurement History and Planning: PB 2016 A	Army	Date: February 2015	
Appropriation / Budget Activity / Budget Sub Activity:	t Activity / Budget Sub Activity: P-1 Line Item Number / Title: Item Numbe		
2033A / 02 / 10	G13501 / Carbine	G13503 / M4A1 CARBINE	

Cost Elements	0 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost		Date Revision Available	RFP Issue Date
1. M4A1 Carbine ^(†)		2013	FN Manufacturing / Columbia	C / FFP	ACC-TACOM, Warren, MI	May 2014	Feb 2015	24,000	0.698	N		
1. M4A1 Carbine ^(†)		2014	FN Manufacturing / Columbia	C / FFP	ACC-TACOM, Warren, MI	May 2014	Oct 2015	28,964	0.641	N		
1. M4A1 Carbine ^(†)		2015	FN Manufacturing / Columbia	C / FFP	ACC-TACOM, Warren, MI	Nov 2014	Jul 2016	13,733	0.663	N		
1. M4A1 Carbine ^(†)		2015	TBD / TBD	C / FFP	ACC-Picatinny, Picatinny, NJ	Aug 2015	Nov 2016	8,132	0.663	N		
1. M4A1 Carbine ^(†)		2016	TBD / TBD	C / FFP	ACC Picatinny, Picatinny, NJ	Nov 2015	Feb 2017	43,074	0.715	N		

^(†) indicates the presence of a P-21

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Exr	iibit F	P-21, Pro	oducti	on Sc	hedul	e: Pi	3 201	6 Arm	าง														Date	: Feb	ruary	2015				
		riation / 1 02 / 10	Budge	et Acti	vity /	Bud	get Sı	ub Ac	tivity	:		<b>Line</b> 3501 <i>I</i>			ber /	Title:									i <b>ber</b> / M4A1					
		Cost E (Units in 7	ements housands	)							Fiscal Y	ear 2014	,										Fiscal Ye	ear 2015						
				ACCEPT									С	alendar `	Year 201	4								Calen	dar Year	2015				
O F		0507405	PROC	PRIOR TO 1 OCT	BAL DUE AS OF	0	N O	D E	J A	F E	M	ЧР	M A	n 1	J U	A U	эπо	0 C	; 0 z	D E	J A	F E	J > M	A P	M A	J J	J J	A U	S E	B
0 #		SERVICE	QTY	2013	1 OCT	Т	V	С	N	В	R	R	Υ	N	L	G	Р	Т	V	С	N	В	R	R	Y	N	L	G	Р	L
1. IVI4	IA1 Carb	ARMY	24.000		24.000				T				A -	- 1		_	_	_	_	_	_	3.000	3.000	3.000	3.000	3.000	3.000	3.000	3.000	,
1	2013			-									A -	-				-	1.200	1.453	-	3.000	3.000	3.000	3.000	3.000	-	3.000	3.000	
1	2013	IVAVI	2.653	-	2.653								A -	_		_	_	2.200	1.000	.848	3.000	_	_		_	_	_	_		-
'		Ai	7.048	-	7.048																									-
1	2013	1	33.701	-	33.701								-	-	-	-	-	2.200	2.200	2.301	3.000	3.000	3.000	3.000	3.000	3.000	3.000	3.000	3.000	_
1	2014	ARMY	28.964	-	28.964								A -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28.96
		MC ^(‡)	1.789	-	1.789									-																1.78
1	2014	AF ^(‡)	4.597	-	4.597								Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.59
1	2014	Total	35.350	-	35.350								-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35.35
1	2015		13.733	-	13.733														Α -	-	-	-	-	-	-	-	-	-	-	13.73
1	2015	IVIO	.400	-	.400														A -	-	-	-	-	-	-	-	-	-		.40
1	2015	NAVY (‡)	1.000	-	1.000														Α -	-	-	-	-	-	-	-	-	-	-	1.00
1	2015	AF ^(‡)	.786	-	.786														Α -	-	-	-	-	-	-	-	-	-	-	.78
1	2015	Total	15.919	-	15.919														-	-	-	-	-	-	-	-	-	-	-	15.91
2	2015		8.132	-	8.132																							Α -	-	8.13
2	2016		43.074	-	43.074																									43.07
2	2016	IVIO	.800	-	.800																									.80
2	2016	NAVY (‡)	.672	-	.672																									.67
2	2016	AF ^(‡)	.100	-	.100																									.10
2	2016	Total	44.646	_	44.646																									44.64
						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 J	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	B A L

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ΞxI	nib	it P	-21, Pr	oducti	on Sc	hedul	le: PE	3 201	6 Arm	у														Date	: Feb	ruary	2015	j			
			<b>ation</b> / 2 / 10	Budge	t Acti	vity /	Budg	get Sı	ıb Ac	tivity		- 1	<b>Line</b> 3501 /			ber /	Title:											[DOD RBINE			
				lements								F! I V	0040											F!! Y	0047			,			Π
$\overline{}$	1		(Units in	Thousands)	ACCEPT							Fiscal Ye	ar 2016	C	alondar	Year 201	<b>6</b>							Fiscal Y		dar Year	2017				$\vdash$
					PRIOR	BAL					_				_			_	_			. 1	_					. 1			+
)   I ;   F	₹			PROC	TO 1 OCT	DUE AS OF	C	N O	D E	J A	F E	M A	A P	M A	N J	n 1	A U	S E	O C T	N O	D E	J A	F E	M A	A P	M A	n 1	n 1	A U	S E	
)   ;		FY	SERVICE	QTY	2015	1 OCT	Т	V	С	N	В	R	R	Υ	N	L	G	Р	Т	V	С	N	В	R	R	Y	N	L	G	Р	
. M	_	Carbin		04.000	04.000			-																							_
1	_		ARMY	24.000	24.000																										
1	_	_	NAVY (‡)	2.653	2.653	-																									
1	2		AF ^(‡)	7.048	7.048																										
_ 1	+-		Total	33.701	33.701	-																									
_ 1	_	_	ARMY	28.964	-	28.964	3.000	3.000		3.000	3.000	3.000	3.000	2.136	2.764	2.200	.864														
1	2	2014	MC ^(‡)	1.789	-	1.789	-	-	-	-	.600	.100	.121	.968	-	-	-														
1	2	2014	AF ^(‡)	4.597	-	4.597	-	-	-	-	-	.597	.597	.597	1.000	1.000	.806														
1	2	2014	Total	35.350	-	35.350	3.000	3.000	3.000	3.000	3.600	3.697	3.718	3.701	3.764	3.200	1.670														
1	2		ARMY	13.733	-	13.733	-	-	-	-	-	-	-	-	-	.600	2.230	4.000	3.700	3.203	-	-	-								
1	2	2015	MC ^(‡)	.400	-	.400	-	-	-	-	-	-	-	-	-	-	-	-	.100	.100	.100	.100	-								
1	2	2015	NAVY (‡)	1.000	-	1.000	-	-	-	-	-	-	-	-	-	-	-	-	.100	.200	.200	.200	.300								
1	2	2015	AF ^(‡)	.786	_	.786	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.786								
1	2	2015	Total	15.919	-	15.919	-	-	-	-	-	-	-	-	-	.600	2.230	4.000	3.900	3.503	.300	.300	1.086								
2	2	2015	ARMY	8.132	-	8.132	-	-	-	-	-	-	-	-	-	-	-	-	-	.300	3.503	3.505	.824								
2	2	2016	ARMY	43.074	-	43.074		Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.090	4.000	4.000	4.200	4.300	4.400	4.500	4.600	10
2	2	2016	MC ^(‡)	.800	-	.800		Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.150	
2	2	2016	NAVY (‡)	.672	_	.672		Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.100	.172	.100	.100	.200	-	$\top$
2	2	_	AF ^(‡)	.100	_	.100		Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.100	-	-	-	-	-	$\top$
2	2	2016	Total	44.646	-	44.646		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.090	4.000	4.200	4.372	4.400	4.500	4.700	4.750	11.
						,	0	N	D	J	F	М	Α	М	J	J	Α	s	0	N	D	J	F	М	Α	М	J	J	Α	s	
							C	O V	E	A N	E B	A R	P R	A Y	U N	U	U G	E P	C T	0 V	E C	A N	E B	A R	P R	A Y	U N	U L	U G	E P	

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Exhibit P-21, Production Schedule: PB 2016 Army  Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 10    P-1 Line Item Number G13501 / Carbine		S O N D E C O E P T V O	D J F E A E C N B	Fiscal Y	A I	er / Title	[DOD		: A
Cost Elements	ear 2018 J A S U U E	S O N D E C O E P T V C	D J F E A E C N B	Fiscal Y	Year 2019 Calendar	Year 2019	RBINE	A S U E	
C	J A S U U E	S O N D E C O E P T V C	D J FE A EC N B	F M	Calendar A I	M J	U	UE	
Calendar Y O C # F FY SERVICE PROC QTY 2017 BAL DUE O N D AS OF C O E A E A E A P A U NAVA1 Carbine  1 2013 ARMY 24.000 24.000 - 1 2013 NAVY (†) 2.653 2.653 - 1 2013 AF (†) 7.048 7.048 - 1 2014 ARMY 28.964 28.964 - 1 2014 MC (†) 1.789 1.789 - 1 2014 AF (†) 4.597 - 1 2015 ARMY 13.733 13.733 - 1 2015 ARMY 13.733 13.733 - 1 2015 NAVY (†) 1.000 1.000 - 1 2015 NAVY (†) 1.000 1.000 - 1 2015 ARMY 8.132 8.132 - 2 2016 ARMY 8.132 8.132 - 2 2016 ARMY 43.074 32.090 10.984 5.492 5.492 2 2016 MC (†) .800 .150 .650 .300 .350	J A S U U E	S O N D E C O E P T V O	D J F E A E C N B	F M	Calendar A I	M J	U	UE	- A L
O	J A S U U E	S O N D D D D D D D D D D D D D D D D D D	D J F E A E B	E A	A I	M J	U	UE	A L
1. M4A1 Carbine  1   2013   ARMY   24.000   24.000   - 1   2013   NAVY (‡)   2.653   2.653   - 1   2013   AF (‡)   7.048   7.048   - 1   2013   Total   33.701   3.3701   - 1   2014   ARMY   28.964   28.964   - 1   2014   MC (‡)   1.789   1.789   - 1   2014   AF (‡)   4.597   4.597   - 1   2014   Total   35.350   35.350   - 1   2015   ARMY   13.733   13.733   - 1   2015   ARMY   13.733   13.733   - 1   2015   AF (‡)   .400   .400   - 1   2015   AF (‡)   .786   .786   - 1   2015   AF (‡)   .786   .786   - 2   2016   ARMY   8.132   8.132   - 2   2016   ARMY   43.074   32.090   10.984   5.492   5.492   2   2016   NAVY (‡)   .800   .150   .650   .300   .350   2   2016   NAVY (‡)   .672   .672   -   -   -									
1 2013 NAVY (‡) 2.653 2.653 - 1 1 2013 AF (‡) 7.048 7.048 - 1 1 2013 Total 33.701 33.701 - 1 1 2014 ARMY 28.964 28.964 - 1 1 2014 MC (‡) 1.789 1.789 - 1 1 2014 AF (‡) 4.597 4.597 - 1 1 2015 ARMY 13.733 13.733 - 1 1 2015 MC (‡) .400 .400 - 1 1 2015 NAVY (‡) 1.000 1.000 - 1 1 2015 AF (‡) .786 .786 - 1 1 2015 Total 15.919 15.919 - 2 2 2016 ARMY 43.074 32.090 10.984 5.492 5.492 2 2016 MC (‡) .800 .150 .650 .300 .350									
1 2013 AF (‡) 7.048 7.048 - 1 1 2014 ARMY 28.964 28.964 - 1 1 2014 MC (‡) 1.789 1.789 - 1 1 2014 Total 35.350 35.350 - 1 1 2015 ARMY 13.733 13.733 - 1 1 2015 MC (‡) 4.00 4.00 - 1 1 2015 NAVY (‡) 1.000 1.000 - 1 1 2015 AF (‡) 7.86 7.86 - 1 1 2015 Total 15.919 15.919 - 2 2 2016 ARMY 43.074 32.090 10.984 5.492 5.492 2 2016 MC (‡) 800 1.50 650 .300 .350 2 2 2016 NAVY (‡) 6.672 .672									
1 2013 Total 33.701 3.701 - 1 2014 ARMY 28.964 28.964 - 1 2014 MC (‡) 1.789 1.789 - 1 2014 AF (‡) 4.597 - 1 2014 Total 35.350 35.350 - 1 2015 ARMY 13.733 13.733 - 1 2015 MC (‡) 4.00 4.00 - 1 2015 NAVY (‡) 1.000 1.000 - 1 2015 AF (‡) .786 .786 - 1 2015 Total 15.919 15.919 - 2 2015 ARMY 8.132 8.132 - 2 2016 ARMY 43.074 32.090 10.984 5.492 5.492 2 2016 NAVY (‡) .672 .672									
1 2014 ARMY 28.964 28.964 - 1 2014 MC (‡) 1.789 1.789 - 1 2014 AF (‡) 4.597 4.597 - 1 2014 Total 35.350 35.350 - 1 2015 ARMY 13.733 13.733 - 1 2015 MC (‡) .400 .400 - 1 2015 NAVY (‡) 1.000 1.000 - 1 2015 AF (‡) .786 .786 - 1 2015 Total 15.919 15.919 - 2 2015 ARMY 8.132 8.132 - 2 2016 ARMY 43.074 32.090 10.984 5.492 5.492 2 2016 MC (‡) .800 .150 .650 .300 .350 2 2016 NAVY (‡) .672 .672									
1 2014 MC (‡) 1.789 1.789 - 1 2014 AF (‡) 4.597 4.597 - 1 2014 Total 35.350 35.350 - 1 2015 ARMY 13.733 13.733 - 1 2015 MC (‡) .400 .400 - 1 2015 NAVY (‡) 1.000 1.000 - 1 2015 AF (‡) .786 .786 - 1 2015 Total 15.919 15.919 - 2 2015 ARMY 8.132 8.132 - 2 2016 ARMY 43.074 32.090 10.984 5.492 5.492 2 2016 NAVY (‡) .672 .672									
1 2014 AF (‡) 4.597 4.597 -  1 2014 Total 35.350 35.350 -  1 2015 ARMY 13.733 13.733 -  1 2015 MC (‡) .400 .400 -  1 2015 NAVY (‡) 1.000 1.000 -  1 2015 AF (‡) .786 .786 -  1 2015 Total 15.919 1-  2 2015 ARMY 8.132 8.132 -  2 2016 ARMY 43.074 32.090 10.984 5.492 5.492  2 2016 NAVY (‡) .800 .150 .650 .300 .350  2 2016 NAVY (‡) .672 .672									
1     2014     Total     35.350     35.350     -       1     2015     ARMY     13.733     -       1     2015     MC (‡)     .400     .400     -       1     2015     NAVY (‡)     1.000     1.000     -       1     2015     AF (‡)     .786     .786     -       1     2015     Total     15.919     15.919     -       2     2015     ARMY     8.132     8.132     -       2     2016     ARMY     43.074     32.090     10.984     5.492     5.492       2     2016     MC (‡)     .800     .150     .650     .300     .350       2     2016     NAVY (‡)     .672     .672     -     -     -									
1 2015 ARMY 13.733 13.733 - 1 2015 MC (‡) .400 .400 - 1 2015 NAVY (‡) 1.000 1.000 - 1 2015 AF (‡) .786 .786 - 1 2015 Total 15.919 1- 2 2015 ARMY 8.132 8.132 - 2 2016 ARMY 43.074 32.090 10.984 5.492 5.492 2 2016 MC (‡) .800 .150 .650 .300 .350 2 2016 NAVY (‡) .672 .672									
1 2015 MC (‡) .400 .400 - 1 2015 NAVY (‡) 1.000 1.000 - 1 2015 AF (‡) .786 .786 - 1 2015 Total 15.919 15.919 - 2 2015 ARMY 8.132 8.132 - 2 2016 ARMY 43.074 32.090 10.984 5.492 5.492 2 2016 MC (‡) .800 .150 .650 .300 .350 2 2016 NAVY (‡) .672 .672									
1 2015 NAVY (‡) 1.000 1.000 - 1 2015 AF (‡) .786 .786 - 1 2015 Total 15.919 1- 2 2015 ARMY 8.132 8.132 - 2 2016 ARMY 43.074 32.090 10.984 5.492 5.492 2 2016 MC (‡) .800 .150 .650 .300 .350 2 2016 NAVY (‡) .672 .672									
1 2015 AF (‡) .786 .786 -  1 2015 Total 15.919 15.919 -  2 2015 ARMY 8.132 8.132 -  2 2016 ARMY 43.074 32.090 10.984 5.492 5.492  2 2016 MC (‡) .800 .150 .650 .300 .350  2 2016 NAVY (‡) .672 .672									
1     2015     Total     15.919     15.919     -       2     2015     ARMY     8.132     8.132     -       2     2016     ARMY     43.074     32.090     10.984     5.492     5.492       2     2016     MC (‡)     .800     .150     .650     .300     .350       2     2016     NAVY (‡)     .672     .672     -     -     -									
2 2015 ARMY 8.132 8.132 - 2 2016 ARMY 43.074 32.090 10.984 5.492 5.492 2 2016 MC (‡) .800 .150 .650 .300 .350 2 2016 NAVY (‡) .672 .672									
2 2016 ARMY 43.074 32.090 10.984 5.492 5.492 2 2016 MC (‡) .800 .150 .650 .300 .350 2 2016 NAVY (‡) .672 .672									
2 2016 MC (‡) .800 .150 .650 .300 .350 2 2016 NAVY (‡) .672 .672									
2 2016 NAVY (‡) .672 .672									
2 2016 AF (‡) 100 100									
Ai   .100   -									
2 2016 Total 44.646 33.012 11.634 5.792 5.842									
O N D J F M A M J C O E A E A P A U T V C N B R R Y N	J A S U U E L G P	ECOE	D J F E A E C N B	E A	A I	M J A U Y N	J U L	A S U E G P	: A

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Exhibit P-21, Production Schedule: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
2033A / 02 / 10	G13501 / Carbine	G13503 / M4A1 CARBINE

		Product	tion Rates (Each /	Month)				Procurement Le	adtime (Months)			
MFF						Init	ial			Reo	rder	
Ref					ALT	ALT		Total	ALT	ALT		Total
#	MFR Name - Location	MSR For 2016	1-8-5 For 2016	MAX For 2016	Prior to Oct 1	After Oct 1	Mfg PLT	After Oct 1	Prior to Oct 1	After Oct 1	Mfg PLT	After Oct 1
'	FN Manufacturing - Columbia	12,000	48,000	120,000	3	7	18	25	3	8	17	25
2	TBD - TBD	12,000	48,000	120,000	3	2	20	22	3	2	15	17

^(‡) Delivery rows marked with this symbol indicate that they are funded through a separate Line Item. See the respective components' exhibits for details, including the full delivery schedule. "A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

G04700 / Common Remotely Operated Weapons Station

Date: February 2015

Vehicles / BSA 10: Weapons & Other Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) : A	4		Program Eler	ments for Cod	de B Items:			Other Relate	d Program El	ements:		
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	2,138.891	47.012	13.409	8.367	19.000	27.367	8.368	8.360	8.312	-	-	2,251.719
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	2,138.891	47.012	13.409	8.367	19.000	27.367	8.368	8.360	8.312	-	-	2,251.719
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	2,138.891	47.012	13.409	8.367	19.000	27.367	8.368	8.360	8.312	-	-	2,251.719
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	ne corresponding	budget requests	are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

### **Description:**

The M153 Common Remotely Operated Weapon Station (CROWS) is an integrated system that provides the capability to remotely operate all standard U.S. Army machine guns (i.e., M2 Heavy Barrel Machine Guns, MK-19 Grenade Machine Guns, M240B/L Medium Machine Guns and M249 Squad Automatic Weapons) on a variety of vehicles from an Up-Armored High Mobility Multi-Purpose Wheeled Vehicle (HMMWV) to a M1A2 Main Battle Tank. The CROWS system includes a three axis stabilized mount, a sensor suite with fire control software, and a vehicle integration kit. CROWS permits the gunner to manipulate the sight and weapon from under armor using a hand controller and a flat panel display. Missions can be carried out under conditions of varying visibility via the day camera or thermal camera. The laser range finder and three-axis stabilization allows for accurate fire on the move.

				FY 2016	FY 2016	FY 2016				
Seconda	ry Distribution	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	47.012	13.409	8.367	19.000	27.367	8.368	8.360	8.312	-
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	<b>Total Obligation Authority</b>	47.012	13.409	8.367	19.000	27.367	8.368	8.360	8.312	-

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P-1 Line #21

Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Date: February 2015

# Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

G04700 / Common Remotely Operated Weapons Station

P-1 Line #21

Vehicles / BSA 10: Weapons & Other Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) : A	P	rogram	Elements for Code	B Items:	Ot	her Related Program	Elements:	
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)
G04700 / Common Remotely Operated Weapons Station	P-5, P-5a	Α	- /2,138.891	- / 47.012	- / 13.409	- / 8.367	- / 19.000	- / 27.367
Total Gross/Weapon System Cost			- / 2,138.891	- / 47.012	- / 13.409	- / 8.367	- / 19.000	- / 27.367

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

#### Justification:

FY 2016 Base procurement dollars in the amount of \$8.367 million supports the Active Army by purchasing Platform Integration Kits, Appended Trainers and Diagnostic Kits to facilitate ongoing fielding of the M153 Common Remotely Operated Weapon Stations (CROWS). FY 2016 OCO procurement dollars in the amount of \$19.000 million supports the purchase of spares and components required for ongoing fielding of CROWS systems. The CROWS system enhances Soldier survivability while increasing lethality and situational awareness.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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Exhibit P-5, Cost Analysis: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:
2033A / 02 / 10

P-1 Line Item Number / Title:
G04700 / Common Remotely Operated Weapons Station

Bate: February 2015

Item Number / Title [DODIC]:
G04700 / Common Remotely Operated Weapons Station

Weapons Station

ID Code (A=Service Ready, B=Not Service Ready) : A	·	ME	AP/MAIS Code:			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	2,138.891	47.012	13.409	8.367	19.000	27.367
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	2,138.891	47.012	13.409	8.367	19.000	27.367
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	2,138.891	47.012	13.409	8.367	19.000	27.367
(The following Resource Summary rows are for information	onal purposes only. The corr	esponding budget requests	are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

	P	rior Years	3		FY 2014			FY 2015		FY	2016 Bas	se	FY	2016 OC	0	FY	2016 Tota	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																	,	
Recurring Cost	_																	
CROWS system	-	-	1,705.786	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CROWS Obsolescence ^(†)	-	-	-	10,983.000	1	10.983	-	-	-	-	-	-	-	-	-	-	-	-
CROWS Post- Production Conversions ^(†)	19.664	393	7.728	19.664	277	5.447	-	-	-	-	-	-	-	-	-	-	-	-
Platform Integration Kits ^(†)	-	-	44.746	-	-	-	3.698	630	2.330	5.000	230	1.150	-	-	-	5.000	230	1.1
Appended Trainers ^(†)	-	-	-	-	-	-	10.000	80	0.800	10.000	50	0.500	-	-	-	10.000	50	0.5
Diagnostic Kits	-	-	-	-	-	-	55.000	20	1.100	46.000	10	0.460	-	-	-	46.000	10	0.4
Engineering Support	-	-	96.930	-	-	12.220	-	-	1.339	-	-	2.369	-	-	-	-	-	2.3
Program Management Support	-	-	12.035	-	-	5.850	-	-	0.635	-	-	0.936	-	-	_	-	-	0.93
Integrated Logistics Support	-	-	42.854	-	-	2.295	-	-	0.200	-	-	0.252	-	-	-	-	-	0.2
Total Package Fielding	-	-	56.055	-	-	8.052	-	-	5.690	-	-	2.190	-	-	-	-	-	2.1
Contractor Field Service Representatives	-	-	23.103	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
First Destination Transportation	-	-	3.955	-	-	0.015	-	-	0.010	-	-	0.010	-	-	_	-	-	0.0

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Exhibit P-5, Cost Analysis: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:
2033A / 02 / 10

P-1 Line Item Number / Title:
G04700 / Common Remotely Operated Weapons Station

G04700 / Common Remotely Operated Weapons Station

Date: February 2015

Item Number / Title [DODIC]:
G04700 / Common Remotely Operated Weapons Station

ID Code (A=Service Ready, B=Not Service Ready) : A

MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or add, due to rounding.

	F	Prior Years	s		FY 2014			FY 2015		FY	' 2016 Ba	se	F	Y 2016 OC	0	FY	/ 2016 Tot	tal
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)															
Spares/Repair Parts	-	-	110.652	-	-	-	-	-	-	-	-	-	-	-	19.000	-	-	19.000
New Equipment Training	-	-	35.047	-	-	2.150	-	-	1.305	-	-	0.500	-	-	-	-	-	0.500
Subtotal: Recurring Cost	-	-	2,138.891	-	-	47.012	-	-	13.409	-	-	8.367	-	-	19.000	-	-	27.367
Subtotal: Flyaway Cost	-	-	2,138.891	-	-	47.012	-	-	13.409	-	-	8.367	-	-	19.000	-	-	27.367
Gross/Weapon System Cost	-	-	2,138.891	-	-	47.012	-	-	13.409	-	-	8.367	-	-	19.000	-	-	27.367

Seconda	ry Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Army	Quantity	-	-	-	-	-
	Total Obligation Authority	47.012	13.409	8.367	19.000	27.367
Total:	Quantity	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	47.012	13.409	8.367	19.000	27.367

^(†) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2016 A	Army	Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 10	P-1 Line Item Number / Title: G04700 / Common Remotely Operated Weapons Station	Item Number / Title [DODIC]: G04700 / Common Remotely Operated Weapons Station

Coat Flamouts	0	FY	Contractor and Location	Method/Type or	Lacation of BCC	Award	Date of First	Qty	Unit Cost	Specs Avail	Revision	RFP Issue
Cost Elements	0	Γĭ	Contractor and Location	Funding Vehicle	Location of PCO	Date	Delivery	(Each)	(\$ K)	Now?	Available	Date
CROWS Obsolescence		2014	Kongsberg Protech Systems USA / Johnstown, PA	SS/FFP	ACC-Picatinny, Picatinny, NJ	Aug 2014	Feb 2015	1	10,983.000	N		
CROWS Post-Production Conversions		2014	Kongsberg Protech Systems USA / Johnstown, PA	SS/FFP	ACC-Picatinny, Picatinny, NJ	Aug 2014	Feb 2015	277	19.664	N		
Platform Integration Kits		2015	Applied Resources Corp / Wharton, NJ	C / FFP	ACC-Picatinny, Picatinny, NJ	Mar 2015	Sep 2015	315	3.698	N		
Platform Integration Kits		2015	Choctaw Manufacturing Defense / Antlers, OK	C / FFP	ACC-Picatinny, Picatinny, NJ	Mar 2015	Sep 2015	315	3.698	N		
Platform Integration Kits		2016	Applied Resources Corp / Wharton, NJ	C/FFP	ACC-Picatinny, Picatinny, NJ	Mar 2016	Sep 2016	115	5.000	N		
Platform Integration Kits		2016	Choctaw Manufacturing Defense / Antlers, OK	C / FFP	ACC-Picatinny, Picatinny, NJ	Mar 2016	Sep 2016	115	5.000	N		
Appended Trainers		2015	Kongsberg Protech Systems USA / Johnstown, PA	SS/FFP	ACC-Picatinny, Picatinny, NJ	Mar 2015	Oct 2015	80	10.000	N		
Appended Trainers		2016	Kongsberg Protech Systems USA / Johnstown, PA	SS/FFP	ACC-Picatinny, Picatinny, NJ	Mar 2016	Oct 2016	50	10.000	N		

Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

G15325 / Handgun

Vehicles / BSA 10: Weapons & Other Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) : E	3		Program Ele	ments for Co	de B Items: 06	604601A		Other Relate	d Program El	ements:		
	Prior			FY 2016	FY 2016	FY 2016					То	
Resource Summary	Years	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	0.300	3.957	5.417	-	5.417	14.629	15.391	15.437	16.354	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	-	0.300	3.957	5.417	-	5.417	14.629	15.391	15.437	16.354	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	0.300	3.957	5.417	-	5.417	14.629	15.391	15.437	16.354	Continuing	Continuing
(The following	Resource Sum	mary rows are fo	or informational p	urposes only. Th	ne corresponding	g budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

### **Description:**

Currently the M9 Pistol is utilized as the personal defense weapon. In FY 2016, the new Modular Handgun System (MHS) will begin replacing both the M9 and M11 handguns. The full and open competition for a Commercial Off the Shelf/ Non-Developmental Item (COTS/NDI) MHS solution, is an open caliber competition. Requirements for competition are increased lethality, modularity, system accuracy, reliability and maintainability.

The FY 16 funding request was reduced for \$.240 million to account for the availability of prior year execution balances

Seconda	ary Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	0.300	2.358	3.250	-	3.250	6.966	7.374	7.463	7.957
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	1.599	2.167	-	2.167	5.108	5.345	5.316	5.598
AR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	-	-	-	2.555	2.672	2.658	2.799
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	0.300	3.957	5.417	-	5.417	14.629	15.391	15.437	16.354

 LI G15325 - Handgun
 UNCLASSIFIED

 Army
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 P-1 Line #22

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

G15325 / Handgun

Vehicles / BSA 10: Weapons & Other Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) : B	Pr	ogran	Elements for Code	<b>B Items:</b> 0604601A	C	Other Related Program	Elements:	
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)
G15325 / Handgun	P-5, P-5a	В	- / -	- / 0.300	- / 3.957	- / 5.417	- / -	- / 5.417
Total Gross/Weapon System Cost			- 1 -	- / 0.300	- / 3.957	- / 5.417	- 1 -	- / 5.417

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

#### Justification:

FY 2016 Base procurement dollars in the amount of \$5.417 million supports the procurement of 7,106 selected Modular Handgun Weapon Systems. The new Modular Handgun System (MHS) will begin replacing both the M9 and M11 handguns. The full and open competition for a Commercial Off the Shelf/ Non-Developmental Item (COTS/NDI) MHS solution, is an open caliber competition. The MHS will provide the Soldier with a more lethal, modular, ergonomic, accurate and reliable sidearm than the current M9 and M11 personal defense weapons.

AAO: 286,114

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L.110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

LI G15325 - Handgun
Army

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P-1 Line #22

Exhibit P-5, Cost Appropriation / B 2033A / 02 / 10					vity:		<b>_ine Iten</b> 325 / Hai	n Number ndgun	/ Title:					Item N	ebruary 2 umber / 1 5 / Handg	itle [DO	DIC]:	
ID Code (A=Service Read	ly, B=Not Service	e Ready) :	В						M	DAP/MAIS	S Code:		1					
	Resource					Prior Yea	ars	FY 201	4	FY	2015	FY 2	2016 Bas	se l	FY 2016 (	СО	FY 2016	Total
Procurement Quantity (Uni							-		_			-		-		-		
Gross/Weapon System Co		s)					-		0.300		3.9	957	Ę	5.417		-		5.41
Less PY Advance Procure	ment (\$ in Milli	ions)					-		-			-		-		-		_
Net Procurement (P1) (\$ in	Millions)						-		0.300		3.9	957	Į	5.417		-		5.41
Plus CY Advance Procure		ons)					-		-			-		-		-		
Total Obligation Authorit	•						-		0.300		3.9	957		5.417		-		5.41
			Summary rov	vs are for info	rmational p	urposes only	v. The corres	sponding budge	et request	s are docum	ented else	where.)				·		
Initial Spares (\$ in Millions)						, ,	-	, , ,	<u> </u>			-		-		-		_
Gross/Weapon System Ur	nit Cost (\$ in Ti	housands)					-		-			-		-		-		-
	·																	
Note: Subtotals or Totals i	n this Exhibit	P-5 may n	ot be exact	or add, due to	rounding.										<u> </u>			
	Р	rior Year	's		FY 2014			FY 2015		F۱	Y 2016 Ba	se	FY	/ 2016 O	СО	F'	Y 2016 Tota	al
Cost Elements	Unit Cost	Qty (Fact)	Total Cost	Unit Cost	Qty (Fack)	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost
Flyaway Cost	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)
Recurring Cost								-										
Modular Handgun System ^(†)	_	_	_	_	_	_	0.497	7,358	3.657	0.464	11,028	5.117	-	_	_	0.464	11,028	5.11
Program Management	-	-	-	-	-	0.300	-	-	0.300	-	-	0.300	-	-	-	-	-	0.30
Subtotal: Recurring Cost	-	-	-	-	-	0.300	-	-	3.957	-	-	5.417	-	-	-	-	-	5.41
Subtotal: Flyaway Cost	-	-	-	-	-	0.300	-	-	3.957	-	-	5.417	-	-	-	-	-	5.4
Gross/Weapon System Cost	-	-	-	-	-	0.300	-	-	3.957	-	-	5.417	-	-	-	-	-	5.41
	Seco	ondary D	istributior	1			FY	2014		FY 2015		FY 20			FY 2016 OCO		FY 201 Total	
Army		Qu	antity					-			-		-			-		
		Tot	al Obligation A	Authority				0.300			2.358		3.250	)		-		3.25
ANG			antity					-			-		-			-		-
			al Obligation A	Authority				-			1.599		2.167	7		-		2.16
Total: Secondary Distribution		_	antity					-			-		-			-		-
		∣ Tot	al Obligation	Authority				0.300	<b>1</b>		3.957		5.417	7		-		5.41

LI G15325 - Handgun Army UNCLASSIFIED
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P-1 Line #22

Exhibit P-5a, Procurement History and Planning: PB 2016	Army	Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
2033A / 02 / 10	G15325 / Handgun	G15325 / Handgun

	0			Method/Type			Date			Specs	Date	RFP
	С			or		Award	of First	Qtv	Unit Cost	Avail	Revision	Issue
Cost Elements	0	FY	Contractor and Location	Funding Vehicle	Location of PCO	Date	Delivery	(Each)	(\$ K)	Now?	Available	Date
Modular Handgun System		2015	TBD / TBD	C / IDIQ	ACC-New Jersey Picatinny, NJ	Sep 2016	Nov 2016	7,358	0.497	N	Oct 2015	Oct 2015
Modular Handgun System		2016	TBD / TBD	C / IDIQ	ACC-New Jersey Picatinny, NJ	Sep 2016	Nov 2016	11,028	0.464	N	Oct 2015	Oct 2015

#### Remarks:

The MHS will be a COTS/NDI solution. Since the MHS will be considered COTS/NDI, a P21 Delivery Schedule is not required for this submission.

 LI G15325 - Handgun
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 Army
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 P-1 Line #22

Exhibit P-40, Budget Line Item Justification: PB 2016 Army

**Date:** February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

GB3000 / MK-19 Grenade Machine Gun MODS

Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles / BSA 20: Mod of Weapons / BSA 20: Mod of Weapo

ID Code (A=Service Ready, B=Not Service Ready) : E	3		Program Ele	ments for Co	de B Items: 06	604601A		Other Relate	d Program El	ements:		
	Prior		->//-	FY 2016	FY 2016	FY 2016	=>/ 00/=	->/ 00/10	=>/ 00/0	<b>-</b> N/ 0000	То	
Resource Summary	Years	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	36.854	-	-	2.777	-	2.777	10.066	11.153	19.387	19.526	-	99.763
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	36.854	-	-	2.777	-	2.777	10.066	11.153	19.387	19.526	-	99.763
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	36.854	-	-	2.777	-	2.777	10.066	11.153	19.387	19.526	-	99.763
(The following	Resource Sumi	mary rows are fo	or informational p	ourposes only. Th	ne corresponding	budget request	s are documente	ed elsewhere.)			<u>'</u>	
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

### **Description:**

The MK-19 Mod 3 is a self-powered, air-cooled, 40mm automatic grenade machine gun capable of a firing rate of 325-375 rounds per minute. It is used to engage point targets up to 1,500 meters and provide suppressive fire at ranges up to 2,200 meters. Since the initial fielding of the MK-19, various system enhancements have been identified that further improve the system by increasing operational capabilities and improving reliability, readiness, maintainability, and safety. These improvements include a lightweight adjustable sight bracket; a weapon-sight bracket interface; improved firing pin sear with modified firing pin; an adjustable secondary drive lever; a Tactical Engagement Simulator (TES) to support Force-on-Force Training; and improved sighting systems that enhance accuracy of the system. The MK-19 is fielded with the MK93 mount. The weapon is mounted on select Stryker vehicles, High Mobility Multi-Purpose Wheeled Vehicles (HMMWVs), the M113 Armored Personnel Carrier family of vehicles, M8A1 Recovery Vehicle and Mine Resistant Ambush Protected (MRAP) vehicles. During static defensive operations it is ground employed utilizing the M3 or M205 Tripod Mount. The MK19 Grenade Machine Gun (GMG) MOD 5 Kits consist of vertical cams, barrels, round positioning blocks, cocking cams, cocking levers, and improved mechanical sights. The Fire Control Unit (FCU) provides ability to acquire, identify and range targets and provides a means of applying laser pointer/designator, combat ID, optics, and systems communication on the MK19 GMG. The FCU will take advantage of future 40mm airbursting capability. The Mounted Machine Gun Optic (MMO) provides the Soldier increased accuracy and identification at range by equipping the Medium/Heavy Machine Gun including the MK19 MOD 3 GMG an optic with selectable magnification. The MMO also retains the capability of short range, transition fire. MK93 Improvement Kits will enhance hit performance during on the move engagement by dampening mount movement. MK93 Improvement Kits also hel

Secondar	y Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	2.777	-	2.777	10.066	11.153	19.387	19.526
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	-	-	2.777	-	2.777	10.066	11.153	19.387	19.526

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

GB3000 / MK-19 Grenade Machine Gun MODS

Vehicles / BSA 20: Mod of Weapons and Other Combat Veh

ID Code (A=Service Ready, B=Not Service Ready) : B	P	rogram	Elements for Code	<b>B Items:</b> 0604601A	0	ther Related Program	Elements:	
Exhibits Schedule	·		Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)
GB3000 / Tripods (Increase Performance)	P-3a		- / 36.854	- / -	- / -	- /2.777	- / -	- /2.777
Total Gross/Weapon System Cost			- / 36.854	- / -	- 1 -	- / 2.777	- 1 -	- / 2.777
Exhibits Schedule	Exhibits Schedule		FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)
GB3000 / Tripods (Increase Performance)	P-3a		- / 10.066	- / 11.153	- / 19.387	- / 19.526	- / -	- / 99.763
Total Gross/Weapon System Cost			- / 10.066	- / 11.153	- / 19.387	- / 19.526	- 1 -	- / 99.763
+T'()	(T) (DODIO) (		1/ 0) // 11 1	/ T. /	\ 6			

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

#### Justification:

FY 2016 Base procurement dollars in the amount of \$2.777 million supports the Active Army by procuring 500 MK19 Grenade Machine Gun MOD 5 Kits. The MK19 Grenade Machine Gun (GMG) MOD 5 Kits provides the Soldier with vertical cams, barrels, round positioning blocks, cocking cams, cocking levers, and improved mechanical sights. The MOD 5 Kits will improve operational reliability, durability, and accuracy of the MK19 GMG. The MK19 Grenade Machine Gun MOD 5 Kit is a New Start in FY16.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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Exhibit P-3a, Individual Modification: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Modification Number / Title:
2033A / 02 / 20	GB3000 / MK-19 Grenade Machine Gun MODS	GB3000 / Tripods

2033A / 02 / 20			GB	3000 / WK-	19 Grenade	Machine G	un MODS		GB3000	<i>i</i> iripoas	ripoas				
	Prior			FY 2016	FY 2016	FY 2016					То				
Resource Summary	Years	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total			
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-			
Gross/Weapon System Cost (\$ in Millions)	36.854	-	-	2.777	-	2.777	10.066	11.153	19.387	19.526	-	99.763			
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-			
Net Procurement (P1) (\$ in Millions)	36.854	-	-	2.777	-	2.777	10.066	11.153	19.387	19.526	-	99.763			
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-			
Total Obligation Authority (\$ in Millions)	36.854	-	-	2.777	-	2.777	10.066	11.153	19.387	19.526	-	99.763			
(The following	Resource Sum	mary rows are fo	or informational _l	ourposes only. Th	ne corresponding	g budget request	s are documente	ed elsewhere.)							
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-			
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	_	-	-	_	-	-	-	-	-	_			

# **Description:**

The MK19 Grenade Machine Gun (GMG) MOD 5 Kits consist of vertical cams, barrels, round positioning blocks, cocking cams, cocking levers, and improved mechanical sights. The MOD 5 Kits will improve operational reliability, durability, and accuracy of the MK19 GMG. The Fire Control Unit (FCU) provides ability to acquire, identify and range targets and provides a means of applying laser pointer/designator, combat ID, optics, and systems communication on the MK19 GMG. The FCU will take advantage of future 40mm airbusting capability. The Mounted Machine Gun Optic (MMO) provides the Soldier increased accuracy and identification at range by equipping the Medium/Heavy Machine Gun including the MK19 MOD 3 GMG an optic with selectable magnification. The MMO also retains the capability of short range, transition fire. MK93 Improvement Kits will enhance hit performance during on the move engagement by dampening mount movement. MK93 Improvement Kits also help when firing extreme elevation and integration of new optics and fire control due to better stability.

Seconda	ary Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	2.777	-	2.777	10.066	11.153	19.387	19.526
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	-	-	2.777	-	2.777	10.066	11.153	19.387	19.526

Exhibit P-3a, Individual Modification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:
2033A / 02 / 20

P-1 Line Item Number / Title:
GB3000 / MK-19 Grenade Machine Gun MODS

Date: February 2015

Modification Number / Title:
GB3000 / Tripods

Models of Systems Affected: MK-19 Grenade

Modeling Cup 2 M3 50 Cel Mochine Cup

Modeling Cup 2 M3 50 Cel Mochine Cup

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)	Qty <i>(Each) I</i> Total Cost <i>(\$ M)</i>	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M)	Qty <i>(Each) I</i> Total Cost <i>(\$ M)</i>	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M,
ocurement												
Modification Item 1 of 3: MK19 GMG MOD 5 Kits												
B Kits												
Recurring												
MK19 GMG MOD 5 Kits	- 1 -	- / -	- 1 -	500 / 0.849	- 1 -	500 / 0.849	636 / 1.080	3,000 / 3.600	3,000 / 3.600	2,694 / 3.100	- 1 -	9,830 / 12.2
Engineering Support	- 1 -	- / -	- 1 -	- / 1.177	- 1 -	- / 1.177	- / 1.177	- /1.150	- /1.115	- / 0.765	- 1 -	- /5.3
Integrated Logistical Support	- 1 -	- 1 -	- 1 -	- / 0.150	- 1 -	- / 0.150	- / 0.150	- / 0.150	- / 0.150	- / 0.150	- 1 -	- /0.7
First Destination Transportation	- 1 -	- 1 -	- 1 -	- / 0.020	- 1 -	- / 0.020	- / 0.020	- / 0.020	- / 0.020	- / 0.020	- 1 -	- / 0.10
Testing	- 1 -	- 1 -	- 1 -	- / 0.250	- 1 -	- / 0.250	- / 0.200	- 1 -	- 1 -	- 1 -	- 1 -	- /0.4
Testing (First Article)	- 1 -	- 1 -	- 1 -	- / 0.080	- 1 -	- / 0.080	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.0
Engineering Study	- 1 -	- 1 -	- 1 -	- / 0.251	- 1 -	- / 0.251	- / 0.150	- 1 -	- 1 -	- 1 -	- 1 -	- /0.4
Subtotal: Recurring	- / -	- / -	- / -	- /2.777	- / -	- /2.777	- /2.777	- /4.920	- /4.885	- /4.035	- / -	- /19.3
Subtotal: MK19 GMG MOD 5 Kits	- / -	- / -	- / -	500 / 2.777	- / -	500 / 2.777	636 / 2.777	3,000 / 4.920	3,000 / 4.885	2,694 / 4.035	- / -	9,830 / 19.3
Modification Item 2 of 3: Mounted Machine Gun Optic (MMO)/Fire Control (FC)  B Kits												
Recurring	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	0.404.45.407	1.806 / 4.516	3.231 / 12.924	3,087 / 12.345	- 1 -	10.285 / 34.9
Mounted Machine Gun Optic (MMO)	- 1 -	- / -	- / -	- / -	- / -	- 1 -	2,161 / 5.187 - / 1.432	- /1.147	.,		- 1 -	- 14.7
Engineering Support	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- / 1.432 - / 0.150	- / 1.147 - / 0.150	- / 1.108 - / 0.150	- /1.111	- / -	- 14.7
Integrated Logistical Support  First Destination Transportation	<del>                                     </del>	- / -	- 1 -	- / -	- / -		- / 0.1501	- / 0.150		10 150	,	
First Destination Transportation		,	1	,						- / 0.150		- /0.6
· · · · · · · · · · · · · · · · · · ·	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 0.020	- / 0.020	- / 0.020	- / 0.020	- 1 -	- / 0.6 - / 0.0
Testing	- 1 -	- 1 -	- 1 -	- 1 -	- I - - I -	- <i>1</i> -	- 10.020 - 10.200	- / 0.020 - / -	- / 0.020 - / -	- 10.020 - 1 -	- 1 -	- /0.6 - /0.0 - /0.2
Testing Testing (First Article)	- 1 -	- <i>I</i> -	- 1 - - 1 -	- I - - I -	- I - - I -	- I - - I -	- 10.020 - 10.200 - 1 -	- /0.020 - / - - /0.100	- /0.020 - / -	- /0.020 - / - - / -	- I - - I - - I -	- / 0.6 - / 0.0 - / 0.2 - / 0.1
Testing Testing (First Article) Engineering Study	- <i>I</i>	- I - - I - - I -	- 1 - - 1 - - 1 -	- 1 - - 1 -	- I - - I - - I -	- I - - I - - I -	- /0.020 - /0.200 - / -	- /0.020 - / - - /0.100 - /0.300	- 10.020 - 1 - - 1 - - 10.300	- /0.020 - / - - / - - /0.300	- I - - I - - I -	- /0.6 - /0.0 - /0.2 - /0.1 - /1.2
Testing Testing (First Article)	- 1 -	- <i>I</i> -	- 1 - - 1 -	- I - - I -	- I - - I -	- I - - I -	- 10.020 - 10.200 - 1 -	- /0.020 - / - - /0.100	- /0.020 - / -	- /0.020 - / - - / -	- 1 - - 1 - - 1 - - 1 -	- / 0.6 - / 0.0 - / 0.2 - / 0.1
Testing Testing (First Article) Engineering Study Subtotal: Recurring Subtotal: Mounted Machine Gun Optic (MMO)/Fire Control (FC)	- 1 - - 1 - - 1 -	- I - - I - - I -	- 1 - - 1 - - 1 -	- I - - I - - I -	- I - - I - - I - - I -	- 1 - - 1 - - 1 - - 1 -	- /0.020 - /0.200 - / - - /0.300 - /7.289	- 10.020 - 1 - - 10.100 - 10.300 - 16.233	- 10.020 - 1 - - 1 - - 10.300 - /14.502	- 10.020 - 1 - - 1 - - 10.300 - /13.926	- 1 - - 1 - - 1 - - 1 -	- /0.6 - /0.0 - /0.2 - /0.1 - /1.2 - /41.9
Testing Testing (First Article) Engineering Study Subtotal: Recurring Subtotal: Mounted Machine Gun Optic (MMO)/Fire Control (FC) Modification Item 3 of 3: MK93 Improvement Kits	- 1 - - 1 - - 1 -	- I - - I - - I -	- 1 - - 1 - - 1 -	- I - - I - - I -	- I - - I - - I - - I -	- 1 - - 1 - - 1 - - 1 -	- /0.020 - /0.200 - / - - /0.300 - /7.289	- 10.020 - 1 - - 10.100 - 10.300 - 16.233	- 10.020 - 1 - - 1 - - 10.300 - /14.502	- 10.020 - 1 - - 1 - - 10.300 - /13.926	- 1 - - 1 - - 1 - - 1 -	- /0.6 - /0.2 - /0.1 - /0.1 - /41.9
Testing Testing (First Article) Engineering Study Subtotal: Recurring Subtotal: Mounted Machine Gun Optic (MMO)/Fire Control (FC) Modification Item 3 of 3: MK93 Improvement Kits B Kits	- 1 - - 1 - - 1 -	- I - - I - - I -	- 1 - - 1 - - 1 -	- I - - I - - I -	- I - - I - - I - - I -	- 1 - - 1 - - 1 - - 1 -	- /0.020 - /0.200 - / - - /0.300 - /7.289	- 10.020 - 1 - - 10.100 - 10.300 - 16.233	- 10.020 - 1 - - 1 - - 10.300 - /14.502	- 10.020 - 1 - - 1 - - 10.300 - /13.926	- 1 - - 1 - - 1 - - 1 -	- /0.6 - /0.2 - /0.1 - /1.2 - /41.9
Testing Testing (First Article) Engineering Study Subtotal: Recurring Subtotal: Mounted Machine Gun Optic (MMO)/Fire Control (FC) Modification Item 3 of 3: MK93 Improvement Kits B Kits Recurring	- I - I - I - I - I - I - I - I - I - I	- 1 - - 1 - - 1 - - / -	- 1 - - 1 - - 1 - - / -	- 1 - - 1 - - 1 - - / -	- 1 - - 1 - - 1 - - 1 - - / -	- 1 - - 1 - - 1 - - 1 - - 1 -	- /0.020 - /0.200 - / - - /0.300 - /7.289 2,161/7.289	- /0.020 - / - - /0.100 - /0.300 - /6.233 1,806 / 6.233	- 10.020 - 1 - - 1 - - 10.300 - /14.502 3,231/14.502	- /0.020 - / - - / - - /0.300 - /13.926 3,087/13.926	- 1 1 1 1 1 1 1 -	- /0.6 - /0.0 - /0.2 - /0.1 - /1.2 - /41.9
Testing Testing (First Article) Engineering Study Subtotal: Recurring Subtotal: Mounted Machine Gun Optic (MMO)/Fire Control (FC) Modification Item 3 of 3: MK93 Improvement Kits B Kits	- 1 - - 1 - - 1 -	- I - - I - - I -	- 1 - - 1 - - 1 -	- I - - I - - I -	- I - - I - - I - - I -	- 1 - - 1 - - 1 - - 1 -	- /0.020 - /0.200 - / - - /0.300 - /7.289	- 10.020 - 1 - - 10.100 - 10.300 - 16.233	- 10.020 - 1 - - 1 - - 10.300 - /14.502	- 10.020 - 1 - - 1 - - 10.300 - /13.926	- 1 1 1 1 1 1 1 -	- /0.6 - /0.0 - /0.2 - /0.1 - /1.2 - /41.9

LI GB3000 - MK-19 Grenade Machine Gun MODS Army

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Date: February 2015 Exhibit P-3a, Individual Modification: PB 2016 Army Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Modification Number / Title: 2033A / 02 / 20 GB3000 / MK-19 Grenade Machine Gun MODS GB3000 / Tripods

Models of Systems Affected: MK-19 Grenade Modification Type: Increase Performance Related RDT&E PEs:

Machine Gun & M2 50 Cai Machine Gun												
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)											
Subtotal: MK93 Improvement Kits	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	835 / 1.565	- / -	835 / 1.565
Subtotal: Procurement, All Modification Items	- / -	- / -	- / -	500 / 2.777	- / -	500 / 2.777	2,797 / 10.066	4,806 / 11.153	6,231 / 19.387	6,616 / 19.526	- / -	20,950 / 62.909
Installation												
Subtotal: Installation	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total												
Total Cost (Procurement + Support + Installation)	36.854	=	-	2.777	-	2.777	10.066	11.153	19.387	19.526	-	99.763
I												

Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 20  Modification Item 1 of 3: MK19 GMG MOD 5 Kits  Manufacturer Information  Manufacturer Name: TBD  Administrative Leadtime (in Months): 8  Production Leadtime (in Months): 10  Administrative Leadtime (in Months): 10  Dates  FY 2014  FY 2015  FY 2016  FY 2017  Mar 2018  Modification Number GB3000 / Tripods  Modification Number GB3000 / Tripods  Modification Number GB3000 / Tripods  Manufacturer Location: TBD  Production Leadtime (in Months): 10  Manufacturer Location: TBD  Apr 2017  Apr 2017  Apr 2018  Jan 2018  Jan 2019  Jan 2020	er / Title:	Modification Number				3 2016 Army	dual Modification: PE	xhibit P-3a, Individ			
Manufacturer Information           Manufacturer Name: TBD         Manufacturer Location: TBD           Administrative Leadtime (in Months): 8         Production Leadtime (in Months): 10           Dates         FY 2014         FY 2015         FY 2016         FY 2017         FY 2018         FY 2019           Contract Dates         Jun 2016         Mar 2017         Mar 2018         Mar 2019			ODS			t Sub Activity:	Iget Activity / Budge				
Manufacturer Name: TBD         Manufacturer Location: TBD           Administrative Leadtime (in Months): 8         Production Leadtime (in Months): 10           Dates         FY 2014         FY 2015         FY 2016         FY 2017         FY 2018         FY 2019           Contract Dates         Jun 2016         Mar 2017         Mar 2018         Mar 2019					'		MK19 GMG MOD 5 Kits	lodification Item 1 of 3:			
Administrative Leadtime (in Months): 8         Production Leadtime (in Months): 10           Dates         FY 2014         FY 2015         FY 2016         FY 2017         FY 2018         FY 2019           Contract Dates         Jun 2016         Mar 2017         Mar 2018         Mar 2019							n	lanufacturer Information			
Dates         FY 2014         FY 2015         FY 2016         FY 2017         FY 2018         FY 2019           Contract Dates         Jun 2016         Mar 2017         Mar 2018         Mar 2019		_	D	Manufacturer Location: TBI				lanufacturer Name: TBD			
Contract Dates         Jun 2016         Mar 2017         Mar 2018         Mar 2019			onths): 10	Production Leadtime (in Mo							
	FY 2020	FY 2019	FY 2018 FY 2019	FY 2017	FY 2016	FY 2015					
Delivery Dates Apr 2017 Jan 2018 Jan 2019 Jan 2020	Mar 2020	Mar 2019	Mar 2018	Mar 2017	Jun 2016			ontract Dates			
7.0.10	Jan 2021	Jan 2020	Jan 2019	Jan 2018	Apr 2017			elivery Dates			
Installation Information								nstallation Information			
Method of Implementation (Organic): Installed by Troops  Installation Quantity: 0		antity: 0	Installation Qu			Ггоорѕ	on (Organic): Installed by T	lethod of Implementation			

Exhibit P-3a, Individ	dual Modification: PB 2016 Arm	ny			Date: February 2015	5		
	Iget Activity / Budget Sub Activity		Number / Title:	_	Modification Numb	er / Title:		
2033A / 02 / 20		GB3000 / MK	19 Grenade Machine Gun N	MODS	GB3000 / Tripods			
Modification Item 2 of 3:	Mounted Machine Gun Optic (MMO)/Fire	e Control (FC)						
Manufacturer Informatio	n							
Manufacturer Name: TBD			Manufacturer Location: TE	BD				
dministrative Leadtime (i	· · · · · · · · · · · · · · · · · · ·		Production Leadtime (in N	·	): 10			
Dates	FY 2014 FY 2	2015 FY 2016	FY 2017	FY 2018	FY 2019	FY 2020		
Contract Dates			Mar 2017	Mar 2018	Mar 2019	Mar 2020		
Delivery Dates			Jan 2018	Jan 2019	Jan 2020	Jan 2021		
nstallation Information Method of Implementation	on (Organic): Installed by Troops			Installation (	Quantity: 0			
	on (Organic): Installed by Troops			Installation (	Quantity: 0			

chibit P-3a, Indiv	idual Modification: Pl	B 2016 Army				Date: February 2015	5	
	dget Activity / Budge	•	<b>P-1 Line Item Nu</b> GB3000 / MK-19	imber / Title: Grenade Machine Gun M	1ODS	Modification Numb GB3000 / Tripods		
odification Item 3 of	3: MK93 Improvement Kits							
anufacturer Informati	ion							
anufacturer Name: TB				Manufacturer Location: TE				
ministrative Leadtime	· · · · · · · · · · · · · · · · · · ·			Production Leadtime (in M				
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	
ontract Dates							Mar 2020	
livery Dates							Jan 2021	
tallation Information	1							

Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

GZ1700 / M777 Mods

Vehicles / BSA 20: Mod of Weapons and Other Combat Veh

ID Code (A=Service Ready, B=Not Service Ready) : A	4		Program Eler	nents for Cod	de B Items:			Other Relate	d Program El	ements:		
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	20.860	35.800	18.166	10.070	-	10.070	12.009	0.581	-	-	-	97.486
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	20.860	35.800	18.166	10.070	-	10.070	12.009	0.581	-	-	-	97.486
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	20.860	35.800	18.166	10.070	-	10.070	12.009	0.581	-	-	-	97.486
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	ne corresponding	g budget requests	are documente	ed elsewhere.)		į.		
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

### **Description:**

The LW155 (M777A2 howitzer) provides direct, reinforcing, and general artillery fire support to maneuver forces. The Army has fielded the M777A2 to their Stryker Brigade Combat Teams, Fires Brigades and the National Guard. The Army began fielding Infantry Brigade Combat Teams starting in FY14. The Marine Corps has fielded to all active and reserve units. The M777A2 is capable of firing the 155MM Excalibur Precision-Guided munition, and the Precision Guidance Kit (PGK). It is a joint program between the Marine Corps and Army with additional Foreign Military Sales purchases from Canada and Australia. It is an excellent example of a successful joint service program with the Marine Corps. The M777A2 is seeing significant action in Afghanistan and has received very high marks for its performance. With the conclusion of the M777A2 US production in November 2013, the program has entered into the Sustainment Phase of its life cycle. Having now been in the field for almost 10 years, the howitzer is going through replacement of electronic components in its digital fire control system to maintain interoperability and fulfill Joint Operational Requirements Document (JORD) requirements that were deferred during development.

The FY 2016 funding request was reduced for \$1.465 million to account for the availability of prior year execution balances

Secondar	y Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	30.725	11.018	6.042	-	6.042	7.205	0.581	-	-
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	5.075	7.148	4.028	-	4.028	4.804	-	-	-
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	35.800	18.166	10.070	-	10.070	12.009	0.581	-	-

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

GZ1700 / M777 Mods

Vehicles / BSA 20: Mod of Weapons and Other Combat Veh

ID Code (A=Service Ready, B=Not Service Ready) : A		Program	n Elements for Code	B Items:	Oti	ner Related Program	Elements:	
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
GZ1700 / Light Weight 155MM Towed Howitzer (Increase Performance)	P-3a		- / 20.860	- / 35.800	- / 18.166	- / 10.070	- / -	- / 10.070
Total Gross/Weapon System Cost			- / 20.860	- / 35.800	- / 18.166	- / 10.070	- 1 -	- / 10.070
Exhibits Schedule			FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
GZ1700 / Light Weight 155MM Towed Howitzer (Increase Performance)	P-3a		- / 12.009	- / 0.581	- / -	- / -	- / -	- / 97.486
Total Gross/Weapon System Cost			- / 12.009	- / 0.581	- / -	- 1 -	- 1 -	- / 97.486

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

#### Justification:

FY 2016 Base procurement dollars in the amount of \$10.070 million continues procurement and integration of hardware and training products required to meet JORD requirements deferred during development due technical maturity and cost. Funding also supports modernization of Digital Fire Control System (DFCS) components required to ensure continued operability of weapon system. Funding will continue to support field retrofits of previously contracted Engineering Change Proposals for the Improved Power Conditioning Control Module (I-PCCM), Electronic Thermal Warning Device (ETWD), Hydraulic Power Assist Kit (HyPAK), Muzzle Velocity Sensor System (MVSS) and Primer Feed Mechanism (PFM) Components. The PFM and ETWD retrofits are critical to addressing current field restrictions for firing the Modular Artillery Charge System (MACS) at extended ranges. The DFCS system software will also be upgraded as part of these retrofits. The upgraded software requires additional operator training as it reflects significant changes to operator tactics and procedures. Priority will be to the units deploying then to those first fielded, utilizing reset and overhaul opportunities as appropriate.

Funding will support composite fielding of the LW155 into the Infantry Brigade Combat Teams (IBCTs), an initiative to increase in operational force effectiveness and indirect precision fire. This will provide the IBCTs with significantly improved indirect fire lethality and enable mitigation of the long range indirect precision fire capability gap.

Funding will continue to support fielding of Computer Based Training and Computer Aided Instruction products. System complexity increases significantly as a result of planned increased software capability. These products will greatly increase proficiency, safety and mission fire accuracy and are supported by Army and USMC user communities.

"In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities."

LI GZ1700 - M777 Mods

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Exhibit P-3a, Individual Modification: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Modification Number / Title:
2033A / 02 / 20	GZ1700 / M777 Mods	GZ1700 / Light Weight 155MM Towed Howitzer

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	20.860	35.800	18.166	10.070	-	10.070	12.009	0.581	-	-	-	97.486
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	20.860	35.800	18.166	10.070	-	10.070	12.009	0.581	-	-	-	97.486
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	20.860	35.800	18.166	10.070	-	10.070	12.009	0.581	-	-	-	97.486
(The following	Resource Sum	mary rows are fo	or informational p	urposes only. Th	ne corresponding	g budget requests	s are documente	ed elsewhere.)			'	
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

### **Description:**

Funding supports the refresh of the Digital Fire Control System (DFCS) components for 518 M777A2 Howitzers, to address obsolescence issues and achieve JORD requirements provided by the user community. The technology used to develop the DFCS is now over 12 years old with numerous electronic components in production since 2002 experiencing sub-component obsolescence events over the past several years. It is critical to identify, qualify and procure various DFCS components prior to the current system becoming unsupportable. Funding will also address modifications required by the user community to ensure continued interoperability using a combination of engineering change proposals and the acquisition of hardware. Contractor dates will vary by item and cannot be predicted.

Mod 2 (Modernization in Service): Funding will address modernization in service utilizing Engineering Change Proposals and procurement of hardware for an Improved Power Conditioning and Control Module (I-PCCM), Enhanced Power Pack (EPP) and Electronic Thermal Warning Device (ETWD). The I-PCCM addresses power deficiencies experienced in Afghanistan operations and will support future modernization efforts such as smart battery technology. The EPP is a limited effort that replaces current lead acid batteries to address limitations with respect to the number of charging cycles, recharge rate, cold temperature, and operational run time. The ETWD is a modification to the cannon to address a firing restriction resulting from the MACS 232A1 charge.

Mod 3 (Interoperability - Communication): Funding will address interoperability issues through Software and Hardware Engineering Change Proposals. Specific Digital Fire Control Electronic Components to be purchased and field retrofit are the replacement of the Defense Advanced GPS Receiver and Platform Integration Kit with the Improved Platform Integration Kit. These components are required to support future M-Code satellite technologies. The Communication Location Enclosure will be modified to accommodate these replacement items. Contract award dates will vary depending on the item, market availability and the competitive environment.

Mod 5 (Retrofit and Composite Fielding Activities): Funding will support field retrofits of previously contracted Engineering Change Proposals for the Improved Power Conditioning Control Module (I-PCCM), Electronic Thermal Warning Device (ETWD), Hydraulic Power Assist Kit (HyPAK), Muzzle Velocity Sensor System (MVSS) and Primer Feed Mechanism (PFM) Components. Funding will also support fielding LW155s to the IRCTs

Mod 6 (Training Aides, Devices, Simulators and Simulations): Funding will continue to support fielding of Training Aids, Devices, Simulator and Simulations (TADSS) products to meet JORD requirements. This includes Computer Based Training (CBT), Computer Aided Instruction (CAI) and Lightweight Desktop Trainer (LWDT) products which include training of all critical artillery operator and maintainer tasks.

Secondary Distribution		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	30.725	11.018	6.042	-	6.042	7.205	0.581	-	-

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Exhibit P-3a, Individual Modification: PB 2016 ArmyAppropriation / Budget Activity / Budget Sub Activity:P-1 Line Item Number / Title:Modification Number / Title:2033A / 02 / 20GZ1700 / M777 ModsGZ1700 / Light Weight 155MM Towed Howitzer

Secondar	y Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	5.075	7.148	4.028	-	4.028	4.804	-	-	-
Total:	Quantity	-	=	-	=	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	35.800	18.166	10.070	-	10.070	12.009	0.581	-	-

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LI GZ1700 - M777 Mods Army

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Exhibit P-3a, Individual Modification: F	PB 2016 Arm	าy							Date: Feb	ruary 2015	5	
Appropriation / Budget Activity / Budg 2033A / 02 / 20	et Sub Acti	vity:		tem Numb M777 Mod						tion Numb Light Weig		Towed
Models of Systems Affected: M777A2		Modifi	ication Typ	e: Increas	e Performa	ance	Re	lated RDT	&E PEs:			
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)											
Procurement		J.	,			,		J.				
Modification Item 1 of 6: Hardware Obsolescence												
A Kits		•										
Non-Recurring												-
DFCS Components	418 / 13.350	70 / 2.863	- / -	- 1 -	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- / -	- 1 -	488 / 16.213
Inertial Navigation Unit	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 0.800	- 1 -	- 1 -	- 1 -	- 1 -	- / 0.800
Engineering Change Proposal	- 1 -	- / 0.678	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 0.678
Subtotal: Non-Recurring	- /13.350	- /3.541	- / -	- / -	- / -	- / -	- /0.800	- / -	- / -	- / -	- / -	- /17.691
Subtotal: Hardware Obsolescence	418 / 13.350	70 / 3.541	- / -	- / -	- / -	- / -	- /0.800	- / -	- / -	- / -	- / -	488 / 17.691
Modification Item 2 of 6: Modernization in service											•	,
A Kits												
Non-Recurring												
Enhanced Power Pack	0 / 6.467	100 / 1.406	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	100 / 7.873
Digital Direct Fire Sight	- 1 -	- 1 -	- /6.670	- /1.100	- 1 -	- /1.100	- /2.600	- 1 -	- 1 -	- 1 -	- 1 -	- / 10.370
Electronic Thermal Warning Integration	- / -	- / -	518 / 3.140	- 1 -	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- / -	- 1 -	518 / 3.140
Engineering Change Proposal	- 1 -	- /0.777	- 1 -	- /1.726	- 1 -	- / 1.726	- / 2.531	- 1 -	- 1 -	- / -	- 1 -	- /5.034
Subtotal: Non-Recurring	- /6.467	- /2.183	- /9.810	- /2.826	- / -	- /2.826	- /5.131	- / -	- / -	- / -	- / -	- /26.417
Subtotal: Modernization in service	0 / 6.467	100 / 2.183	518 / 9.810	- /2.826	- / -	- /2.826	- /5.131	- / -	- / -	- / -	- / -	618 / 26.417
<b>Modification Item 3 of 6:</b> Interoperability - Communication												
A Kits												
Non-Recurring												
Engineering Change Proposal	418 / 1.043	70 / 0.225	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	488 / 1.268
Electronic Communication Components	- 1 -	440 / 7.987	- 1 -	50 / 1.300	- 1 -	50 / 1.300	28 / 0.750	- 1 -	- 1 -	- 1 -	- 1 -	518 / 10.037
Subtotal: Non-Recurring	- /1.043	- /8.212	- / -	- /1.300	- / -	- /1.300	- /0.750	- / -	- / -	- / -	- / -	- /11.305
Subtotal: Interoperability - Communication	418 / 1.043	510 / 8.212	- / -	50 / 1.300	- / -	50 / 1.300	28 / 0.750	- / -	- / -	- / -	- / -	1,006 / 11.305
<b>Modification Item 4 of 6:</b> Performance Based Life Cycle											1	,
A Kits												
Recurring												
Interim Contractor Support	- 1 -	- / 9.014	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 9.014
Systems Engineering	- 1 -	- /2.656	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /2.656
Subtotal: Recurring	- / -	- /11.670	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- /11.670

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Exhibit P-3a, Individual Modification: PB 2016 Army Date: February 2015 Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: **Modification Number / Title:** 2033A 1 02 1 20 GZ1700 / M777 Mods GZ1700 / Light Weight 155MM Towed Howitzer Related RDT&E PEs: Models of Systems Affected: M777A2 Modification Type: Increase Performance FY 2016 FY 2016 FY 2016 To oco **Prior Years** FY 2014 FY 2015 Base Total FY 2017 FY 2018 FY 2019 FY 2020 Complete Total Qtv (Each) I Qty (Each) I Qty (Each) I Qty (Each) I Qtv (Each) I **Financial Plan** Total Cost (\$ M) Subtotal: Performance Based Life Cycle - / -- /11.670 - / -- / -- /11.670 Modification Item 5 of 6: Retrofit and Composite Fielding Activities A Kits Recurring - 1 -Retrofit and Composite Fielding Activiti 15.909 - / 6.358 - /3.454 - 1 -13.454 - /3.568 - / 0.581 - 1 -- / 19.870 **Engineering Change Orders** - 1 -12.443 - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- /2.443 - /3.454 - /0.581 Subtotal: Recurring - / -/ 8.352 - /6.358 - / -/ 3.454 - /3.568 - / -- / -- / -- /22.313 - /3.568 - / -/8.352 - /6.358 - /3.454 - / -/ 3.454 - /0.581 - / -- / -- / -- /22.313 Subtotal: Retrofit and Composite Fielding Activities Modification Item 6 of 6: Training Aides, Devices, Simulators A Kits Recurring Software Engineering / 1.842 - /1.998 12.490 - 1 -12.490 - /1.760 - 1 -- /8.090 - / -- /1.842 - /1.998 - /2.490 - / -/2.490 - /1.760 - / -- / -- / -- / -- /8.090 Subtotal: Recurring - /2.490 - /1.760 - / -- /8.090 - / -- /1.842 - /1.998 - / -/ 2.490 - / -- / -- / -Subtotal: Training Aides, Devices, Simulators Subtotal: Procurement. All Modification Items 836 / 20.860 680 / 35.800 518 / 18.166 50 / 10.070 - / -50 / 10.070 28 / 12.009 - /0.581 - / -- / -2.112 / 97.486

Installation												
Subtotal: Installation	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total												
Total Cost (Procurement + Support + Installation)	20.860	35.800	18.166	10.070	-	10.070	12.009	0.581	-	-	_	97.486

			<u> </u>					
Exhibit P-3a, Indivi	dual Modification: F	B 2016 Army				Date: February 2015	j	
<b>Appropriation / Bu</b> 2033A / 02 / 20	dget Activity / Budg	et Sub Activity:	P-1 Line Item Nu GZ1700 / M777 N			Modification Number / Title: GZ1700 / Light Weight 155MM Towed Howitzer		
Modification Item 1 of 6	: Hardware Obsolescence					Į.		
Manufacturer Information	on							
Manufacturer Name: Var	ious			Manufacturer Location: Va	rious			
Administrative Leadtime	(in Months):			Production Leadtime (in M	onths):			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2020		
Contract Dates								
Delivery Dates								
Installation Information								
Method of Implementat	ion (Organic): Digital Fire	Control Component Har	dware procurement and E	ngineering Change Proposals	Installation Q	uantity: 0		

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Exhibit P-3a, Indivi	dual Modification: P	PB 2016 Army				Date: February 2015	j	
<b>Appropriation / Bud</b> 2033A / 02 / 20	dget Activity / Budg	et Sub Activity:	P-1 Line Item Nu GZ1700 / M777 N			Modification Number / Title: GZ1700 / Light Weight 155MM Towed Howitzer		
Modification Item 2 of 6	: Modernization in service		'			•		
Manufacturer Information	on							
Manufacturer Name: Vari	ous			Manufacturer Location: Va	rious			
Administrative Leadtime	(in Months):			Production Leadtime (in Mo	onths):			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	
Contract Dates								
Delivery Dates								
Installation Information								
Method of Implementati	ion (Organic): Digital Fire	Control Component Har	dware procurement and Er	ngineering Change Proposals	Installation C	Quantity: 0		
					·			

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Exhibit P-3a, Indivi	dual Modification: F	PB 2016 Army				Date: February 2015	<u> </u>	
<b>Appropriation / Bud</b> 2033A / 02 / 20	dget Activity / Budg	et Sub Activity:	P-1 Line Item Nu GZ1700 / M777 N			Modification Number / Title: GZ1700 / Light Weight 155MM Towed Howitzer		
Modification Item 3 of 6	: Interoperability - Commu	nication	•					
Manufacturer Information	on							
Manufacturer Name: Vari	ous			Manufacturer Location: Va	arious			
Administrative Leadtime	(in Months):			Production Leadtime (in M	lonths):			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	
Contract Dates								
Delivery Dates								
Installation Information								
Method of Implementati	on (Organic): Software E	naineerina. Enaineerina	Change Proposals and pro	ocurement of hardware	Installation C	uantity: 0		

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Exhibit P-3a, Indiv	idual Modification: F	PB 2016 Army				Date: February 2015	5
<b>Appropriation / Bu</b> 2033A / 02 / 20	idget Activity / Budg	et Sub Activity:	<b>P-1 Line Item Nu</b> GZ1700 / M777 N		Modification Number / Title: GZ1700 / Light Weight 155MM Towed Howitzer		
Modification Item 4 of	6: Performance Based Life	Cycle	1			-	
Manufacturer Informati	ion						
Manufacturer Name: N/A	Ą			Manufacturer Location: N/	Ά		
Administrative Leadtime	(in Months): 6			Production Leadtime (in M	fonths): 1		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Mar 2014						
Delivery Dates	Apr 2014						
Installation Information	2						
	tion (Organic): MIPR to AF	PDEC and Evergising Co	entract Ontions		Installation	Quantity: 0	
metriod of implementat	tion (Organic). Will IN to Al	ADEO and Excroising Oc	лиаст Ориона		mstanation	guarity: 0	

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Exhibit P-3a, Indivi	dual Modification: P	B 2016 Army				Date: February 2015	,	
<b>Appropriation / Bu</b> 2033A / 02 / 20	dget Activity / Budg	et Sub Activity:	<b>P-1 Line Item Nu</b> GZ1700 / M777 N			Modification Number / Title: GZ1700 / Light Weight 155MM Towed Howitzer		
Modification Item 5 of 6	: Retrofit and Composite F	ielding Activities				1		
Manufacturer Information	on							
Manufacturer Name: N/A				Manufacturer Location: N/	'A			
Administrative Leadtime	(in Months):			Production Leadtime (in M	fonths):			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	
Contract Dates								
Delivery Dates								
Installation Information								
Method of Implementati	ion (Organic): MIPR to AR	DEC and Contract Opti	ons		Installation C	Quantity: 0		

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Exhibit P-3a, Individ	dual Modification: P	PB 2016 Army				Date: February 2015		
<b>Appropriation / Buo</b> 2033A / 02 / 20	dget Activity / Budg	et Sub Activity:	<b>P-1 Line Item Nu</b> GZ1700 / M777 M			Modification Number / Title: GZ1700 / Light Weight 155MM Towed Howitzer		
Modification Item 6 of 6:	Training Aides, Devices,	Simulators	•			•		
Manufacturer Information	on							
Manufacturer Name: N/A				Manufacturer Location: N/	A			
Administrative Leadtime (	(in Months):			Production Leadtime (in M	fonths):			
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	
Contract Dates								
Delivery Dates								
Installation Information								
Method of Implementation	on (Organic): MIPR to AR	RDEC. Software Enginee	erina		Installation (	Quantity: 0		
					,			

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

GB3007 / M4 Carbine Mods

Vehicles / BSA 20: Mod of Weapons and Other Combat Veh

ID Code (A=Service Ready, B=Not Service Ready) :			Program Elements for Code B Items:					Other Related Program Elements:				
	Prior			FY 2016	FY 2016	FY 2016					То	
Resource Summary	Years	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	799.208	9.900	6.446	27.566	-	27.566	28.310	24.207	23.214	21.301	-	940.152
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	799.208	9.900	6.446	27.566	-	27.566	28.310	24.207	23.214	21.301	-	940.152
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	799.208	9.900	6.446	27.566	-	27.566	28.310	24.207	23.214	21.301	-	940.152
(The following	Resource Sumr	mary rows are fo	or informational p	urposes only. Th	ne corresponding	g budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	0.290	-	0.290	-	-	-	-	-	585.764

### **Description:**

The M4 Carbine Modification Program provides combat optics, a Close Quarters Battle Kit (CQBK), and M4 to M4A1 carbine upgrade kits. The Squad Common Optic (SCO) was recently replaced by Fire Control Squad which consists of direct view optic, ballistic module, atmospheric sensors, range finder, and in-scope overlay which will be optimized for dismounted Infantry Squad weapons. The Improved Weapons Cleaning Kit (IWCK) contains necessary items to conduct a thorough and efficient cleaning of both weapon and optic, and has been reconfigured into: Individual Kit and Team Kit. The M4 Product Improvement Program converts all fielded M4 Carbines to M4A1 configuration by adding a heavy barrel assembly, a full auto trigger mechanism and new ambidextrous controls. Also provides additional carbine improvement in system precision and enabler integration. FY16 is a new start of the Enhanced Performance Magazine.

Secondary	y Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	9.900	6.446	23.934	-	23.934	24.577	20.424	19.380	20.040
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	2.417	-	2.417	2.485	2.518	2.552	0.839
AR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	1.215	-	1.215	1.248	1.265	1.282	0.422
Cocondon, Distribution	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	9.900	6.446	27.566	-	27.566	28.310	24.207	23.214	21.301

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**Exhibit P-40, Budget Line Item Justification:** PB 2016 Army **Date:** February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

GB3007 / M4 Carbine Mods

Vehicles / BSA 20: Mod of Weapons and Other Combat Veh

ID Code (A=Service Ready, B=Not Service Ready) :		Progran	n Elements for Code	B Items:	0	Other Related Program Elements:			
Exhibits Schedule	•		Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)	
GB3007 / M4 PIP (Increase Performance)	P-3a		- /799.208	- / 9.900	- / 6.446	- /27.566	- / -	- / 27.566	
Total Gross/Weapon System Cost			- /799.208	- / 9.900	- / 6.446	- / 27.566	- 1 -	- / 27.566	
Exhibits Schedule			FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)	
GB3007 / M4 PIP (Increase Performance)	P-3a		- / 28.310	- / 24.207	- / 23.214	- /21.301	- / -	- / 940.152	
Total Gross/Weapon System Cost			- / 28.310	- / 24.207	- / 23.214	- / 21.301	- 1 -	- / 940.152	
TTU	(D.O.D.) (			/ T / A	\ c				

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

#### Justification:

FY 2016 Base procurement dollars in the amount of \$27.566 million supports the procurement of Improved Weapons Cleaning Kits (IWCK), the purchase of the new enhanced magazine, and the conversion of M4 to M4A1 Carbine. The M4 Carbine upgrade converts the M4 to the M4A1 and provides additional improvements in system precision and enabler integration. FY16 funding covers labor for the M4 PIP system support modification work order team (MWO) to include the M4 PIP Staging Facility located in Anniston, Alabama, the M4 PIP Installation travel teams, and Tactical Army Command (TACOM) MWO Support Team. The IWCK has been reconfigured to increase the utility to the Soldier and drive down unit cost. The Individual Kit contains the tools to clean 5.56mm weapon systems, while the Team Kit contain tools to clean 5.56mm, 7.62mm, 9mm, and .45 caliber weapons systems.

In accordance with Section 1815 of the FY 2008 National Defense Act, (P.L.110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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Exhibit P-3a, Individual Modification: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Modification Number / Title:
2033A / 02 / 20	GB3007 / M4 Carbine Mods	GB3007 / M4 PIP

2033A / 02 / 20			GB3	3007 / M4 C	Carbine Mod	ds			GB3007	GB3007 / M4 PIP			
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-	
Gross/Weapon System Cost (\$ in Millions)	799.208	9.900	6.446	27.566	-	27.566	28.310	24.207	23.214	21.301	-	940.152	
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-	
Net Procurement (P1) (\$ in Millions)	799.208	9.900	6.446	27.566	-	27.566	28.310	24.207	23.214	21.301	-	940.152	
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-	
Total Obligation Authority (\$ in Millions)	799.208	9.900	6.446	27.566	-	27.566	28.310	24.207	23.214	21.301	-	940.152	
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	ne corresponding	g budget requests	are documente	d elsewhere.)					
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-	
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	0.290	-	0.290	-	-	-	-	-	585.764	

### **Description:**

The M4 Carbine Modification Program provides combat optics, a Close Quarters Battle Kit, an improved buttstock, a modular weapon system and a product improvement kit. The modular weapon system includes an adapter rail system and a back-up iron sight. The M4 Product Improvement Program converts all fielded M4 Carbines to M4A1 configuration by adding a heavy barrel assembly, a full auto trigger mechanism and new ambidextrous controls. Also provides additional carbine improvement in system precision and enabler integration. The kits enhance current M4 Carbine's sustained rate of fire, ergonomics, reliability, durability, and maintainability.

Close Quarters Battle Kit (MOD 2): The Close Quarters Battle Kit (CQBK) provides the Soldier with multiple low cost items to increase lethality and survivability with individual weapons. The Improved Weapons Cleaning Kit (IWCK) contains all the necessary items needed to conduct a thorough and efficient cleaning of both the weapon and the optic. The IWCK has been reconfigured into two separate kits: Individual Kit and Team Kit. The IWCK has been reconfigured to increase the utility to the Soldier and drive down unit cost. The Individual Kit contains the tools to clean 5.56mm weapon systems, while the Team Kit contain tools to clean 5.56mm, 7.62mm, 9mm, and .45 caliber weapons systems. The Individual Kit will be fielded to every Soldier issued a M4/M16. The Team Kit will be fielded one per Fire Team or 2 per squad of 9 soldiers. A new an improved enhanced magazine will be procured for the carbine/rifle fleet.

M4 Product Improvement Program (PIP) Phase I (MOD 3): Phase I Increment C converts up to 483,000 M4 Carbines to M4A1 Carbines by incorporating the M4A1 heavy barrel assembly, the M4A1 full auto trigger mechanism, and a new ambidextrous selector. The kits enhance current M4 Carbine's sustained rate of fire, ergonomics, reliability, durability, and maintainability. A new an improved enhanced magazine will be procured for the carbine/rifle fleet. Also provides additional carbine improvement in system precision and enabler integration.

	Consumer Distribution	EV 2044	EV 2045	FY 2016	FY 2016	FY 2016	EV 2047	EV 2040	EV 2040	EV 2020
	Secondary Distribution	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	9.900	6.446	23.934	-	23.934	24.577	20.424	19.380	20.040
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	2.417	-	2.417	2.485	2.518	2.552	0.839
AR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	1.215	-	1.215	1.248	1.265	1.282	0.422
Total:	Quantity	-	-	-	-	-	-	-	-	-

LI GB3007 - M4 Carbine Mods
Army

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P-1 Line #25

Exhibit P-3a, Individual Modification: PB 2016 Army				Date: Februar	y 2015	
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 20	P-1 Line Item Number GB3007 / M4 Carbine N			Modification   GB3007 / M4		<b>:</b>
	=>< ==<=	=>/ 00/0	=>/.00./.0			

				FY 2016	FY 2016	FY 2016				
Secondar	y Distribution	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020
Secondary Distribution	Total Obligation Authority	9.900	6.446	27.566	-	27.566	28.310	24.207	23.214	21.301

Development	Status/Major Development Milestones	
Date	Title	Description
Apr 2014	M4 PIP MWO Field Conversion	M4 PIP Phase 1; MWO Initial Conversion; Ft Riley, KS
Jul 2014	M4 PIP MWO Field Conversion	M4 PIP Phase 1; MWO Field Conversion; Ft Stewart/Hunter Army Airfield, GA
Aug 2014	Contract Awards	M4 PIP Phase 1 (ACC-NJ) Gas Tube recompete & (ACC-NJ) Ambidextrous Selectors (Delivery Orders)
Oct 2014	M4 PIP MWO Field Conversion	M4 PIP Phase 1; MWO Field Conversion; Ft Drum, NY

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Exhibit P-3a, Individual Modification: PB 2016 Army Date: February 2015 Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: **Modification Number / Title:** 2033A 1 02 1 20 GB3007 / M4 Carbine Mods GB3007 / M4 PIP Models of Systems Affected: M4/M4A1 CARBINE **Modification Type:** Increase Performance Related RDT&E PEs: FY 2016 FY 2016 FY 2016 То FY 2014 FY 2015 oco FY 2018 FY 2020 **Prior Years** Base Total FY 2017 FY 2019 Complete Total Qtv (Each) I **Financial Plan** Total Cost (\$ M) | Total Cost (\$ Procurement Modification Item 1 of 3: Combat Optics B Kits Recurring Combat Optics 459,113 I - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -76 / 0.243 2,070 / 6.625 - 1 -461,259 139.500 146.368 - 1 -- / 12.137 0 / 11.550 - 1 -- 1 -- 1 -- 1 -- 1 -- / 0.200 - / 0.187 10.200 - 1 -Program Management - / 0.140 - / 0.135 / 0.140 Engineering Support - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- / 0.415 0 / 0.400 - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- /0.400 Test - 1 -- 1 -- 1 -Integrated Logistical Support 0/2.990 - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- /0.010 / 0.010 - 1 -- /3.010 Total Package Fielding 0 / 2.100 - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- / 0.015 10.015 - 1 -- /2.130 New Equipment Training 0 / 0.100 - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- /0.010 10.010 - 1 -- / 0.120 / 156.640 - / -- / -- / -- / -- /0.340 - /0.600 /7.000 - / -- /164.580 Subtotal: Recurring - / -- / -Subtotal: Combat Optics 459.113/ - / -- / -- / -- / -- / -- /0.340 76 / 0.600 2.070 / 7.000 461.259 164.580 156.640 Modification Item 2 of 3: Close Quarters Battle Kit B Kits Recurring Close Quarters Battle Kit 149.182 I - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -149.182 302 600 302 600 Improved Weapons Cleaning Kit (Indv) 143,159 I - 1 -- 1 -63,951 / 5.877 - 1 -63,951 / 5.877 65,598 / 6.330 22,902 / 2.320 8,711 / 0.928 60,273 / 6.733 364,594 11.364 33 552 Improved Weapons Cleaning Kit (Team) - 1 -13,750 / 1.469 13.750 / 1.469 14,105 / 1.580 4.924 / 0.580 1.873 / 0.231 12.960 / 1.683 47.612 / 5.543 - 1 -- 1 -- 1 -- 1 -Improved Magazines 119,760 / 1.000 - 1 -- 1 -2,040 / 0.020 - 1 -2,040 / 0.020 2,000 / 0.020 1,941 / 0.020 1,904 / 0.020 1,870 / 0.020 - 1 -129,515 / 1.100 - / 0.100 - / 0.155 - / 0.160 - / 0.160 - / 0.180 - / 0.190 - / 0.200 - / 0.205 - 1 -- / 1.190 Program Management - 1 -- / -0 / 12.700 10.200 - /0.210 - / 0.300 - 1 -/ 0.300 - / 0.300 - / 0.300 - / 0.305 / 0.310 - 1 -- / 14.625 **Engineering Support** Integrated Logistic Support 0/4.700 10.020 - / 0.020 - /0.020 - 1 -10.020 - /0.020 - / 0.020 - / 0.020 10.025 - 1 -- /4.845 - / 0.100 Total Package Fielding 0/2.744 / 0.100 - / 0.100 - 1 -10.100 - / 0.100 - / 0.107 - / 0.110 / 0.115 - 1 -- /3.476 / 335.108 / 0.420 - /0.485 /7.946 - / -/7.946 - /8.530 - /3.537 - /1.814 / 9.091 - / -- /366.931 Subtotal: Recurring Subtotal: Close Quarters Battle Kit 412,101/ - /0.420 - /0.485 79,741 / 7.946 79,741 / 7.946 81,703 / 8.530 29,767 / 3.537 12,488 / 1.814 75,103 / 9.091 690,903 335.108 366.931 Modification Item 3 of 3: M4 Product Improvement Program (PIP) Phase I B Kits Recurring

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Exhibit P-3a, Individual Modification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:

2033A / 02 / 20

Date: February 2015

Modification Number / Title:

GB3007 / M4 Carbine Mods

GB3007 / M4 PIP

Models of Systems Affected: M4/M4A	CARBINE	Modifi	cation Typ	e: Increas	e Performa	ance	Re	lated RDT	&E PEs:			
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M										
Hardware M4 PIP Phase 1 (kit equivalent)	483,000 <i>l</i> 73.802	- 1 -	- 1 -	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	483,000 73.80
Hardware PIP Parts (bench stocks,others)	- 1 -	- /3.327	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 3.32
System Support MWO Team/TACOM	0 / 1.785	- / 0.895	- / 1.611	- / 1.387	- 1 -	- / 1.387	- /1.430	- /1.470	- / 1.518	- /1.000	- 1 -	- / 11.096
Program Management	0 / 0.100	- / 0.360	- / 0.400	- / 0.355	- 1 -	- / 0.355	- / 0.360	- / 0.365	- / 0.370	- / 0.305	- 1 -	- /2.615
Engineering Support	0 / 0.986	- / 0.400	- / 0.605	- / 0.641	- 1 -	- / 0.641	- / 0.645	- / 0.640	- / 0.645	- / 0.300	- 1 -	- /4.862
Integrated Logistics Support	0 / 0.442	- /0.080	- / 0.075	- / 0.075	- 1 -	- / 0.075	- / 0.075	- / 0.075	- / 0.078	- / 0.040	- 1 -	- / 0.940
Transportation Costs	- 1 -	- / 0.140	- / 0.200	- / 0.510	- 1 -	- / 0.510	- / 0.515	- / 0.520	- / 0.530	- / 0.200	- 1 -	- / 2.615
Subtotal: Recurring	- /77.115	- /5.202	- /2.891	- /2.968	- / -	- /2.968	- /3.025	- /3.070	- /3.141	- /1.845	- / -	- /99.25
Subtotal: M4 Product Improvement Program (PIP) Phase I	483,000 / 77.115	- /5.202	- /2.891	- /2.968	- / -	- /2.968	- /3.025	- /3.070	- /3.141	- /1.845	- / -	483,000 99.25
Subtotal: Procurement, All Modification Items	1,354,214 / 568.863	- /5.622	- /3.376	79,741 / 10.914	- / -	79,741 / 10.914	81,703 / 11.555	29,767 / 6.947	12,564 / 5.555	77,173 / 17.936	- / -	1,635,162 630.76
Installation	,	<u> </u>				<u>'</u>	<u>'</u>	<u>'</u>	<u>'</u>	<u>'</u>	<u>'</u>	
Modification Item 3 of 3: M4 Product Improvement Program (PIP) Phase I	0 / 0.000	23,154 / 4.278	42,157 / 3.070	95,003 / 16.652	- / -	95,003 / 16.652	96,000 / 16.755	96,000 / 17.260	96,000 / 17.659	33,710 / 3.365	976 / -	483,000 79.03
Subtotal: Installation	0/0.000	23,154 / 4.278	42,157 / 3.070	95,003 / 16.652	- / -	95,003 / 16.652	96,000 / 16.755	96,000 / 17.260	96,000 / 17.659	33,710 / 3.365	976 / -	483,000 79.03
Total												
Total Cost (Procurement + Support + Installation)	799.208	9.900	6.446	27.566	-	27.566	28.310	24.207	23.214	21.301	-	940.152

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Exhibit P-3a, Indivi	dual Modification: P	B 2016 Army				Date: February 2015	
Appropriation / Bud 2033A / 02 / 20	dget Activity / Budge	et Sub Activity:	P-1 Line Item Nu GB3007 / M4 Car			Modification Number GB3007 / M4 PIP	er / Title:
Modification Item 1 of 3	: Combat Optics		•				
Manufacturer Information	on						
Manufacturer Name: TBD	)			Manufacturer Location: TE	BD		
Administrative Leadtime	(in Months): 5			Production Leadtime (in M	fonths): 2		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates					Feb 2018	Feb 2019	Feb 2020
elivery Dates					Apr 2018	Apr 2019	Apr 2020
	on (Organic): Installed by	Soldiers			Installation Q	antity: 0	
nstallation Information		Soldiers			Installation Qu	antity: 0	
		Soldiers			Installation Qu	antity: 0	
		Soldiers			Installation Qu	antity: 0	
		Soldiers			Installation Qu	antity: 0	
		Soldiers			Installation Qu	nantity: 0	
		Soldiers			Installation Qu	antity: 0	
		Soldiers			Installation Qu	nantity: 0	
		Soldiers			Installation Qu	antity: 0	
		Soldiers			Installation Qu	nantity: 0	

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Exhibit P-3a, Indivi	idual Modification: P	B 2016 Army				Date: February 2015	j		
<b>Appropriation / Bu</b> 2033A / 02 / 20	dget Activity / Budge	et Sub Activity:	P-1 Line Item Nu GB3007 / M4 Car			Modification Number GB3007 / M4 PIP	er / Title:		
Modification Item 2 of 3	3: Close Quarters Battle Kit		'						
Manufacturer Informati	on								
Manufacturer Name: Otis	Products Inc.			Manufacturer Location: Ly	ons Falls, NY				
Administrative Leadtime	(in Months): 4			Production Leadtime (in N	fonths): 4				
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	18 FY 2019 FY 2020			
Contract Dates		Feb 2015	Jan 2016	Jan 2017	Jan 2019	Jan 2020			
Delivery Dates		Jun 2015	May 2016	May 2017	Apr 2018	Apr 2019	Apr 2020		
Installation Information			·						
Installation Information									
Method of Implementat	ion (Organic): Installed by	Soldiers			Installation	Quantity: 0			

Exhibit P-3a, Indivi	idual Modification: P	B 2016 Army				Date: February 2015	5		
<b>Appropriation / Bu</b> 2033A / 02 / 20	dget Activity / Budge	et Sub Activity:	P-1 Line Item Nu GB3007 / M4 Car			Modification Number / Title: GB3007 / M4 PIP			
Modification Item 3 of 3	3: M4 Product Improvement	Program (PIP) Phase I				·			
Manufacturer Informati	on								
Manufacturer Name: vari	ous vendors			Manufacturer Location: v	arious locations				
Administrative Leadtime	(in Months):			Production Leadtime (in	Months): 3				
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020		
Contract Dates	Apr 2014	Oct 2014	Oct 2015	Oct 2016	Oct 2017	Oct 2018	Oct 2019		
Delivery Dates	Jul 2014	Dec 2014	Dec 2015	Dec 2016	Dec 2019				

### Installation Information

Method of Implementation: Installed by TACOM

<u>'</u>									,			
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	0 / 0.000	23,154 / 4.278	42,157 / 3.070	95,003 / 16.652	- 1 -	95,003 / 16.652	96,000 / 16.755	96,000 / 17.260	96,000 / 17.659	33,710 / 3.365	976 / 0.000	483,000 / 79.039
FY 2014	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2015	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2016	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	0 / 0.000	23.154 / 4.278	42.157 / 3.070	95.003 / 16.652	- 1 -	95.003 / 16.652	96.000 / 16.755	96.000 / 17.260	96.000 / 17.659	33.710 / 3.365	976 / -	483.000 / 79.039

#### Installation Schedule

			FY 2	2014			FY 2	2015			FY 2	2016			FY 2	2017			FY 2	2018			FY 2	2019			FY 2	2020			
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	-	-	-	11,57	711,57	710,54	010,54	010,53	910,53	823,75	323,750	023,75	023,75	024,00	024,00	024,000	024,000	24,000	024,000	024,00	024,000	024,000	24,000	024,00	024,00	08,428	8,428	8,427	8,427	976	483,000
Out	-	-	-	11,57	711,57	710,54	010,54	010,53	910,53	823,75	323,750	023,75	023,75	024,00	024,00	024,00	024,000	24,000	024,000	024,00	024,00	024,000	024,000	024,00	024,00	08,428	8,428	8,427	8,427	976	483,000

LI GB3007 - M4 Carbine Mods Army UNCLASSIFIED Page 9 of 9

Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

GB4000 / M2 50 Cal Machine Gun MODS

Vehicles / BSA 20: Mod of Weapons and Other Combat Veh

ID Code (A=Service Ready, B=Not Service Ready) : E	3		Program Ele	ments for Co	de B Items: 0	604601A		Other Relate	d Program Ele	ements:		
	Prior			FY 2016	FY 2016	FY 2016					То	
Resource Summary	Years	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	203.655	28.242	25.296	44.004	-	44.004	57.915	51.133	28.697	22.797	-	461.739
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	203.655	28.242	25.296	44.004	-	44.004	57.915	51.133	28.697	22.797	-	461.739
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	203.655	28.242	25.296	44.004	-	44.004	57.915	51.133	28.697	22.797	-	461.739
(The following	Resource Sumr	mary rows are fo	or informational p	ourposes only. Th	ne corresponding	g budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	4.427	-	4.427	-	-	-	-	-	287.688

#### **Description:**

The M2A1 Quick Change Barrel (QCB) Kit provides enhancements for the .50 Caliber M2 Heavy Barrel Machine Gun to provide the Soldier with the ability to quickly change the barrel without the need to reset the headspace and timing and reduce the visible muzzle flash. The quick change barrel kits are being produced allowing the Army to retrofit the current M2 fleet on a one for one basis. In a dismounted role, the M2/MK19 Machine Guns are mounted on the M3 Tripod or the M205 Lightweight Tripod. The 34 pound M205 Tripod reduces the Soldier burden by 16 pounds, as the current .50 Caliber machine gun tripod (M3) weighs 50 pounds (including traverse and elevation mechanisms and pintle). The Mounted Machine Gun Optic (MMO) will provide increased accuracy by equipping Medium/Heavy Machine Guns, including the M2/M2A1, with a magnified optic. The MMO will significantly improve target identification and engagement at extended ranges while retaining the capability of short range, transition fire. The Fire Control Unit (FCU) provides ability to acquire, identify and range targets and provides a means of applying laser pointer/designator combat ID, optics, and systems communication of the M2/M2A1. The MK93 is the primary mount used to interface the M2/M2A1 with all Army vehicles. Improvements being implemented include rotary dampers to minimize weapon bounce during vehicle operations which will increase the probability of hit on target while still allowing fast changes in both direction and elevation. Continues engineering studies on the M2A1 Machine Gun components and the M205 Lightweight Tripod to lighten the Soldier's load.

	Secondary Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	=
	Total Obligation Authority	11.313	10.371	15.042	-	15.042	21.004	29.133	20.697	5.891
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	9.281	8.095	17.302	-	17.302	21.231	12.000	8.000	6.453
AR	Quantity	-	-	-	-	-	-	-	-	=
	Total Obligation Authority	7.648	6.830	11.660	-	11.660	15.680	10.000	-	10.453
Total:	Quantity	-	-	-	-	-	-	-	-	-

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

GB4000 / M2 50 Cal Machine Gun MODS

Vehicles / BSA 20: Mod of Weapons and Other Combat Veh

ID Code (A=Service Ready, B=N	lot Service Ready) : B	Pro	gram Elements	for Code B Items	s: 0604601A		Other Related Prog	gram Elements:		
Secondary	/ Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Secondary Distribution	Total Obligation Authority	28.242	25.296	44.004	-	44.004	57.915	51.133	28.697	22.797

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army

**Date:** February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

GB4000 / M2 50 Cal Machine Gun MODS

Vehicles / BSA 20: Mod of Weapons and Other Combat Veh

ID Code (A=Service Ready, B=Not Service Ready) : B		Program	n Elements for Code	<b>B Items:</b> 0604601A		Other Related Program I	Elements:	
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cos (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)
GB4000 / M2 Mods (Increase performance)	P-3a		- / 203.655	- / 28.242	- / 25.296	- / 44.004	- / -	- / 44.004
Total Gross/Weapon System Cost			- / 203.655	- / 28.242	- / 25.296	- / 44.004	- 1 -	- / 44.004
Exhibits Schedule			FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cos (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)
GB4000 / M2 Mods (Increase performance)	P-3a		- / 57.915	- /51.133	- / 28.697	- / 22.797	- / -	- /461.739
Total Gross/Weapon System Cost			- / 57.915	- / 51.133	- / 28.697	- / 22.797	- / -	- / 461.739

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

#### Justification:

FY 2016 Base procurement dollars in the amount of \$44.004 million supports the Active Army, the National Guard and the Reserve by purchasing 10,067 M205 Lightweight Tripods and 9,009 MK93 Improvement Kits. The 34 pound M205 Tripod reduces the Soldier burden by 16 pounds, as the current .50 Caliber machine gun tripod (M3) weighs 50 pounds (including traverse and elevation mechanisms and pintle). The MK93 Improvement Kits include rotary dampers, a link deflector and an improved M2 cradle to enhance overall performance of the mounted machine gun during vehicle operations. Continues engineering studies on the M2A1 Machine Gun components and the M205 Lightweight Tripod to lighten the Soldier's load.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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Exhibit P-3a, Individual Modification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:
2033A / 02 / 20

Date: February 2015

Modification Number / Title:
GB4000 / M2 50 Cal Machine Gun MODS

GB4000 / M2 Mods

2033A / 02 / 20			GB ₂	1000 / IVIZ 5	o Cai Mach	line Gun MC	202		GB4000	1 IVIZ IVIOUS	i	
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	203.655	28.242	25.296	44.004	-	44.004	57.915	51.133	28.697	22.797	-	461.739
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	203.655	28.242	25.296	44.004	-	44.004	57.915	51.133	28.697	22.797	-	461.739
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	203.655	28.242	25.296	44.004	-	44.004	57.915	51.133	28.697	22.797	-	461.739
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	ne corresponding	g budget requests	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	4.427	-	4.427	-	-	-	-	-	287.688

### **Description:**

The M2A1 Quick Change Barrel (QCB) Kit provides enhancements for the .50 Caliber M2 Heavy Barrel Machine Gun to provide the Soldier with the ability to quickly change the barrel without the need to reset the headspace and timing and reduce the visible muzzle flash. In a dismounted role, the M2/MK19 Machine Guns are mounted on the M3 Tripod or the M205 Lightweight Tripod. The 34 pound M205 Tripod reduces the Soldier burden by 16 pounds, as the current .50 Caliber machine gun tripod (M3) weighs 50 pounds (including traverse and elevation mechanisms and pintle). The M205 Tripod provides integral traverse and elevation mechanisms for easier, more accurate target engagement; adjustable traverse limit stop for night time missions; and a new lightweight pintle design. The Mounted Machine Gun Optic (MMO) will provide increased accuracy by equipping Medium/Heavy Machine Guns, including the M2/M2A1, with a magnified optic. The MMO will significantly improve target identification and engagement at extended ranges while retaining the capability of short range, transition fire. The MK93 is the primary mount used to interface the M2/M2A1 with all Army vehicles. Improvements being implemented include rotary dampers to minimize weapon bounce during vehicle operations which will increase the probability of hit on target while still allowing fast changes in both direction and elevation. Continues engineering studies on the M2A1 Machine Gun components and the M205 Lightweight Tripod to lighten the Soldier's load.

				FY 2016	FY 2016	FY 2016				
Seco	ndary Distribution	FY 2014	FY 2015	Base	осо	Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	11.313	10.371	15.042	-	15.042	21.004	29.133	20.697	5.891
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	9.281	8.095	17.302	-	17.302	21.231	12.000	8.000	6.453
AR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	7.648	6.830	11.660	-	11.660	15.680	10.000	-	10.453
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	28.242	25.296	44.004	-	44.004	57.915	51.133	28.697	22.797

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Exhibit P-3a, Individual Modification: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Modification Number / Title:
2033A / 02 / 20	GB4000 / M2 50 Cal Machine Gun MODS	GB4000 / M2 Mods

Development	Status/Major Development Milestones	
Date	Title	Description
Aug 2011	Production Verification Test	XM205 Tripod
Aug 2011	Operational Test	XM205 Tripod
Aug 2012	Type Classification - Standard	M205 Tripod
Oct 2013	First Unit Equipped	M205 Tripod

Exhibit P-3a, Individual Modification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:

2033A / 02 / 20

Date: February 2015

Modification Number / Title:

GB4000 / M2 50 Cal Machine Gun MODS

GB4000 / M2 Mods

Models of Systems Affected: Machine Gun, CAL .50
M2 and MK-19 Grenade Machine Gun
Machine Gun
Modification Type: Increase performance
Related RDT&E PES:

MZ and MK-19 Grenade Machine Gun												
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M)	Qty (Each) I	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M
Procurement	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			1	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	1	1	(*)	1	1	(,,,,,
<b>Modification Item 1 of 4:</b> M2A1 Quick Change Barrel Kit												
B Kits												
Recurring												
Hardware Quick Change Barrel Kits	31,689 <i>I</i> 169.890	751 / 3.100	907 / 3.630	- / -	- / -	- 1 -	- 1 -	- 1 -	- / -	- / -	- 1 -	33,347 176.620
Engineering Support	0 / 5.620	- / 0.914	- / 1.125	- / 1.125	- 1 -	- / 1.125	- / 1.125	- / 1.215	- / 1.215	- 1 -	- 1 -	- / 12.339
Program Management Support	0 / 0.619	- / 1.007	- / 0.125	- / 0.125	- 1 -	- / 0.125	- / 0.125	- / 0.135	- / 0.135	- 1 -	- 1 -	- 12.271
Integrated Logistics Support	0 / 0.800	- / 0.150	- / 0.175	- / 0.150	- 1 -	- / 0.150	- / 0.175	- / 0.150	- / 0.175	- 1 -	- 1 -	- / 1.775
Fielding	0 / 0.500	- / 0.300	- / 0.800	- / 0.800	- 1 -	- / 0.800	- / 0.800	- / 0.800	- / 0.800	- 1 -	- 1 -	- /4.800
New Equipment Training	0 / 0.470	- / 0.300	- / 0.800	- / 0.800	- 1 -	- / 0.800	- / 0.800	- / 0.800	- / 0.800	- 1 -	- 1 -	- /4.770
First Destination Transportation	0 / 1.111	- / 0.330	- / 0.200	- / 0.100	- 1 -	- / 0.100	- / 0.100	- 1 -	- 1 -	- 1 -	- 1 -	- / 1.841
Engineering Studies	- 1 -	- / 0.066	- /1.200	- /2.300	- 1 -	- /2.300	- / 0.400	- 1 -	- 1 -	- / -	- / -	- /3.966
Testing	0 / 0.800	- 1 -	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / -	- / -	- / 0.800
Anniston Packaging	0 / 0.700	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 0.700
Subtotal: Recurring	- /180.510	- /6.167	- /8.055	- /5.400	- / -	- /5.400	- /3.525	- /3.100	- /3.125	- / -	- / -	- / 209.882
Subtotal: M2A1 Quick Change Barrel Kit	31,689 / 180.510	751 / 6.167	907 / 8.055	- /5.400	- / -	- /5.400	- /3.525	- /3.100	- /3.125	- / -	- / -	33,347 209.882
Modification Item 2 of 4: Tripods												
B Kits		•	•									
Recurring												
M3 Tripods	12,109 / 8.500	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	12,109 / 8.500
M205 Tripod	4,412 / 11.030	8,676 / 16.488	5,762 / 12.640	10,067 / 15.993	- 1 -	10,067 / 15.993	13,815 / 23.240	10,832 / 17.885	5,903 / 9.740	5,634 / 9.296	- 1 -	65,101 116.312
Engineering Support	0 / 1.225	- / 0.412	- / 0.586	- / 0.600	- 1 -	- / 0.600	- / 0.701	- /0.700	- / 0.700	- /0.700	- 1 -	- /5.624
Program Management Support	0 / 0.136	- / 0.630	- / 0.065	- / 0.691	- 1 -	- / 0.691	- / 1.105	- / 1.064	- / 0.912	- / 0.650	- 1 -	- /5.253
Integrated Logistics Support	0 / 0.200	- / 0.150	- / 0.125	- / 0.175	- 1 -	- / 0.175	- / 0.175	- / 0.200	- / 0.200	- / 0.250	- 1 -	- / 1.475
New Equipment Training	0 / 0.300	- / 0.107	- /0.300	- / 0.275	- 1 -	- / 0.275	- / 0.300	- / 0.325	- / 0.275	- / 0.275	- 1 -	- /2.157
Fielding	0 / 0.265	- / 0.200	- / 0.575	- / 0.550	- 1 -	- / 0.550	- /0.700	- /1.000	- / 0.850	- / 0.850	- 1 -	- /4.990
Engineering Study	- 1 -	- / 0.175	- / 0.400	- / 0.750	- 1 -	- / 0.750	- /0.700	- / 0.400	- 1 -	- 1 -	- 1 -	- /2.42
M205 Tripod - Rock Island Arsenal (RIA)	- 1 -	- 1 -	- 1 -	517 / 6.206	- 1 -	517 / 6.206	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	517 / 6.20
Engineering Change Proposal	- 1 -	- 1 -	- 1 -	- / 0.600	- 1 -	- / 0.600	- /3.000	- /3.500	- /1.000	- /1.500	- 1 -	- / 9.600
Testing (First Article)	- 1 -	- /1.780	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 1.800	- 1 -	- 1 -	- 1 -	- / 3.580
First Destination Transportation	_	- 1 -	- 1 -	-	-			-		-		

LI GB4000 - M2 50 Cal Machine Gun MODS Army

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Exhibit P-3a, Individual Modification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:

2033A / 02 / 20

Date: February 2015

Modification Number / Title:

GB4000 / M2 50 Cal Machine Gun MODS

GB4000 / M2 Mods

Models of Systems Affected: Machine Gun, CAL .50
M2 and MK-19 Grenade Machine Gun

Modification Type: Increase performance

Related RDT&E PEs:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M										
Subtotal: Recurring	- /21.956	- /19.942	- /14.691	- / 25.840	- / -	- / 25.840	- /29.921	- /26.874	- /13.677	- /13.521	- / -	- /166.42
Subtotal: Tripods	16,521 / 21.956	8,676 / 19.942	5,762 / 14.691	10,584 / 25.840	- / -	10,584 / 25.840	13,815 / 29.921	10,832 / 26.874	5,903 / 13.677	5,634 / 13.521	- / -	77,727 166.42
Modification Item 3 of 4: MK93 Improvements												
B Kits	_											
Recurring												
MK93 Improvements	- 1 -	- 1 -	697 / 0.705	9,009 / 7.658	- 1 -	9,009 / 7.658	13,575 / 11.878	12,094 / 10.897	3,399 / 3.154	2,214 / 2.117	- 1 -	40,988 / 36.40
Engineering Support	- 1 -	- / 0.200	- / 0.155	- / 0.400	- 1 -	- / 0.400	- / 0.600	- / 0.600	- / 0.700	- / 0.600	- 1 -	- /3.25
Program Management Support	- 1 -	- 1 -	- / 0.020	- / 0.350	- 1 -	- / 0.350	- / 0.550	- / 0.600	- / 0.600	- / 0.600	- 1 -	- /2.720
Integrated Logistics Support	- 1 -	- 1 -	- / 0.275	- / 0.075	- 1 -	- / 0.075	- / 0.075	- / 0.075	- / 0.100	- / 0.100	- 1 -	- /0.700
Fielding	- 1 -	- 1 -	- / 0.100	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.100
Material Work Order (ANAD)	- 1 -	- 1 -	- / 0.225	- /2.228	- 1 -	- /2.228	- /3.188	- /2.837	- / 1.434	- / 0.899	- 1 -	- / 10.81
Material Work Order (TACOM)	- 1 -	- / -	- 1 -	- / 0.450	- 1 -	- / 0.450	- / 0.750	- / 0.750	- / 0.725	- / 0.800	- / -	- /3.47
Testing (First Article)	- 1 -	- / -	- / 0.220	- / 0.225	- 1 -	- / 0.225	- / 0.500	- 1 -	- / -	- 1 -	- 1 -	- / 0.94
Defense Ordnance Technology Consortium	- 1 -	- 1 -	- 1 -	- / 0.512	- 1 -	- / 0.512	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 0.51
Testing	- 1 -	- / 0.500	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 0.500
Engineering Studies	- 1 -	- / 0.600	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 0.600
Subtotal: Recurring	- / -	- /1.300	- /1.700	- /11.898	- / -	- /11.898	- /17.541	- /15.759	- /6.713	- /5.116	- / -	- /60.027
Subtotal: MK93 Improvements	- / -	- /1.300	697 / 1.700	9,009 / 11.898	- / -	9,009 / 11.898	13,575 / 17.541	12,094 / 15.759	3,399 / 6.713	2,214 / 5.116	- / -	40,988 / 60.02
Modification Item 4 of 4: Mounted Machine Gun Optic	,								'			
B Kits												
Recurring												
Mounted MG Optic	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	2,428 / 4.960	1,732 / 3.645	1,402 / 3.040	1,237 / 2.760	- 1 -	6,799 / 14.405
Engineering Support	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 0.325	- / 0.200	- / 0.325	- / 0.375	- 1 -	- /1.225
Program Management Support	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 0.175	- / 0.150	- / 0.225	- / 0.275	- 1 -	- / 0.82
Testing (First Article)	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 0.350	- 1 -	- 1 -	- 1 -	- 1 -	- / 0.35
Integrated Logistics Support	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 0.100	- / 0.080	- / 0.150	- / 0.200	- 1 -	- / 0.530
Fielding	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- / 0.075	- / 0.300	- / 0.350	- / 0.350	- / -	- / 1.07
New Equipment Training	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 0.060	- / 0.125	- / 0.175	- / 0.200	- 1 -	- / 0.560
Subtotal: Recurring	- / -	- / -	- / -	- / -	- / -	- / -	- /6.045	- /4.500	- /4.265	- /4.160	- / -	- /18.970
Subtotal: Mounted Machine Gun Optic	- / -	- / -	- / -	- / -	- / -	- / -	2,428 / 6.045	1,732 / 4.500	1,402 / 4.265	1,237 / 4.160	- / -	6,799 / 18.97
ubtotal: Procurement, All Modification Items	48,210 / 202.466	9,427 / 27.409	7,366 / 24.446	19,593 / 43.138	- / -	19,593 / 43.138	29,818 / 57.032	24,658 / 50.233	10,704 / 27.780	9,085 / 22.797	- / -	158,861 455.30

LI GB4000 - M2 50 Cal Machine Gun MODS Army

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Models of Systems Affected: Machine Gun, CAL .50 | Modification Type: Increase performance | Related RDT&E PEs:

M2 and MK-19 Grenade Machine Gun

IVIZ and IVIN-19 Oferlade Machine Odif												
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)											
Modification Item 1 of 4: M2A1 Quick Change Barrel Kit	6,525 / 1.189	4,800 / 0.833	4,800 / 0.850	4,800 / 0.866	- 1 -	4,800 / 0.866	4,800 / 0.883	4,800 / 0.900	2,822 / 0.917	- 1 -	- 1 -	33,347 / 6.438
Subtotal: Installation	6,525 / 1.189	4,800 / 0.833	4,800 / 0.850	4,800 / 0.866	- / -	4,800 / 0.866	4,800 / 0.883	4,800 / 0.900	2,822 / 0.917	- / -	- / -	33,347 / 6.438
Total												
Total Cost (Procurement + Support + Installation)	203.655	28.242	25.296	44.004	-	44.004	57.915	51.133	28.697	22.797	-	461.739

Exhibit P-3a, Indiv	idual Modification: Pl	B 2016 Army				Date: February 2015	5
Appropriation / Bu 2033A / 02 / 20	dget Activity / Budge	et Sub Activity:	P-1 Line Item Nu GB4000 / M2 50 0	<b>mber / Title:</b> Cal Machine Gun MODS	3	Modification Numb GB4000 / M2 Mods	er / Title:
Modification Item 1 of	4: M2A1 Quick Change Barre	el Kit					
Manufacturer Informat	ion						
Manufacturer Name: TB	D			Manufacturer Location: T	BD		
Administrative Leadtime	(in Months): 5			Production Leadtime (in I	Months): 8		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Feb 2014	Feb 2015					
Delivery Dates	Oct 2014	Oct 2015					

### Installation Information

Method of Implementation: Overhaul/conversion

	Prior Years	FY 2014	FY 2015	FY 2016	FY 2016 OCO	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	To	Total
	Prior rears	F1 2014	F1 2015	Base	000	Total	F1 2017	F1 2010	F1 2019	F1 2020	Complete	TOLAT
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	6,525 / 1.189	4,800 / 0.833	4,800 / 0.850	4,800 / 0.866	- 1 -	4,800 / 0.866	4,800 / 0.883	4,800 / 0.900	1,164 / 0.376	- / 0.000	- / 0.000	31,689 / 5.897
FY 2014	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	751 / 0.248	- 1 -	- 1 -	751 / 0.248
FY 2015	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	907 / 0.293	- 1 -	- 1 -	907 / 0.293
FY 2016	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	6,525 / 1.189	4,800 / 0.833	4,800 / 0.850	4,800 / 0.866	- 1 -	4,800 / 0.866	4,800 / 0.883	4,800 / 0.900	2,822 / 0.917	- / -	- / -	33,347 / 6.438

#### Installation Schedule

		-	FY 2	014		-	FY 2	015			FY 2	016			FY 2	2017			FY 2	2018			FY 2	019			FY 2	020			
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot																
In	7,725	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	422	-	-	-	-	-	-	-	33,347
Out	6,525	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	422	-	-	-	-	-	-	33,347

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Exhibit P-3a, Indivi	dual Modification: Pl	3 2016 Army				Date: February 2015	5					
<b>Appropriation / Bu</b> 2033A / 02 / 20	dget Activity / Budge	t Sub Activity:	<b>P-1 Line Item Nu</b> GB4000 / M2 50 0	umber / Title:Modification Number / Title:Cal Machine Gun MODSGB4000 / M2 Mods								
Modification Item 2 of 4	: Tripods		-									
Manufacturer Information	on											
Manufacturer Name: TBD	)			Manufacturer Location: TE	BD							
Administrative Leadtime	(in Months): 6			Production Leadtime (in Months): 9								
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020					
Contract Dates	Aug 2014	Mar 2015	Mar 2016	Mar 2017	Jun 2018	Mar 2019	Mar 2020					
Delivery Dates	Jan 2015	Sep 2015	Dec 2016	Dec 2017	Mar 2019	Dec 2019	Dec 2020					
Installation Information												
Method of Implementati	on (Organic): Installed by	Ггоорѕ			Installation (	Quantity: 0						

Exhibit P-3a, Indivi	Date: February 2015							
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 20			P-1 Line Item Number / Title: GB4000 / M2 50 Cal Machine Gun MODS			Modification Number / Title: GB4000 / M2 Mods		
Modification Item 3 of 4	: MK93 Improvements		•					
Manufacturer Information	on							
Manufacturer Name: TBD	1			Manufacturer Location: TBD				
Administrative Leadtime (	in Months): 7			Production Leadtime (in Months): 7				
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	
Contract Dates		Apr 2015	Apr 2016	Apr 2017	Apr 2018	Apr 2019	Apr 2020	
Delivery Dates		Nov 2015	Nov 2016	Nov 2017	Nov 2018	Nov 2019	Nov 2020	
Installation Information	on (Organic): Installed by	France			Installation	Quantity 0		
Method of implementati	on (Organic). Installed by	100рз			mstanation	auantity. ∪		

Exhibit P-3a, Individual Modification: PB 2016 Army						Date: February 2015	
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 20			P-1 Line Item Number / Title: GB4000 / M2 50 Cal Machine Gun MODS			Modification Number / Title: GB4000 / M2 Mods	
odification Item 4 of 4	: Mounted Machine Gun Op	ptic	•			•	
anufacturer Informati	on						
Manufacturer Name: TBD				Manufacturer Location: TE	iD.		
dministrative Leadtime	(in Months): 6			Production Leadtime (in M	onths): 10		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
ontract Dates				Mar 2017	Mar 2018	Mar 2019	Mar 2020
elivery Dates				Jan 2018	Jan 2019	Jan 2020	Jan 2021
stallation Information	ion (Organic): Installed by	Troops			Installation Q	uantity: 0	
		Troops			Installation Q	uantity: 0	
		Troops			Installation Q	uantity: 0	
		Troops			Installation Q	uantity: 0	

P-1 Line #26

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**Exhibit P-40, Budget Line Item Justification:** PB 2016 Army **Date:** February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

GZ1290 / M249 SAW Machine Gun MODS

Vehicles / BSA 20: Mod of Weapons and Other Combat Veh

ID Code (A=Service Ready, B=Not Service Ready) : A	A		Program Ele	ments for Co	de B Items:			Other Related	d Program El	ements:		
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	201.087	7.608	5.546	1.190	-	1.190	1.189	1.189	1.189	1.190	-	220.188
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	201.087	7.608	5.546	1.190	-	1.190	1.189	1.189	1.189	1.190	-	220.188
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	201.087	7.608	5.546	1.190	-	1.190	1.189	1.189	1.189	1.190	-	220.188
(The following	Resource Sumi	mary rows are fo	r informational p	ourposes only. Th	ne corresponding	g budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
yaway Unit Cost (\$ in Thousands) -		-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)					-	-	-	-	-	-	-	-

#### **Description:**

The M249 Squad Automatic Weapon (SAW) is a 5.56mm, lightweight machine gun that can be utilized in either the automatic rifle role or light machine gun role. Various system enhancements have been identified that improve the use of this weapon system. These include the addition of a feedtray cover rail and forward rail assemblies. The addition of these rails provides a Military-Standard-1913 interface allowing the mounting of standard military optics and other target designation devices directly to the machine gun. Improved components include a collapsible buttstock, bipod, drop-in mount cradle and 200-round ammunition pack. Other items being procured to enhance Soldier performance include design modifications to the lightweight ground mount, short barrel, short barrel blank firing adapter, improved sling assembly and improved extractor and op-rod kits.

The M197 Vehicle Mount is the current standard used to mount the M249 and M240B to most vehicle platforms. A system improvement (drop in mount cradle) will add a link/spent case deflector and ammo handling system to provide capability upgrades addressing issues that Soldiers have identified as shortcomings of the current system.

The M192 is the primary ground mount for the M240B/L and M249 machineguns. Based on recent combat experience, improvements are required to address identified shortcomings in the design and to enhance operational performance.

Secondar	y Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	7.608	5.546	1.190	-	1.190	1.189	1.189	1.189	1.190
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	7.608	5.546	1.190	-	1.190	1.189	1.189	1.189	1.190

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

GZ1290 / M249 SAW Machine Gun MODS

Date: February 2015

Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) : A	ı	Program	Elements for Code	B Items:	0	ther Related Program	Elements:	
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)
GZ1290 / M249 SAW Machine Gun MODS (Increase Performance)	P-3a		- /201.087	- /7.608	- / 5.546	- / 1.190	- / -	- / 1.190
Total Gross/Weapon System Cost			- / 201.087	- /7.608	- / 5.546	- / 1.190	- 1 -	- / 1.190
Exhibits Schedule			FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)
GZ1290 / M249 SAW Machine Gun MODS (Increase Performance)	P-3a		- / 1.189	- / 1.189	- / 1.189	- / 1.190	- / -	- / 220.188
Total Gross/Weapon System Cost			- / 1.189	- /1.189	- / 1.189	- / 1.190	- 1 -	- / 220.188

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

#### Justification:

FY 2016 Base procurement dollars in the amount of \$1.190 million supports the Active Army by purchasing collapsible buttstocks and M197 Modification Work Order (MWO) kits (drop-in mount cradle) for the M249 SAW Machine Gun weapon system. Continues action on short barrels, short barrel blank firing adapters (BFA), M192 improvements (MWO kits), and feedbox support improvement kit (FSIK). The M249 SAW when deployed with a collapsible buttstock and short barrel it reduces the overall weapon length by 10 inches, when compared to the standard issue M249 SAW. The shorter length improves Military Operation in Urban Terrain (MOUT), and Airborne/Air Assault Operations. It allows for easier egress and entrance into vehicles and confined areas, also facilitates clearing operation in current urban combat environments. The shortened M249 SAW improves survivability in extended missions and close combat situations encountered in current war-time deployments.

The M197 MWO kit (drop-in mount cradle) will upgrade the existing M197 Vehicle Mounts to add a link/spent case deflector and ammo handling system. These upgrades provide capability improvements addressing issues that Soldiers have identified as shortcomings of the current system. The M192 MWO kit upgrades the primary ground mount used for the M249 to address shortcomings detected during recent combat excursions.

In accordance with Section 1815 of the FY2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

Exhibit P-3a, Individual Modification: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 20	P-1 Line Item Number / Title: GZ1290 / M249 SAW Machine Gun MODS	Modification Number / Title: GZ1290 / M249 SAW Machine Gun MODS

	Prior			FY 2016	FY 2016	FY 2016					То	
Resource Summary	Years	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	201.087	7.608	5.546	1.190	-	1.190	1.189	1.189	1.189	1.190	-	220.188
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	201.087	7.608	5.546	1.190	-	1.190	1.189	1.189	1.189	1.190	-	220.188
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	201.087	7.608	5.546	1.190	-	1.190	1.189	1.189	1.189	1.190	-	220.188
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	ne corresponding	g budget requests	s are documente	ed elsewhere.)			<u>'</u>	
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

### **Description:**

LI GZ1290 - M249 SAW Machine Gun MODS

Various system enhancements have been identified that improve the use of this weapon system. Improved components include a collapsible buttstock, bipod, drop-in mount cradle and 200-round ammunition pack and Feedbox Support Improvement Kit (FSIK). Other items being procured to enhance Soldier performance include a lightweight ground mount, short barrel, short barrel blank firing adapter and improved sling assembly.

M249 Short Barrel/BFA/Coll Buttstock/Ext Op-Rod (MOD 2): The M249 Squad Automatic Weapon (SAW) Short Barrel and Lightweight Collapsible Buttstock (LCBS) provides a shorter version of the 5.56 automatic weapon to allow for better maneuverability in close quarters. The Short barrel in conjunction with the LCBS shortens the M249 SAW by almost 8 inches. The shorter weapons enhances operational capabilities by improving Military Operations in Urban Terrain (MOUT) maneuverability and Airborne/Air Assault jump capabilities. The Short Barrel firing Adapters will allow for realistic training allowing use of the short barrels in training exercises. M249 SAW Short Barrel and Lightweight Collapsible Buttstock improvements increase maneuverability, reliability and availability of overall weapon system. For FY15 and out, Design West Technologies is the manufacturer of the Lightweight Collapsible Buttstocks.

Lightweight Ground Mount/Drop-in Mount Cradle (MOD 3): The M192 is the primary ground mount for the M240B/L and M249 machineguns. Based on recent combat experience, improvements are required to address identified shortcomings in the design and to enhance operational performance. The M192 Modification Work Order (MWO) kit procures components to upgrade this system. The M197 Vehicle Mount is the current standard used to mount the M249 and M240B to most vehicle platforms. A system improvement (drop-in mount cradle) adds a link/spent case deflector and ammo handling system to provide capability upgrades addressing issues that Soldiers have identified as shortcomings of the current system.

Second	ary Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	7.608	5.546	1.190	-	1.190	1.189	1.189	1.189	1.190
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Distribution Total Obligation Authority		5.546	1.190	-	1.190	1.189	1.189	1.189	1.190

Exhibit P-3a, Individual Modification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:
2033A / 02 / 20

P-1 Line Item Number / Title:
GZ1290 / M249 SAW Machine Gun MODS

Modification Number / Title:
GZ1290 / M249 SAW Machine Gun MODS

MODS

Models of Systems Affected: M249 SAW Machine Modification Type: Increase Performance Related RDT&E PEs:

Gun

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ I										
rocurement												
Modification Item 1 of 4: M249 SAW Bipod												
B Kits												
Recurring												
Hardware	3,075 / 16.208	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	3,075 / 16.20
Engineering Support	0 / 3.043	- / 0.200	- / 0.200	- / 0.025	- 1 -	- / 0.025	- / 0.025	- 1 -	- 1 -	- 1 -	- 1 -	- /3.4
Integrated Logistical Support	0 / 0.730	- / 0.050	- / 0.050	- / 0.025	- 1 -	- / 0.025	- / 0.025	- 1 -	- 1 -	- 1 -	- 1 -	- /0.8
Fielding	0 / 0.524	- / 0.074	- / 0.072	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / -	- /0.6
Program Management Support	0 / 0.246	- / 0.200	- / 0.200	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / -	- 1 -	- / -	- / 0.6
Subtotal: Recurring	- /20.751	- /0.524	- /0.522	- /0.050	- / -	- /0.050	- /0.050	- / -	- / -	- / -	- / -	- /21.8
Subtotal: M249 SAW Bipod	3,075 / 20.751	- /0.524	- /0.522	- /0.050	- / -	- /0.050	- /0.050	- / -	- / -	- / -	- / -	3,075 / 21.8
Modification Item 2 of 4: M249 Short Barrel/BFA/Coll Buttstock/Ext Op-Rod												
B Kits												
Recurring												1
Hardware	0 / 60.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 60.0
Short Barrel	8,037 / 2.728	3,189 / 1.161	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	11,226 / 3.8
Blank Firing Adapter	7,323 / 0.665	17,170 / 1.628	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / -	- 1 -	- 1 -	24,493 / 2.2
Collapsible Buttstock	7,049 / 1.715	- 1 -	3,429 / 1.351	1,269 / 0.500	- 1 -	1,269 / 0.500	1,260 / 0.500	1,395 / 0.550	1,260 / 0.500	1,260 / 0.500	- 1 -	16,922 / 5.6
Extractor and Op-Rod Kits	- 1 -	- / -	- 1 -	- / -	- / -	- 1 -	- 1 -	- 1 -	500 / 0.100	500 / 0.100	- 1 -	1,000 / 0.2
Engineering Support	0 / 4.611	- /0.442	- / 0.436	- / 0.050	- 1 -	- / 0.050	- / 0.050	- / 0.050	- / 0.039	- / 0.040	- 1 -	- /5.7
Integrated Logistical Support	0 / 0.620	- / 0.050	- / 0.050	- / 0.020	- 1 -	- / 0.020	- / 0.020	- / 0.020	- / 0.020	- / 0.020	- 1 -	- /0.8
Fielding	0 / 0.643	- / 0.246	- / 0.246	- / 0.020	- / -	- /0.020	- / 0.020	- /0.020	- / 0.020	- /0.020	- 1 -	- /1.2
Program Management Support	0 / 0.993	- /0.400	- /0.400	- /0.010	- 1 -	- /0.010	- /0.010	- /0.010	- /0.010	- /0.010	- 1 -	- /1.8
Subtotal: Recurring	- /71.975	- /3.927	- /2.483	- /0.600	- / -	- /0.600	- /0.600	- /0.650	- /0.689	- /0.690	- / -	- /81.6
Subtotal: M249 Short Barrel/BFA/Coll Buttstock/Ext Op- Rod	22,409 / 71.975	20,359 / 3.927	3,429 / 2.483	1,269 / 0.600	- / -	1,269 / 0.600	1,260 / 0.600	1,395 / 0.650	1,760 / 0.689	1,760 / 0.690	- / -	53,641 / 81.6
<b>Modification Item 3 of 4:</b> Lightweight Ground Mount/ Drop-in Mount Cradle												
B Kits												
	1											
Recurring												

LI GZ1290 - M249 SAW Machine Gun MODS Army UNCLASSIFIED
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**Exhibit P-3a, Individual Modification:** PB 2016 Army **Date:** February 2015

Appropriation / Budget Activity / Budget Sub Activity:
2033A / 02 / 20

P-1 Line Item Number / Title:
GZ1290 / M249 SAW Machine Gun MODS

Modification Number / Title:
GZ1290 / M249 SAW Machine Gun

MODS

Models of Systems Affected: M249 SAW Machine Modification Type: Increase Performance Related RDT&E PEs:

Gun

Gun												
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)											
Hardware-Drop-in Mount Cradle	- 1 -	230 / 0.150	2,466 / 1.377	357 / 0.225	- 1 -	357 / 0.225	367 / 0.240	357 / 0.240	320 / 0.220	- 1 -	- 1 -	4,097 / 2.452
Engineering Support	0 / 2.914	- / 0.366	- / 0.305	- / 0.050	- 1 -	- / 0.050	- / 0.065	- / 0.050	- / 0.050	- / 0.090	- 1 -	- /3.890
Program Management Support	0 / 0.381	- / 0.310	- / 0.310	- / 0.075	- 1 -	- / 0.075	- / 0.080	- / 0.085	- / 0.075	- / 0.065	- 1 -	- / 1.381
Integrated Logistical Support	0 / 0.385	- / 0.050	- / 0.050	- / -	- 1 -	- 1 -	- / -	- 1 -	- / 0.030	- / 0.030	- 1 -	- / 0.545
TACOM-MWO	0 / 0.423	- / 0.150	- / 0.150	- / 0.100	- 1 -	- / 0.100	- / 0.115	- / 0.125	- / 0.125	- / 0.315	- 1 -	- / 1.503
FAT	- 1 -	- / -	- 1 -	- / 0.050	- 1 -	- / 0.050	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- / 0.050
Subtotal: Recurring	- /35.013	- /2.253	- /2.192	- /0.500	- / -	- /0.500	- /0.500	- /0.500	- /0.500	- /0.500	- / -	- /41.958
Subtotal: Lightweight Ground Mount/Drop-in Mount Cradle	4,438 / 35.013	1,401 / 2.253	2,466 / 2.192	357 / 0.500	- / -	357 / 0.500	367 / 0.500	357 / 0.500	320 / 0.500	- /0.500	- / -	9,706 / 41.958
Modification Item 4 of 4: 200rd/Feedbox Spt Improvement Kit											,	
B Kits												
Recurring												
Hardware	0 / 9.800	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /9.800
200 Rd Magazine	26,793 / 1.661	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	26,793 / 1.661
Slings	7,230 / 0.534	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	7,230 / 0.534
Feedbox Support Improvement Kit	40,258 / 2.264	10,360 / 0.555	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	50,618 / 2.819
Engineering Support	0 / 1.569	- / 0.173	- / 0.173	- / 0.010	- 1 -	- / 0.010	- / 0.009	- / 0.009	- 1 -	- 1 -	- 1 -	- / 1.943
Fielding	0 / 0.325	- / 0.076	- / 0.076	- / 0.020	- 1 -	- / 0.020	- / 0.020	- / 0.020	- 1 -	- 1 -	- 1 -	- / 0.537
Program Management Support	0 / 0.266	- / 0.100	- / 0.100	- / 0.010	- 1 -	- / 0.010	- / 0.010	- / 0.010	- 1 -	- 1 -	- 1 -	- / 0.496
Subtotal: Recurring	- /16.419	- /0.904	- /0.349	- /0.040	- / -	- /0.040	- /0.039	- /0.039	- / -	- / -	- / -	- /17.790
Subtotal: 200rd/Feedbox Spt Improvement Kit	74,281 / 16.419	10,360 / 0.904	- /0.349	- /0.040	- / -	- /0.040	- /0.039	- /0.039	- / -	- / -	- / -	84,641 / 17.790
Subtotal: Procurement, All Modification Items	104,203 / 144.158	32,120 / 7.608	5,895 / 5.546	1,626 / 1.190	- / -	1,626 / 1.190	1,627 / 1.189	1,752 / 1.189	2,080 / 1.189	1,760 / 1.190	- / -	151,063 / 163.259
Installation	<del></del>											
Modification Item 1 of 4: M249 SAW Bipod	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Modification Item 2 of 4: M249 Short Barrel/BFA/Coll Buttstock/Ext Op-Rod	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Modification Item 3 of 4: Lightweight Ground Mount/ Drop-in Mount Cradle	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Modification Item 4 of 4: 200rd/Feedbox Spt Improvement Kit	0 / 0.000	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Subtotal: Installation	0 / 0.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- /-

Exhibit P-3a, Individual Modification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:
2033A / 02 / 20

P-1 Line Item Number / Title:
GZ1290 / M249 SAW Machine Gun MODS

GZ1290 / M249 SAW Machine Gun MODS

MODS

Models of Systems Affected: M249 SAW Machine Modification Type: Increase Performance Related RDT&E PEs:

Gun

Guii												
				FY 2016	FY 2016	FY 2016					То	
	Prior Years	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)	Qty <i>(Each) I</i> Total Cost <i>(\$ M)</i>	Qty (Each) I Total Cost (\$ M)									
Total												
Total Cost (Procurement + Support + Installation)	201.087	7.608	5.546	1.190	-	1.190	1.189	1.189	1.189	1.190	-	220.188

Exhibit P-3a, Indivi	dual Modification: Pl	3 2016 Army				Date: February 201	5
Appropriation / Bu 2033A / 02 / 20	dget Activity / Budge	t Sub Activity:	<b>P-1 Line Item Nu</b> GZ1290 / M249 S	mber / Title: SAW Machine Gun MOD	08	Modification Numb GZ1290 / M249 SAV MODS	
Modification Item 1 of 4	: M249 SAW Bipod						
Manufacturer Information	on						
Manufacturer Name: N/A				Manufacturer Location: N	N/A		
Administrative Leadtime	(in Months):			Production Leadtime (in	Months):		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							

### Installation Information

Method of Implementation: Installed by Troops

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M)										
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- 1 -	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000
FY 2014	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2015	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2016	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / -
FY 2017	0 / 0.000	- / -	- 1 -	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	0 / 0.000	- / -	- 1 -	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / -
To Complete	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -

#### Installation Schedule

			FY 2	2014			FY 2015				FY 2	2016			FY 2	2017			FY 2	2018			FY 2	019			FY 2	020			
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	3,075	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,075
Out	3,075	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,075

Exhibit P-3	a, Individual Modifi	ication: PB 2	016 Army							Date: Fe	ebruary 201	15	
Appropriati 2033A / 02	ion / Budget Activit / 20	ty / Budget S	Sub Activity	- 1	Line Item I 1290 / M249			ODS			ation Num / M249 SA	ber / Title: W Machine	Gun
Modification I	Item 2 of 4: M249 Short E	Barrel/BFA/Coll E	Buttstock/Ext C	Dp-Rod									
Manufacturer	Information												
Manufacturer N	Name: Design West Tech	nologies				Manu	facturer Locatio	n: Tustin, CA					
Administrative	Leadtime (in Months): 6					Produ	ction Leadtime	(in Months): 9					
Date	s FY 2	014	FY 2018	5	FY 2016		FY 2017		FY 2018	F'	Y 2019	FY	2020
Contract Dates	s Mar 2	2014	Mar 201	5	Mar 2016		Mar 2017	N	Mar 2018	Ma	ar 2019	Mar	2020
Delivery Dates	Dec 2	2014	Dec 201	5	Dec 2016		Dec 2017		Dec 2018	De	ec 2019	Dec	2020
Installation In	formation												
Method of Imp	plementation: Installed b	y Troops											
		Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Ins	stallation Cost	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M										
Prior Years		0 / 0.000	- /0.000	- /0.000	- /0.000	- 1 -	- /0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.00
FY 2014		0 / 0.000		- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2015		0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2016		0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017		0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018		0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019		0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020		0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete		0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total		0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Installation So	chedule												
	FY 2014	FY 201	_	FY 2016		FY 2017		FY 2018	_	Y 2019		2020	1

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Q3

Q2

Q4

Q1

Q2

Q3

Q4

Q1

Q3

Q2

Q4

Q1

Q2

Q3

Q4

TC

Tot

22,409

22,409

240

PYS Q1

22,409 -

22,409 -

Out

Q2

Q3

Q4

Q1

Q2

Q3

Q4

Q1

Q2

Q3

Q4

Q1

Exhibit P-3a, Individual Modification: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 20	P-1 Line Item Number / Title: GZ1290 / M249 SAW Machine Gun MODS	Modification Number / Title: GZ1290 / M249 SAW Machine Gun MODS

Modification Item 3 of 4: Lightweight Ground Mount/Drop-in Mount Cradle

	0 0						
Manufacturer Information	on						
Manufacturer Name: TBD				Manufacturer Location: TE	BD		
Administrative Leadtime (	in Months): 6			Production Leadtime (in M	fonths): 3		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Mar 2014	Mar 2015	Mar 2016	Mar 2017	Mar 2018	Mar 2019	
Delivery Dates	Jun 2014	Jun 2015	Jun 2016	Jun 2017	Jun 2018	Jun 2019	

#### Installation Information

Method of Implementation: Installed by Troops

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- 1 -	- / 0.000	- /0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- /0.000
FY 2014	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2015	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2016	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / -
FY 2017	0 / 0.000	- / -	- 1 -	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	0 / 0.000	- / -	- 1 -	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / -
To Complete	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -

#### Installation Schedule

			FY 2	2014			FY 2	2015			FY 2	2016			FY 2	2017			FY 2	2018			FY 2	019			FY 2	020			
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot																
In	4,438	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,438
Out	4,438	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,438

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Exhibit P-3a, Indi	vidual Modification: Pl	B 2016 Army				Date: February 2015	5
Appropriation / B 2033A / 02 / 20	udget Activity / Budge	et Sub Activity:	P-1 Line Item Nu GZ1290 / M249 S	mber / Title: AW Machine Gun MOD	)S	Modification Numb GZ1290 / M249 SAV MODS	
Modification Item 4 of	f4: 200rd/Feedbox Spt Impro	vement Kit					
Manufacturer Informa	ition						
Manufacturer Name: Po	olymer Technologies, Inc.			Manufacturer Location: (	Clifton, NJ		
Administrative Leadtime	e (in Months): 6			Production Leadtime (in	Months): 9		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates	Mar 2014						
Delivery Dates	Dec 2014						

### Installation Information

Method of Implementation: Installed by Troops

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- 1 -	- / 0.000	- /0.000	- / 0.000	- / 0.000	- / 0.000	- / 0.000	- /0.000
FY 2014	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2015	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2016	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / -
FY 2017	0 / 0.000	- / -	- 1 -	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	0 / 0.000	- / -	- 1 -	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / -
To Complete	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -

#### Installation Schedule

				FY 2	014			FY 2	2015			FY 2	2016			FY 2	2017			FY 2	2018			FY 2	019			FY 2	2020			
	P'	YS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	74	1,281	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	74,281
Ou	74	1,281	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	74,281

**Exhibit P-40, Budget Line Item Justification:** PB 2016 Army **Date:** February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

GZ1300 / M240 Medium Machine Gun MODS

Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles / BSA 20: Mod of Weapons / BSA 20: Mod of Weap

ID Code (A=Service Ready, B=Not Service Ready) :	A		Program Eler	ments for Cod	de B Items:			Other Relate	d Program El	ements:		
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	157.554	2.719	2.635	1.424	-	1.424	1.798	1.945	1.953	1.982	-	172.010
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	157.554	2.719	2.635	1.424	-	1.424	1.798	1.945	1.953	1.982	-	172.010
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	157.554	2.719	2.635	1.424	-	1.424	1.798	1.945	1.953	1.982	-	172.010
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	ne corresponding	g budget requests	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

### **Description:**

The M240B/L Medium Machine Gun is an infantry version of the M240 Armored Machine Gun used to replace the M60 Series Machine Gun in Light Infantry, Mechanized Infantry, Armor, Rangers, Special Forces, and select Combat Engineer units. Since the initial fielding of the M240B, various system enhancements have been identified that further improves the use of this weapon system by increasing functionality and performance capabilities, while improving training capability. These include adopting a forward rail system to mount ancillary sighting/night vision equipment, an accessory ammunition pouch, a spare barrel bag to transport and store overheated barrels, and an improved Lightweight Ground Mount. Additional enhancements include improved bipod, sling, short barrel, improved barrel, combat ammo pack, improved hydraulic buffer, drop-in mount cradle, design modifications to the Lightweight Ground Mount, collapsible buttstock and Mounted Machine Gun Optic. These enhancements are applicable to both the M240B and M240L. M240L reduces the weight of the existing M240B by approximately 5 pounds.

The M197 Vehicle Mount is the current standard used to mount the M249 and M240B to most vehicle platforms. A system improvement (drop in mount cradle) will add a link/spent case deflector and ammo handling system to provide capability upgrades addressing issues that Soldiers have identified as shortcomings of the current system. The M192 is the primary ground mount for the M240B/L and M249 machineguns. Based on recent combat experience, improvements are required to address identified shortcomings in the design and to enhance operational performance.

Fielding of the M240H Machine Gun requires replacement/upgrade of the helicopter mounts/cradles to accommodate the replacement M240H. This upgrade will enhance the performance of the armament subsystems the M240H is assigned to thereby increasing the overall survivability of the aircraft platform. Improved mounts are required to be fielded to both the UH-60 and CH-47 platforms.

Secondar	y Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	2.719	2.635	1.424	-	1.424	1.798	1.945	1.953	1.982
Total:	Quantity	-	-	-	-	-	-	-	-	-

UNCLASSIFIED
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Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

GZ1300 / M240 Medium Machine Gun MODS

Vehicles / BSA 20: Mod of Weapons and Other Combat Veh

FY 2018	FY 2019	FY 2020
1 1 2010	1 . 20.0	2020
1.94	5 1.953	1.982
8	FY 2018	

#### Justification:

FY 2016 Base procurement dollars in the amount of \$1.424 million supports the Active Army by purchasing system enhancements for the M240B/L Medium Machine Gun Weapon System. System enhancements have been identified by fielded units to further improve the reliability and functionality of this weapon system. These include improved lightweight bipods which production of these items will allow for fielding to approximately 25 Infantry Brigade Combat Teams (IBCT), and the M197 Modification Work Order (MWO) Kit (drop-in mount cradle) that adds a link/spent case deflector and ammo handling system to provide capability upgrades addressing issues that Soldiers have identified as shortcomings of the current system. Continues action on the Collapsible Buttstock, Improved Barrel, and M192 MWO Kit which, when provided, delivers a system improvement to this lightweight tripod. M240L reduces the Soldier's combat load while allowing easier handling and movement of the weapon.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

**Exhibit P-40, Budget Line Item Justification:** PB 2016 Army **Date:** February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

GZ1500 / Sniper Rifles Modifications

Vehicles / BSA 20: Mod of Weapons and Other Combat Veh

ID Code (A=Service Ready, B=Not Service Ready) : E	3		Program Elei	ments for Cod	de B Items: 06	604601A		Other Relate	d Program El	ements:		
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	27.819	7.017	4.079	2.431	-	2.431	9.979	9.186	8.862	5.947	-	75.320
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	27.819	7.017	4.079	2.431	-	2.431	9.979	9.186	8.862	5.947	-	75.320
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	27.819	7.017	4.079	2.431	-	2.431	9.979	9.186	8.862	5.947	-	75.320
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	ne corresponding	g budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

### **Description:**

LI GZ1500 - Sniper Rifles Modifications

Program to procure modifications or conversions of sniper weapon, Squad Designated Weapon (SDM), and system components, Advanced Sniper Accessory Kits (ASAK), M151 Spotting Scope System, Tactical Tripod Kit (TTK) components, combat optics, sophisticated laser range finders and fire control systems. Initial buys of items to support or meet operational needs and lighten sniper load. It includes the procurement of rifle scope optics, spotting scopes, and improved capabilities including an enhanced reticle pattern to recognize and engage targets at longer ranges and lower light levels increasing hit probability. This program also provides improved ancillary equipment such as round counters, ballistic chronographs, light weight barrels, fire control items, muzzles with suppressors, other components, and support costs. The current army fleet of sniper weapons, consisting of the M14 Enhanced Battle Rifle (EBR), M110 Semi-Automatic Sniper System (SASS), M2010 Enhanced Sniper Rifle (ESR) and the M107 Semi-Automatic Long Range Sniper Rifle (LRSR) require continuous upgrades to the weapon, components, and/or ancillary equipment. Ongoing planned upgrades consist of the M110 SASS to the M110 Compact SASS (CSASS) and M151 Enhanced Reticle Effort. Sniper upgrades enhance sniper capability, effectiveness, and survivability by extending the sniper's influence through the application of emerging technologies in perfecting ballistics with exacting hardware and precise calculations, reducing sniper team burden through decreased weight and enhanced ergonomics, portability, signature, faster more precise target reconnaissance, surveillance, and target acquisition (RSTA) and aiming with automated fire control systems - Squad Designated Marksmen (SDM), Precision Guided Firearm (PGF)- networked intelligence and mission information sharing. The Compact SASS (CSASS) is a New Start in FY2016.

The FY 2016 funding request was reduced for \$2.755 million to account for the availability of prior year execution balances

Secondary Distribution		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	7.017	4.079	2.431	-	2.431	9.979	9.186	8.862	5.947
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	7.017	4.079	2.431	-	2.431	9.979	9.186	8.862	5.947

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

GZ1500 / Sniper Rifles Modifications

Vehicles / BSA 20: Mod of Weapons and Other Combat Veh

P	rogran	n Elements for Code	<b>B Items:</b> 0604601A	C	ther Related Program	Elements:	
		Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)
P-3a		- / 27.819	- /7.017	- /4.079	- / 2.431	- / -	- /2.431
		- / 27.819	- /7.017	- / 4.079	- / 2.431	- 1 -	- / 2.431
		FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)
P-3a		- / 9.979	- /9.186	- /8.862	- /5.947	- / -	- /75.320
		10.070	10.400	/ 0.000	- / 5.947	,	- / 75.320
	Exhibits P-3a  Exhibits	Exhibits ID CD P-3a ID Exhibits CD	Prior Years    D	Exhibits	Prior Years   FY 2014   FY 2015	Prior Years   FY 2014   FY 2015   FY 2016 Base	Prior Years   FY 2014   FY 2015   FY 2016 Base   FY 2016 OCO

^{&#}x27;Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

#### Justification:

FY 2016 Base procurement dollars in the amount of \$2.431 million supports the Active Army through procurement of weapon conversions using engineering change proposals (ECP's), modifications or upgrades and acquisition of Advanced Sniper Accessory Kits (ASAK) items. Conversions include M110 Semi-Automatic Sniper Systems (SASS) to Compact Semi-Automatic Sniper Systems (CSASS), M151 Upgrades and continued support for M2010 Enhanced Sniper Rifle Modifications. These modifications and upgrades provide a more full-spectrum and versatile suite of sniper rifles that improves ergonomics, survivability, capability, and portability without sacrificing performance, accuracy and reliability. Efforts also include evaluation and/or validation of any proposed ECP's regarding fire control optics and any ancillary equipment enhancements that can include performing engineering studies to investigate the proposed enhancements and also to procure samples for evaluation.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

LI GZ1500 - Sniper Rifles Modifications

Army

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Exhibit P-3a, Individual Modification: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 20	P-1 Line Item Number / Title: GZ1500 / Sniper Rifles Modifications	Modification Number / Title: GZ1500 / SNIPER RIFLES
2000A 1 02 1 20	GZ 1300 / Shiper Miles Mounications	MODIFICATIONS (GZ1500)

Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	27.819	7.017	4.079	2.431	-	2.431	9.979	9.186	8.862	5.947	-	75.320
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	27.819	7.017	4.079	2.431	-	2.431	9.979	9.186	8.862	5.947	-	75.320
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	27.819	7.017	4.079	2.431	-	2.431	9.979	9.186	8.862	5.947	-	75.320
(The following	Resource Sumi	mary rows are fo	or informational p	ourposes only. Ti	ne corresponding	g budget request	ts are documente	ed elsewhere.)	•			
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	_

### **Description:**

This funds the conversion of the M110 SASS to CSASS to objective improvements. Sniper Rifle Modifications (GZ1500) consolidates Army modernization initiatives to procure enhancements to sniper mission and system performance capability with greater lethality and survivability. Through acquisition of present and future system components, ancillary, and associated items of equipment for the Advanced Sniper Accessory Kit (ASAK) and the M151 spotting scope. As well as other Sniper Upgrades and Improvements to include but not limited to the Spotting Scope Optical Display (SSOD), Sniper Rifle Fire Control System (SRFCS), Eagle Eye (EE), Shot Counter for Reliability and Maintainability (SCRAM), and Extreme Accuracy Tasked Ordnance (EXACTO). Installation costs are included in the contractor costs and cannot be broken out.

Seconda	ry Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	7.017	4.079	2.431	-	2.431	9.979	9.186	8.862	5.947
Total:	Quantity	-	-	-	-	-	=	-	=	-
Secondary Distribution	Total Obligation Authority	7.017	4.079	2.431	-	2.431	9.979	9.186	8.862	5.947

Development S	Development Status/Major Development Milestones										
Date	Title	Description									
Jan 2017	Milestone C ADM	M110 Compact (CSASS)									
Jan 2017	Type Classification Standard	M110 Compact (CSASS)									

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Exhibit P-3a, Individual Modification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:

2033A / 02 / 20

P-1 Line Item Number / Title:
GZ1500 / Sniper Rifles Modifications

Modification Number / Title:
GZ1500 / SNIPER RIFLES
MODIFICATIONS (GZ1500)

Models of Systems Affected: M14 EBR (GZ2801), M110 SASS (G01505), M107 LRSR (G01500), M24 SWS (G04200), and M2010 ESR (GZ1500)

Modification Type: Increased Performance

Related RDT&E PEs:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Financial Plan	Qty (Each) I	Qty (Each) I Total Cost (\$ M)	Qty (Each) I	Qty (Each) I	Qty (Each) I Total Cost (\$ M)	Qty (Each) I	Qty (Each) I Total Cost (\$ M)	Qty (Each) I	Qty (Each) I	Qty (Each) I	Qty (Each) I Total Cost (\$ M)	Qty (Each) I
Procurement	10101 0001 (\$111)	1 ota: 0 ot (\$ 111)	10101 0001 (# 111)	10101 0001 (4 111)	10ta: 000t (# m)	10ta: 000t (\$ 111)	10ta: 000t (# m)	rotal Goot (# III)	1 otal 0 oct (\$ 111)	10101 0001 (# 111)	Total Cook (# III)	10101 0001 (4 111)
Modification Item 1 of 3: M110 Compact (CSASS)												
B Kits												
Recurring												
M110 Compact	- 1 -	- 1 -	- 1 -	289 / 1.351	- 1 -	289 / 1.351	1,062 / 7.161	977 / 7.311	943 / 7.311	632 / 3.526	- 1 -	3,903 / 26.660
Engineering Support	- 1 -	- 1 -	- 1 -	- /0.080	- 1 -	- / 0.080	- / 1.500	- /1.500	- /1.400	- / 1.500	- 1 -	- /5.980
Subtotal: Recurring	- / -	- / -	- / -	- /1.431	- / -	- /1.431	- /8.661	- /8.811	- /8.711	- /5.026	- / -	- /32.640
Subtotal: M110 Compact (CSASS)	- / -	- / -	- / -	289 / 1.431	- / -	289 / 1.431	1,062 / 8.661	977 / 8.811	943 / 8.711	632 / 5.026	- / -	3,903 / 32.640
<b>Modification Item 2 of 3:</b> Sniper Upgrades and Accessories												
B Kits												
Recurring												
Sniper Upgrades and Accessories	160 / 1.600	- 1 -	3,643 / 2.040	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	3,803 / 3.640
ECP Spotting Scope	- 1 -	- /3.300	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /3.300
Engineering Support (ESIP)	0 / 14.388	- /3.717	- /2.039	- / 0.950	- 1 -	- / 0.950	- / 0.100	- / 0.100	- / 0.100	- / 0.100	- 1 -	- / 21.494
Engineering Study	- 1 -	- 1 -	- 1 -	- / 0.050	- 1 -	- / 0.050	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 0.050
Subtotal: Recurring	- /15.988	- /7.017	- /4.079	- /1.000	- / -	- /1.000	- /0.100	- /0.100	- /0.100	- /0.100	- / -	- / 28.484
Subtotal: Sniper Upgrades and Accessories	160 / 15.988	- /7.017	3,643 / 4.079	- /1.000	- / -	- /1.000	- /0.100	- /0.100	- /0.100	- /0.100	- / -	3,803 / 28.484
<b>Modification Item 3 of 3:</b> Squad Designated Marksmen (SDM)												
B Kits												
Recurring												
Engineering Support	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 1.218	- / 0.275	- / 0.051	- / 0.821	- 1 -	- /2.365
Subtotal: Recurring	- / -	- / -	- / -	- / -	- / -	- / -	- /1.218	- /0.275	- /0.051	- /0.821	- / -	- /2.365
Subtotal: Squad Designated Marksmen (SDM)	- / -	- / -	- / -	- / -	- / -	- / -	- /1.218	- /0.275	- /0.051	- /0.821	- / -	- /2.365
Subtotal: Procurement, All Modification Items	160 / 15.988	- /7.017	3,643 / 4.079	289 / 2.431	- / -	289 / 2.431	1,062 / 9.979	977 / 9.186	943 / 8.862	632 / 5.947	- / -	7,706 / 63.489
Installation												
Modification Item 1 of 3: M110 Compact (CSASS)	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	900 / -	1,183 / -	952 / -	710 / -	158 / -	3,903 / -
Subtotal: Installation	0 / 0.000	- / -	- / -	- / -	- / -	- / -	900 / -	1,183/ -	952 / -	710/ -	158 / -	3,903 / -
Total	,											

LI GZ1500 - Sniper Rifles Modifications Army

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Exhibit P-3a, Individual Modification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:

2033A / 02 / 20

P-1 Line Item Number / Title:

GZ1500 / Sniper Rifles Modifications

Modification Number / Title:

GZ1500 / SNIPER RIFLES

MODIFICATIONS (GZ1500)

Models of Systems Affected: M14 EBR (GZ2801), M110 SASS (G01505), M107 LRSR (G01500), M24 SWS (G04200), and M2010 ESR (GZ1500)

Modification Type: Increased Performance

Related RDT&E PEs:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)											
Total Cost (Procurement + Support + Installation)	27.819	7.017	4.079	2.431	-	2.431	9.979	9.186	8.862	5.947	-	75.320

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Exhibit P-3a, Individual Modification: PB 2016 Army	Date: February 2015	
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 20	P-1 Line Item Number / Title: GZ1500 / Sniper Rifles Modifications	Modification Number / Title: GZ1500 / SNIPER RIFLES MODIFICATIONS (GZ1500)

Modification Item 1 of 3: M110 Compact (CSASS)

Manufacturer Informatio	n						
Manufacturer Name: Insta	lled by Contractor			Manufacturer Location: TE	BD		
Administrative Leadtime (i	n Months): 4			Production Leadtime (in M	Months): 3		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020

Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates			Jan 2017	Jan 2017	Jan 2018	Jan 2019	Jan 2020
Delivery Dates			Apr 2017	Apr 2017	Apr 2018	Apr 2019	Apr 2020

### Installation Information

Method of Implementation: Installed by Contractor

				FY 2016	FY 2016	FY 2016					То	
	Prior Years	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	0 / 0.000	- / 0.000	- / 0.000	- / 0.000	- 1 -	- /0.000	- /0.000	- / 0.000	- / 0.000	- / 0.000	- /0.000	- / 0.000
FY 2014	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2015	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2016	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	289 / -	- 1 -	- 1 -	- 1 -	- 1 -	289 / -
FY 2017	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	611 / -	451 / -	- 1 -	- 1 -	- 1 -	1,062 / -
FY 2018	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	732 / -	245 / -	- 1 -	- 1 -	977 / -
FY 2019	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	707 / -	236 / -	- 1 -	943 / -
FY 2020	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	4741 -	158 / -	632 / -
To Complete	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	900 / -	1,183 / -	952 / -	710 / -	158 / -	3,903 / -

#### Installation Schedule

			FY 2	2014			FY 2	2015			FY 2	2016			FY 2	017			FY 2	2018			FY 2	019			FY 2	020			
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	450	450	451	244	244	244	245	235	236	236	236	158	158	158	158	-	3,903
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	450	450	451	244	244	244	245	235	236	236	236	158	158	158	158	3,903

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2033A / 02 / 20  GZ1500 / Sniper Rifles Modifications  GZ1500 / MODIFI  Modification Item 2 of 3: Sniper Upgrades and Accessories  Manufacturer Information  Manufacturer Name: N/A  Administrative Leadtime (in Months): 6  GZ1500 / Sniper Rifles Modifications  MODIFI  Monufacturer Information  Production Leadtime (in Months): 6	ation Number / Title:	Date: February 20				3 2016 Army	ual Modification: PE	Exhibit P-3a, Individ
Manufacturer Information  Manufacturer Name: N/A  Administrative Leadtime (in Months): 6  Dates FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 F  Contract Dates Mar 2015  Delivery Dates Sep 2015  Installation Information	/ SNIPER RIFLES CATIONS (GZ1500)	GZ1500 / SNIPER			I	Sub Activity:	get Activity / Budge	
Manufacturer Name: N/A Administrative Leadtime (in Months): 6 Production Leadtime (in Months): 6  Dates FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 F Contract Dates Mar 2015 Delivery Dates Sep 2015  Installation Information					1	ssories	Sniper Upgrades and Acce	Modification Item 2 of 3:
Administrative Leadtime (in Months): 6  Dates FY 2014 FY 2015 FY 2016 FY 2017 FY 2018 F Contract Dates Mar 2015 Delivery Dates Sep 2015  Installation Information							1	Manufacturer Informatio
Dates         FY 2014         FY 2015         FY 2016         FY 2017         FY 2018         F           Contract Dates         Mar 2015         Oelivery Dates         Sep 2015         Oelivery Dates         Oelivery Dates			/A	Manufacturer Location: N/				Manufacturer Name: N/A
Contract Dates Mar 2015 Delivery Dates Sep 2015  Installation Information			Months): 6	Production Leadtime (in M			<u> </u>	Administrative Leadtime (i
Delivery Dates Sep 2015  Installation Information	7 2019 FY 202	FY 2019	FY 2018	FY 2017	FY 2016		FY 2014	Dates
nstallation Information								
						Sep 2015		elivery Dates
								nstallation Information
instantion (organic). 188		Quantity: 0	Installation				n (Organic): TRD	

xhibit P-3a, Indivi	dual Modification: Pl	B 2016 Army				Date: February 2015	5
<b>ppropriation / Bu</b> 033A / 02 / 20	dget Activity / Budge	et Sub Activity:	P-1 Line Item Nu GZ1500 / Sniper I	mber / Title: Rifles Modifications		Modification Number GZ1500 / SNIPER R MODIFICATIONS (G	IFLES
odification Item 3 of 3	: Squad Designated Marksr	men (SDM)	1			1	
anufacturer Information	on						
anufacturer Name: TBD	)			Manufacturer Location: TB	D		
dministrative Leadtime (	(in Months): 4			Production Leadtime (in M	onths): 3		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
ontract Dates				Jan 2017	Jan 2018	Jan 2019	Jan 2020
elivery Dates				Apr 2017	Apr 2018	Apr 2019	Apr 2020
stallation Information							
ethod of Implementati					Installation Q	uantity: 0	
					Installation Q	uantity: 0	
					Installation Q	uantity: 0	
					Installation Q	uantity: 0	
					Installation Q	uantity: 0	
					Installation Q	uantity: 0	
					Installation Q	uantity: 0	
					Installation Q	uantity: 0	
					Installation Q	uantity: 0	
					Installation Q	uantity: 0	
					Installation Q	uantity: 0	
					Installation Q	uantity: 0	
					Installation Q	uantity: 0	
					Installation Q	uantity: 0	
					Installation Q	uantity: 0	

Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

GC0401 / M119 Modifications

Vehicles / BSA 20: Mod of Weapons and Other Combat Veh

ID Code (A=Service Ready, B=Not Service Ready) : A	4		Program Ele	ments for Cod	de B Items:			Other Relate	d Program El	ements:		
	Prior			FY 2016	FY 2016	FY 2016					То	
Resource Summary	Years	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	213.288	22.207	72.718	20.599	-	20.599	3.894	3.925	4.921	5.465	-	347.017
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	213.288	22.207	72.718	20.599	-	20.599	3.894	3.925	4.921	5.465	-	347.017
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	213.288	22.207	72.718	20.599	-	20.599	3.894	3.925	4.921	5.465	-	347.017
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	e corresponding	g budget request	s are documente	ed elsewhere.)			<u>'</u>	
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

### **Description:**

LI GC0401 - M119 Modifications

The M119A3 Towed Howitzer provides direct fire support for the Infantry Brigade Combat Teams. Funding in the M119 Modifications budget supports the application of modernization system enhancements. Modifications to the howitzer include a Recoil System Capability Package, which will enhance survivability by replacing the Buffer and Recuperator in the recoil system and add suspension modifications. A Power System Modification will replace current system batteries to increase power output and cold temperature performance. The Training Devices modification products include M119A3 legacy desktop personal computer trainer, M119A3 desktop crew trainer, and M119A3 computer based trainer. The durability modification provides for modified spades on the howitzers.

				FY 2016	FY 2016	FY 2016				
Seconda	ry Distribution	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	12.974	44.105	12.359	-	12.359	2.336	2.355	2.953	3.279
ANG	Quantity	-	-	-	=	-	-	-	-	-
	Total Obligation Authority	9.233	28.613	8.240	-	8.240	1.558	1.570	1.968	2.186
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	<b>Total Obligation Authority</b>	22.207	72.718	20.599	-	20.599	3.894	3.925	4.921	5.465

Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

GC0401 / M119 Modifications

Vehicles / BSA 20: Mod of Weapons and Other Combat Veh

ID Code (A=Service Ready, B=Not Service Ready) : A		Program	Elements for Code	B Items:	Oth	Other Related Program Elements:			
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)						
GC0401 / M119 Modifications (Increase Performance)	P-3a		- / 213.288	- / 22.207	- /72.718	- / 20.599	- / -	- / 20.599	
Total Gross/Weapon System Cost			- / 213.288	- / 22.207	- / 72.718	- / 20.599	- 1 -	- / 20.599	
Exhibits Schedule			FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)	
GC0401 / M119 Modifications (Increase Performance)	P-3a		- / 3.894	- / 3.925	- / 4.921	- / 5.465	- / -	- / 347.017	
Total Gross/Weapon System Cost			- / 3.894	- / 3.925	- / 4.921	- / 5.465	- 1 -	- / 347.017	

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

#### Justification:

FY 2016 Base procurement dollars in the amount of \$20.599 million supports the procurement of Recoil Systems for 127 howitzers, Power System Modifications for 238 howitzers, Training Devices, and durability modifications. The Recoil System modification will enhance durability of the howitzer and address deficiencies in the legacy recoil system. The Training Devices modification provides for Training Aids, Devices, Simulators and Simulations (TADSS) products for use in training artillerymen and maintainers in the field and at school houses. The Power System modification will increase system electrical power output and meet system operating requirements for low temperature environments. The Durability modifications will increase system durability and decrease system weight.

IAW Section 1815 of the FY 2008 NDAA this item is necessary for use by the active and reserve components of the Armed Forces for Homeland Defense missions, domestic emergency responses, and providing military support to civil authorities.

Exhibit P-3a, Individual Modification: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Modification Number / Title:
2033A / 02 / 20	GC0401 / M119 Modifications	GC0401 / M119 Modifications

2033A / 02 / 20			GC	J401 / M1118	9 Modificati	ons			GC0401	7 MT19 MC	odifications	
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	213.288	22.207	72.718	20.599	-	20.599	3.894	3.925	4.921	5.465	-	347.017
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	213.288	22.207	72.718	20.599	-	20.599	3.894	3.925	4.921	5.465	-	347.017
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	213.288	22.207	72.718	20.599	-	20.599	3.894	3.925	4.921	5.465	-	347.017
(The following	g Resource Sum	mary rows are fo	or informational p	urposes only. Th	e corresponding	g budget requests	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands,	-	-	-	-	-	-	-	-	-	-	-	-

### **Description:**

Modifications to M119A2 Howitzer. Contractor dates will vary by item and cannot be predicted.

Mod 2 (Recoil Capability Package): Procurement of the Digital Fire Control System is contracted separately for each major component, with various contract award dates. Application will occur in Battalion sets of 17 each over a two-month period. Recoil Capability Package is for a new recoil system which will enhance the survivability of the M119. The recoil system upgrade will consist of the recoil buffer, recuperator, and suspension modification.

Mod 3 (TADSS): This modification is for the procurement of Training Aids, Devices, Simulators and Simulations (TADSS) for use in training artillerymen and maintainers in fielded units as well as in classroom instruction at school houses. Products will include M119A3 Legacy Desktop Personal Computer Trainer, M119A3 Desktop Crew Trainer, and M119A3 Computer Based Trainer.

Mod 4 (Power System): Power System Management Mod will procure a new power supply for the M119A3 Digital Fire Control System. The modification will increase system electrical power and meet system operating requirements for low temperature environments.

Mod 5 (Durability): Durability Mods will optimize the design of the spades on the M119 howitzer to increase durability and decrease weight.

			FY 2016	FY 2016	FY 2016				
ndary Distribution	FY 2014	FY 2015	Base	осо	Total	FY 2017	FY 2018	FY 2019	FY 2020
Quantity	-	-	-	-	-	-	-	-	-
Total Obligation Authority	12.974	44.105	12.359	-	12.359	2.336	2.355	2.953	3.279
Quantity	-	-	-	-	-	-	-	-	-
Total Obligation Authority	9.233	28.613	8.240	-	8.240	1.558	1.570	1.968	2.186
Quantity	-	-	-	-	-	-	-	-	-
<b>Total Obligation Authority</b>	22.207	72.718	20.599	-	20.599	3.894	3.925	4.921	5.465
	Quantity Total Obligation Authority Quantity Total Obligation Authority Quantity	Quantity - Total Obligation Authority 12.974 Quantity - Total Obligation Authority 9.233 Quantity -	Quantity         -         -           Total Obligation Authority         12.974         44.105           Quantity         -         -           Total Obligation Authority         9.233         28.613           Quantity         -         -	Quantity	Quantity	Quantity	Columbia	Idary Distribution         FY 2014         FY 2015         Base         OCO         Total         FY 2017         FY 2018           Quantity         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -         -	Columbia   Columbia

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LI GC0401 - M119 Modifications Army

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Exhibit P-3a, Individual Modification	on: PB 2016 Arm	ıy							Date: Feb	ruary 2015	5	
Appropriation / Budget Activity / B 2033A / 02 / 20	udget Sub Acti	vity:		tem Numb M119 Mod						ion Numb M119 Mod		
Models of Systems Affected: M119	A2/A3 Howitzer	Modifi	cation Typ	oe: Increas	e Performa	ance	Re	lated RDT	&E PEs:			
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)											
Procurement												
Modification Item 1 of 5: Digitization												
A Kits												
Recurring												
Integration Prod/Init Spares	393 / 83.360	38 / 11.498	71 / 22.347	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	502 / 117.205
Logistics & Fielding	0 / 8.148	- / 1.950	- /3.785	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 13.883
Program Management	0 / 6.702	- /2.103	- /1.604	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 10.409
System Engineering	0 / 9.820	- /4.056	- /3.700	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 17.576
Engineering Change Orders (ECO)	0 / 9.700	- /2.600	- /2.223	- 1 -	- 1 -	- 1 -	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- / 14.523

Modification Item 1 of 5: Digitization												
A Kits												
Recurring												
Integration Prod/Init Spares	393 / 83.360	38 / 11.498	71 / 22.347	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	502 / 117.20
Logistics & Fielding	0 / 8.148	- / 1.950	- /3.785	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 13.88
Program Management	0 / 6.702	- / 2.103	- / 1.604	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 10.40
System Engineering	0 / 9.820	- /4.056	- /3.700	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 17.576
Engineering Change Orders (ECO)	0 / 9.700	- /2.600	- /2.223	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 14.523
Subtotal: Recurring	- /117.730	- /22.207	- /33.659	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- /173.596
Subtotal: Digitization	393 / 117.730	38 / 22.207	71 / 33.659	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	502 / 173.596
Modification Item 2 of 5: Recoil Capability Package												
A Kits												
Recurring												
Recoil System Upgrade	- 1 -	- 1 -	375 / 32.959	127 / 11.802	- 1 -	127 / 11.802	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	502 / 44.761
Subtotal: Recurring	- / -	- / -	- /32.959	- /11.802	- / -	- /11.802	- / -	- / -	- / -	- / -	- / -	- /44.761
Subtotal: Recoil Capability Package	- / -	- / -	375 / 32.959	127 / 11.802	- / -	127 / 11.802	- / -	- / -	- / -	- / -	- / -	502 / 44.761
Modification Item 3 of 5: Training Devices (TADSS)		,										,
A Kits												
Non-Recurring												
Training Devices	- 1 -	- 1 -	- /1.100	- /4.647	- 1 -	- /4.647	- /3.894	- /3.925	- /2.496	- / 2.688	- 1 -	- / 18.750
Subtotal: Non-Recurring	- / -	- / -	- /1.100	- /4.647	- / -	- /4.647	- /3.894	- /3.925	- /2.496	- /2.688	- / -	- /18.750
Subtotal: Training Devices (TADSS)	- / -	- / -	- /1.100	- /4.647	- / -	- /4.647	- /3.894	- /3.925	- /2.496	- /2.688	- / -	- /18.750
Modification Item 4 of 5: Power System Management		'	'					'				,
A Kits												
Non-Recurring												
Power System Mods	- 1 -	- 1 -	264 / 3.500	238 / 3.315	- 1 -	238 / 3.315	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	502 / 6.815
Subtotal: Non-Recurring	- / -	- / -	- /3.500	- /3.315	- / -	- /3.315	- / -	- / -	- / -	- / -	- / -	- /6.815
Subtotal: Power System Management	- / -	- / -	264 / 3.500	238 / 3.315	- / -	238 / 3.315	- / -	- / -	- / -	- / -	- / -	502 / 6.815
Modification Item 5 of 5: Durability Mods		'	-	'				'	'			J
A Kits												
Recurring												
Kit Quantity	- 1 -	- 1 -	98 / 1.500	53 / 0.835	- 1 -	53 / 0.835	- / -	- 1 -	165 / 2.425	186 / 2.777	- 1 -	502 / 7.537

LI GC0401 - M119 Modifications Army

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Exhibit P-3a, Individual Modification: PB 2016 Army	Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 20	Modification Number / Title: GC0401 / M119 Modifications

Models of Systems Affected: M119A2/A	3 Howitzer	Modifi	cation Typ	e: Increas	e Performa	ince	Re	lated RDT	ted RDT&E PEs:				
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total	
Financial Plan	Qty (Each) I Total Cost (\$ M)												
Subtotal: Recurring	- / -	- / -	- /1.500	- /0.835	- / -	- /0.835	- / -	- / -	- /2.425	- /2.777	- / -	- /7.537	
Subtotal: Durability Mods	- / -	- / -	98 / 1.500	53 / 0.835	- / -	53 / 0.835	- / -	- / -	165 / 2.425	186 / 2.777	- / -	502 / 7.537	
Subtotal: Procurement, All Modification Items	393 / 117.730	38 / 22.207	808 / 72.718	418 / 20.599	- / -	418 / 20.599	- /3.894	- /3.925	165 / 4.921	186 / 5.465	- / -	2,008 / 251.459	
Installation							<u> </u>						
Subtotal: Installation	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	
Total													
Total Cost (Procurement + Support + Installation)	213.288	22.207	72.718	20.599	-	20.599	3.894	3.925	4.921	5.465	-	347.017	

P-1 Line #30

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Exhibit P-3a, Indivi	idual Modification: P	B 2016 Army				Date: February 2015	5				
· ·	dget Activity / Budg		P-1 Line Item Nu GC0401 / M119 I		_	Modification Numb	er / Title:				
Modification Item 1 of 5	: Digitization		1			· ·					
Manufacturer Information	on										
Manufacturer Name: Var	ious			Manufacturer Location: V	/arious						
Administrative Leadtime	(in Months):			Production Leadtime (in I	Date: February 2015  Der / Title: Modification Number / Title:						
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020				
Contract Dates											
Delivery Dates											
Installation Information											
Method of Implementat					Installation (	Quantity: 0					

LI GC0401 - M119 Modifications

Army

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Exhibit P-3a, Individ	lual Modification: PE	3 2016 Army				Date: February 2015				
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 20			<b>P-1 Line Item Nu</b> GC0401 / M119 N	m Number / Title:  119 Modifications  Modification Number / Title:  GC0401 / M119 Modification						
Modification Item 2 of 5:	Recoil Capability Package					•				
Manufacturer Informatio	n									
Manufacturer Name: Vario	us			Manufacturer Location: Va	rious					
Administrative Leadtime (i	n Months): 4			Production Leadtime (in Months): 2						
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2020					
Contract Dates		Apr 2015	Jan 2016							
Delivery Dates		Jun 2015	Mar 2016							
Installation Information										
Method of Implementation	on (Organic): Organic				Installation (	Quantity: 0				

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Exhibit P-3a, Individ	lual Modification: PB	3 2016 Army				Date: February 2015	<u> </u>
Appropriation / Bud 2033A / 02 / 20	get Activity / Budget	t Sub Activity:	<b>P-1 Line Item Nu</b> GC0401 / M119 N		Modification Number / Title: GC0401 / M119 Modifications		
Modification Item 3 of 5:	Training Devices (TADSS)		•			•	
Manufacturer Informatio	n						
Manufacturer Name: Orga	nic			Manufacturer Location: Va	arious		
Administrative Leadtime (i	n Months):			Production Leadtime (in N	Months):		
Dates	FY 2014		FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates							
Delivery Dates							
Installation Information							
Method of Implementation	on (Organic): Organic				Installation	Quantity: 0	

LI GC0401 - M119 Modifications Army

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Exhibit P-3a, Individ	dual Modification: Pl	3 2016 Army				Date: February 2015			
<b>Appropriation / Buo</b> 2033A / 02 / 20	lget Activity / Budge	<b>P-1 Line Item Nu</b> GC0401 / M119 N							
Modification Item 4 of 5:	Power System Manageme	nt	·						
Manufacturer Information	n								
Manufacturer Name: TBD				Manufacturer Location: TBD					
Administrative Leadtime (	in Months): 4			Production Leadtime (in M	fonths): 2				
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020		
Contract Dates		Apr 2015	Jan 2016						
Delivery Dates		Jun 2015	Mar 2016						
Installation Information									
Mathad of Implementation	on (Organic): Organic				Installation	Quantity: 0			

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			UNCL	ASSIFIED			
Exhibit P-3a, Indivi	dual Modification: P	B 2016 Army				Date: February 2015	j
<b>Appropriation / Bu</b> 2033A / 02 / 20	dget Activity / Budge	et Sub Activity:	P-1 Line Item Nu GC0401 / M119 N		Modification Number / Title: GC0401 / M119 Modifications		
Modification Item 5 of 5	: Durability Mods		•			•	
Manufacturer Information	on						
Manufacturer Name: TBD	cturer Name: TBD Manufacturer Location: TBD						
Administrative Leadtime	(in Months): 4			Production Leadtime (in M	lonths): 2		
Dates	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Contract Dates		Mar 2015	Jan 2016			Jan 2019	Jan 2020
Delivery Dates		May 2015	Mar 2016			Mar 2019	Mar 2020
Installation Information Method of Implementati					Installation	Quantity: 0	

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army	Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

GZ2800 / M16 Rifle Mods

Vehicles / BSA 20: Mod of Weapons and Other Combat Veh

ID Code (A=Service Ready, B=Not Service Ready) : A		Program Ele	ments for Co	de B Items:			Other Relate	Other Related Program Elements:				
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	168.938	2.136	-	-	-	-	-	-	-	-	-	171.074
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	168.938	2.136	-	-	-	-	-	-	-	-	-	171.074
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	168.938	2.136	-	-	-	-	-	-	-	-	-	171.074
(The following	Resource Sumi	mary rows are fo	or informational p	ourposes only. Tl	he corresponding	g budget request	s are document	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

### **Description:**

The M16 Rifle Modifications Program provides combat optics and Close Quarters Battle (CQB) Kit. The M68 Close Combat Optic (CCO) is used on the M4 Carbine and M16 Rifle and allows the Infantry Soldier to engage targets with both eyes open while maintaining situational awareness of events happening in close proximity. The Rifle Combat Optic (RCO) provides an improved capability to recognize and engage targets from 300 to 600m with the M4, M4A1, M16A2 and the M16A4. The Close Quarters Battle Kit (CQBK) provides the Soldier with multiple low cost items to increase lethality and survivability with individual weapons. The Improved Weapons Cleaning Kit (IWCK) contains all the necessary items needed to conduct a thorough and efficient cleaning of both the weapon and the optic.

Secondary	Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	2.136	-	-	-	-	-	-	-	=
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	2.136	-	-	-	-	-	-	-	-

#### Justification:

No FY 2016 procurement funding.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L.110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

LI GZ2800 - M16 Rifle Mods
Army

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P-1 Line #31

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**Exhibit P-40, Budget Line Item Justification:** PB 2016 Army **Date:** February 2015

6.300

8.903

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Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat Vehicles / BSA 20: Mod of Weapons and Other Combat Veh

107.279

G02100 / Mortar Modification

6.300

11.319

6.098

5.118

**Program Elements for Code B Items:** Other Related Program Elements: ID Code (A=Service Ready, B=Not Service Ready) : B Prior FY 2016 FY 2016 FY 2016 To Complete **Resource Summary Years** FY 2014 FY 2015 Base OCO Total **FY 2017 FY 2018** FY 2019 FY 2020 **Total** Procurement Quantity (Units in Each) Gross/Weapon System Cost (\$ in Millions) 107.279 -8.903 6.300 6.300 11.319 6.098 5.118 145.017 Less PY Advance Procurement (\$ in Millions) Net Procurement (P1) (\$ in Millions) 107.279 8.903 6.300 6.300 11.319 6.098 5.118 145.017

(The following	(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)											
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	4.200	-	4.200	-	-	-	-	-	90.353

#### **Description:**

Plus CY Advance Procurement (\$ in Millions)

Total Obligation Authority (\$ in Millions)

Mortar System modifications for 60mm Light Weight M224A1, 81mm Light Weight M252A1, 120mm M120A1/M121 Mortar Weapon Systems, and Engineering Support of Items in Production (ESIP) for improved Aiming Posts and Lights (tritium free) for all mortar calibers, M191A1 bipod with integral pointing device mount improvement for the M120A1 towed mortar, and Range Indicators to include 60MM HE Enhanced Fragment (EF) M1061 markings and the M8A1 patrolling baseplate for the 60mm M224A1 mortar.

Secondar	ry Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	8.903	6.300	-	6.300	11.319	6.098	5.118	-
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	-	8.903	6.300	-	6.300	11.319	6.098	5.118	-

**UNCLASSIFIED** 

145.017

Exhibit P-40, Budget Line Item Justification: PB 2016 Army **Date:** February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

G02100 / Mortar Modification

Vehicles / BSA 20: Mod of Weapons and Other Combat Veh

ID Code (A=Service Ready, B=Not Service Ready) : B	P	rogram	n Elements for Code	B Items:	Ot	Other Related Program Elements:				
Exhibits Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total		
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)		
G02100 / Mortar Modification (Army Mortar Modernization)	P-3a		- / 107.279	- / -	- / 8.903	- / 6.300	- / -	- / 6.300		
Total Gross/Weapon System Cost			- / 107.279	- / -	- / 8.903	- / 6.300	- 1 -	- / 6.300		
Exhibits Schedule			FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total		
Title*	Exhibits	ID CD	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)	Quantity / Total Cost (Each) / (\$ M)		
G02100 / Mortar Modification (Army Mortar Modernization)	P-3a		- / 11.319	- / 6.098	- / 5.118	- / -	- / -	- / 145.017		
Total Gross/Weapon System Cost			- / 11.319	- / 6.098	- / 5.118	- 1 -	- 1 -	- /145.017		
+T''.	/ T''			/ T. /	\ f					

^{*}Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

#### Justification:

FY 2016 Base procurement dollars in the amount of \$6.300 million supports the procurement of 500 range indicators (with revised range scales for the MAPAM round) to be used with the M224A1 Light Weight 60mm mortar, 250 M191A1 bipods to be used with the M120A1 towed mortar, and 1000 aiming posts and light sets to be used with all mortar calibers. The mortar modification support funds are essential to meet US Army fielding requirements of the lightweight 60mm & 81mm mortars and the 120MM mortars to forty Infantry Combat Teams, nine Stryker Brigade Combat Teams, seven Special Forces Brigades and a Ranger Regiment. Fielding and Training of these modifications will be performed through FY 2016 base funding.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L.110-181) this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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Exhibit P-3a, Individual Modification: PB 2016 Army	,					
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Modification Number / Title:				
2033A / 02 / 20	G02100 / Mortar Modification	G02100 / Mortar Modification				

2033A / 02 / 20			G02	2100 / Morta	ar Modificat	ion			G02100	/ Mortar M	odification	
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	107.279	-	8.903	6.300	-	6.300	11.319	6.098	5.118	-	-	145.017
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	107.279	-	8.903	6.300	-	6.300	11.319	6.098	5.118	-	-	145.017
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	107.279	-	8.903	6.300	-	6.300	11.319	6.098	5.118	-	-	145.017
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	ne corresponding	g budget requests	are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands,	-	-	-	4.200	-	4.200	-	-	-	-	-	90.353

### **Description:**

Description:

Mortar System modifications for 60mm Light Weight M224A1, 81mm Light Weight M252A1, 120mm M120A1/M121 Mortar Weapon Systems, and Engineering Support of Items in Production (ESIP) for improved Aiming Posts and Lights (tritium free) for all mortar calibers, M191A1 bipod with integral pointing device mount improvement for the M120A1 towed mortar, and Range Indicators to include Mortar Anti Personnel Anti Material (MAPAM) markings and the M8A1 patrolling baseplate for the 60mm M224A1 mortar.

Justification:

FY 2016 Base procurement dollars in the amount of \$6.300 million supports the procurement of 500 range indicators (with revised range scales for the MAPAM round) to be used with the M224A1 Light Weight 60mm mortar, 250 M191A1 bipods to be used with the M120A1 towed mortar, and 1000 aiming posts and light sets to be used with all mortar calibers. The mortar modification support funds are essential to meet US Army fielding requirements of the lightweight 60mm & 81mm mortars and the 120MM mortars to forty Infantry Combat Teams, nine Stryker Brigade Combat Teams, seven Special Forces Brigades and a Ranger Regiment. Fielding and Training of these modifications will be performed through FY 2016 base funding.

Secondar	y Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	8.903	6.300	-	6.300	11.319	6.098	5.118	-
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	-	8.903	6.300	-	6.300	11.319	6.098	5.118	-

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Exhibit P-3a, Individual Modification	n: PB 2016 Arm	าง							Date: Feb	ruary 2015	5	
Appropriation / Budget Activity / Bu 2033A / 02 / 20	dget Sub Acti	vity:		<b>tem Numb</b> Mortar Mod						i <b>on Numb</b> o Mortar Mo		
Models of Systems Affected: M224A M120A1, M121	A1, M252A1,	Modifi	ication Typ	oe: Army M	lortar Mode	ernization	Re	lated RDT	&E PEs:			
	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M										
Procurement				,		,	,					
Modification Item 1 of 1: Mortar Modification												
A Kits												
Recurring												
Aiming Post Lights	- 1 -	- 1 -	1,000 / 1.650	1,000 / 1.650	- 1 -	1,000 / 1.650	1,000 / 1.650	417 / 0.688	- 1 -	- 1 -	- 1 -	3,417 / 5.63
Range Indicators	- 1 -	- 1 -	500 / 0.188	500 / 0.188	- / -	500 / 0.188	505 / 0.189	- 1 -	- 1 -	- 1 -	- 1 -	1,505 / 0.56
M191A1 Bipods	- 1 -	- 1 -	200 / 6.000	250 / 3.800	- 1 -	250 / 3.800	250 / 3.800	- 1 -	- 1 -	- 1 -	- 1 -	700 / 13.60
Subtotal: Recurring	- / -	- / -	- /7.838	- /5.638	- / -	- /5.638	- /5.639	- /0.688	- / -	- / -	- / -	- /19.80
Non-Recurring												
First Article Testing	- 1 -	- 1 -	- / 0.250	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 0.25
Tech Manuals	- 1 -	- 1 -	- / 0.100	- / -	- / -	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 0.10
Engineering/Program Support	- 1 -	- 1 -	- / 0.250	- / 0.250	- 1 -	- / 0.250	- /3.580	- /3.300	- /3.100	- 1 -	- 1 -	- / 10.48
New Equipment Training	- 1 -	- 1 -	- / 0.465	- / 0.412	- 1 -	- / 0.412	- / 1.500	- /1.510	- /1.418	- 1 -	- 1 -	- / 5.30
Fielding / Install	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 0.600	- / 0.600	- / 0.600	- 1 -	- 1 -	- / 1.80
Subtotal: Non-Recurring	- / -	- / -	- /1.065	- /0.662	- / -	- /0.662	- /5.680	- /5.410	- /5.118	- / -	- / -	- /17.93
Subtotal: Mortar Modification	- / -	- / -	1,700 / 8.903	1,750 / 6.300	- / -	1,750 / 6.300	1,755 / 11.319	417 / 6.098	- /5.118	- / -	- / -	5,622 / 37.73
Subtotal: Procurement, All Modification Items	- / -	- / -	1,700 / 8.903	1,750 / 6.300	- / -	1,750 / 6.300	1,755 / 11.319	417 / 6.098	- /5.118	- / -	- / -	5,622 / 37.73
Installation											,	
Subtotal: Installation	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total										<u> </u>	<u> </u>	

LI G02100 - Mortar Modification Army

Total Cost (Procurement + Support + Installation)

107.279

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6.300

6.300

11.319

6.098

5.118

8.903

P-1 Line #32

145.017

Exhibit P-3a, Individual Modification: PE		Date: February 2015						
Appropriation / Budget Activity / Budge 2033A / 02 / 20	t Sub Activity:	P-1 Line Item Nu G02100 / Mortar N			Modification Number / Title: G02100 / Mortar Modification			
Modification Item 1 of 1: Mortar Modification		•			'			
Manufacturer Information								
Manufacturer Name: TBS01, TBS01			Manufacturer Location: TE	3S01, TBS01				
Administrative Leadtime (in Months): 9			Production Leadtime (in Months): 10					
Dates FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020		
Contract Dates	Jun 2015	Mar 2016	Mar 2017	Mar 2018				
Delivery Dates	Aug 2016	Jan 2017	Jan 2018	Jan 2019				
Installation Information	7.03 20.0	54.7.2577	33.1.23.13	04.7.20.70				
Method of Implementation (Organic): Organic Insta	.II			Installation (	Duantitus O			

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Page 5 of 5 P-1 Line #32

LI G02100 - Mortar Modification

Army

Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

GC0925 / Modifications Less Than \$5.0m (WOCV-WTCV)

Date: February 2015

Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles / BSA 20: Mod of Weapons and Other Combat Vehicles

ID Code (A=Service Ready, B=Not Service Ready) : E	3		Program Ele	ments for Co	de B Items: 06	604601A		Other Relate	d Program El	ements:		
D	Prior	EV 0044	EV 0045	FY 2016	FY 2016	FY 2016	EV 0047	EV 0040	EV 0040	E)/ 0000	То	T-4-1
Resource Summary	Years	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	195.708	1.569	2.089	3.737	-	3.737	3.182	3.489	3.495	3.517	-	216.786
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	195.708	1.569	2.089	3.737	-	3.737	3.182	3.489	3.495	3.517	-	216.786
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	195.708	1.569	2.089	3.737	-	3.737	3.182	3.489	3.495	3.517	-	216.786
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	ne corresponding	g budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	9.296	-	9.296	-	-	-	-	-	135.069

### **Description:**

This program procures modifications of small arms with a cost less than \$5.000 million to include the procurement of accessory components of optics, protective lens coatings, mounting systems and mount improvements, bipods, tripods and tripods improvements/upgrades. Optic sights allow the Soldier to identify and engage targets at longer ranges more effectively than standard iron sights. The M150 Rifle Combat Optic is a 4-powered scope with a ranging reticule enhancing the Soldier ability to engage targets out to 600 meters. The improved optic combines the close range, rapid target acquisition capabilities of the M68 Close Combat Optic (CCO) and the magnified capabilities of the M150 Rifle Combat Optic (RCO) and M145 Machine Gun Optic (MGO). Mounting systems provide a means to mount accessory components to weapons and mount weapon systems to platforms. The M197 Vehicle Mount is the current standard used to mount the M249 and M240B machine guns to most vehicle platforms. A system improvement will add a link/spent case deflector and ammo handling system to provide capability upgrades addressing issues that Soldiers have identified as shortcomings of the current system. Bipods and tripods are used to stabilize and maneuver a weapon to target. The M205 is a lightweight tripod for dismounted M2/M2A1/MK19 machine guns; it weighs 16 lbs (32%) less than the currently used M3 Tripod. The M192 is the primary ground mount for the M240B/L and M249 machine guns. Based on recent combat experience, improvements are required to address identified shortcomings in the design and to enhance operational performance.

Secondar	ry Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	1.569	2.089	3.737	-	3.737	3.182	3.489	3.495	3.517
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	1.569	2.089	3.737	-	3.737	3.182	3.489	3.495	3.517

Justification:

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Exhibit P-40, Budget Line Item Justification: PB	2016 Army		Date: February 2015	_
Appropriation / Budget Activity / Budget Sub Ac 2033A: Procurement of W&TCV, Army / BA 02: We Vehicles / BSA 20: Mod of Weapons and Other Co	eapons and Other Combat	P-1 Line Item Num GC0925 / Modificati	iber / Title: ions Less Than \$5.0m (WOCV-WTCV)	
ID Code (A=Service Ready, B=Not Service Ready) : B	Program Elements for Code E	Items: 0604601A	Other Related Program Elements:	
kits to modify fielded system. The M205 Tripod reduces the So elevation mechanisms for easier, more accurate target engage Vehicle Mounts to add a link/spent case deflector and ammo hasystem. The M192 MWO Kit delivers a system improvement to MWO Kit addresses identified shortcomings in the design and	oldier's burden by providing a stable firing the stable firing the stable traverse limit stop for report and ling system. These upgrades provides this lightweight tripod. Fielded in 2005, provides increased height of the pintle a	g platform at 16 lbs (32%) le night time missions; and a ne le capability improvements a the M192 is no longer comp s well as improved performa	oviding 1,300 M197 Modification Work Order (MWO) Kits and 1,786 M192 MWC as than the current M3. The M205 Tripod also provides integral traverse and aw lightweight pintle design. The M197 MWO Kit will upgrade the existing M197 ddressing issues that Soldiers have identified as shortcomings of the current patible with the various body armor designs fielded in recent years. The M192 ance of the traversing and elevation mechanism.	
defense missions, domestic emergency responses, and provid	,	is item is necessary for use t	by the active and reserve components of the Armed Forces for nometand	

LI GC0925 - Modifications Less Than \$5.0m (WOCV-WTCV... Army

Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

GL3200 / Items Less Than \$5.0m (WOCV-WTCV)

Vehicles / BSA 30: Support Equipment & Facilities

ID Code (A=Service Ready, B=Not Service Ready) : E	3		Program Ele	ments for Co	de B Items:			Other Related Program Elements:				
	Prior			FY 2016	FY 2016	FY 2016					То	
Resource Summary	Years	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	123.948	2.024	2.005	0.391	-	0.391	2.958	2.622	2.952	2.973	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	123.948	2.024	2.005	0.391	-	0.391	2.958	2.622	2.952	2.973	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	123.948	2.024	2.005	0.391	-	0.391	2.958	2.622	2.952	2.973	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	ne corresponding	budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

#### **Description:**

Program provides for the procurement of standard and non-standard small arms to include auxiliary components such as combat optics, protective lens coatings for optics, fire controls, suppressors, powered rails, weapon mounts/platforms, and adaptors to meet urgent needs or initial buys. Weapons and auxiliary components procured under this budget activity in prior years consist of MK48 Machine Guns, M9 Pistols, GO Pistols, M500 Mossberg Shotguns, M3 Multi-Role Anti-Armor Anti-Personnel Weapon System (MAAWS) and MP5KA Submachine Guns to include magazines, clamps, holsters, lanyards and cleaning kits. Funding will also purchase world class Olympic Grade marksmanship weapons and accessories to support the Army Marksmanship Unit (AMU) in maintaining and procuring the specialized target rifles, pistols and accessories: Air Rifles, 22 caliber Pistols, Shooting glasses and scopes, Free Pistols, Shot Guns and bolt action rifles.

The FY 16 funding request was reduced for \$1.619 million to account for the availability of prior year execution balances.

Seconda	ry Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	2.024	2.005	0.391	-	0.391	2.958	2.622	2.952	2.973
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	2.024	2.005	0.391	-	0.391	2.958	2.622	2.952	2.973

#### Justification:

FY 2016 Base procurement dollars in the amount of \$0.391 million supports the Active Army by providing funding for stand-alone shotguns and other enhanced capabilities. The funding also supports the Army marksmanship Unit (AMU). The AMU competes worldwide on a regular basis. The man/weapon interface at this competitive level is important. Between competitions the AMU is firing constantly to hone their

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Exhibit P-40, Budget Line Item Justification: F	PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub A 2033A: Procurement of W&TCV, Army / BA 02: V Vehicles / BSA 30: Support Equipment & Facilitie	Veapons and Other Combat	P-1 Line Item N GL3200 / Items	Number / Title: Less Than \$5.0m (WOCV-WTCV)
D Code (A=Service Ready, B=Not Service Ready) : B	Program Elements for Code I	3 Items:	Other Related Program Elements:
requires the weapons to be coded out and replaced regularly	v. Funding will also provide for the procure	ement and training of var	nce provided, these weapons exceed their stated effective life projections faster. This rious Non-Standard Weapons to support the regionally engaged Active Army. These regionally aligned force missions. A New Start in FY2016 will be the procurement of
In accordance with Section 1815 of the FY 2008 National De defense missions, domestic emergency responses, and prov	,	nis item is necessary for t	use by the active and reserve components of the Armed Forces for homeland

LI GL3200 - Items Less Than \$5.0m (WOCV-WTCV) Army

Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

GC0050 / Production Base Support (WOCV-WTCV)

Vehicles / BSA 30: Support Equipment & Facilities

<b>ID Code</b> (A=Service Ready, B=Not Service Ready) :			Program Ele	ments for Co	de B Items:		Other Related Program Elements:					
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	437.974	10.108	8.911	9.027	-	9.027	9.175	8.866	9.046	9.248	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	437.974	10.108	8.911	9.027	-	9.027	9.175	8.866	9.046	9.248	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	437.974	10.108	8.911	9.027	-	9.027	9.175	8.866	9.046	9.248	Continuing	Continuing
(The following	Resource Sumr	mary rows are fo	r informational p	ourposes only. Th	ne corresponding	g budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	_	-

# **Description:**

This program provides funding to establish, modernize, expand or replace Army-owned industrial facilities and equipment used in production and production testing of Weapons and Tracked Combat Vehicles
and their components. The program also provides for the preserving, storing and disposing of facilities and equipment that are 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; Yuma Proving Grounds, AZ; Rock Island Arsenal, IL; Watervliet Arsenal, NY; and General
Dynamics-Armaments and Technical Products (GD-ATP), Saco, ME. The Layaway of Industrial Facilities (LIF) funding support necessary or unique equipment at arsenals.

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army

**Date:** February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

GC0050 / Production Base Support (WOCV-WTCV)

Vehicles / BSA 30: Support Equipment & Facilities

ID Code (A=Service Ready, B=Not Service Ready):		Program	Elements for Code B	Items:	Othe	Other Related Program Elements:					
Project Schedule			Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total			
Project	Exhibits	ID CD	Total Cost (\$ M)	Total Cost (\$ M)	Total Cost (\$ M)	Total Cost (\$ M)	Total Cost (\$ M)	Total Cost (\$ M)			
Production Support			-	9.506	8.292	7.895	-	7.350			
GD-ATP/Watervliet/Rock Island PBS Provisioning of Industrial Facilities			-	0.023	0.023	0.023	-	0.023			
Hot & Cold Forge emergency repairs and maintenance.	P25		-	0.023	0.023	0.023	-	0.023			
Rock Island Arsenal - JMTC			-	2.365	2.383	2.383	-	2.110			
Large Capacity Mills (Small Arms) and laboratory relocation	P25		-	2.365	2.383	2.383	-	2.110			
Watervliet Arsenal			-	2.365	2.383	2.383	-	2.111			
Machine Equipment installation with site preparation.	P25		-	2.365	2.383	2.383	-	2.111			
ATEC Test Range Instrumentation			-	4.753	3.503	3.106	-	3.106			
Instrumentation for production testing of WTCV systems.	P25		-	4.753	3.503	3.106	-	3.106			
(Uncategorized)			419.115	0.602	0.619	0.629	-	0.629			
Watervliet			419.115	0.602	0.619	0.629	-	0.629			
Layaway of Industrial Facilities (LIF)			419.115	0.602	0.619	0.629	-	0.629			
Total Gross/Weapon System Cost			419.115	10.108	8.911	8.524	-	7.979			

*For the P-17 and P-25, the Project Column displays a three-level indentation: Project Category (e.g., Environmental), followed by the Facility, followed by the Project Name. Exhibits with no Project Category are included under the "Uncategorized" category. For the P-26, the Project column displays a two-level indentation: Project Type (e.g., Inactive Plants, Inactive Lines at Contractor Plants and Inactive Lines at Active Plants), followed by the Facility. Note also that although all P-17, P-25 and P-26 projects are shown in the project schedule, not all projects will have a corresponding exhibit. A P-17 or P-25 exhibit is only included if data beyond the Project Number, Project Title and Cost are included (for example: for the P-17, Description, Manufacturer, etc.; for the P-25, Narrative Explanation, Cost Elements, Principle Milestones, etc.). A P-26 exhibit is only included if data beyond Project Type and Total Cost are included (for example, Description, Contractor, Maintenance/Recurring/Environmental/Other costs, etc.).

#### Justification:

FY 2016 Base procurement dollars in the amount of \$9.027 million support the PIF and LIF programs. The PIF funding will support upgrade and replacement 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 PIF funding will also support the repair of government owned equipment used in the production of gun barrels for small caliber weapons such as the MK19 Grenade Launcher and the M2 Machine Gun and the M242 Bushmaster Chain Gun. PIF projects are essential in fulfilling current and projected operations requirements. The upgrade and modernization of facilities and equipment at Rock Island Arsenal based on a five year plan is critical for the Army to meet both small arms and medium caliber weapon requirements supporting future peacetime requirements. Benefits of this effort include the ability to maintain lower unit costs for production items. The Layaway of Industrial Facilities efforts at all facilities preserve 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 derived from this effort benefit the entire Army.

PIF funding directly supports production of small caliber weapons systems, large caliber weapons systems and combat service support manufacturing equipment at Rock Island Arsenal with modernization and upgrade requests supporting current and new manufacturing capabilities such as small arms spare parts and gages (e.g. 50-caliber M2 Machine Gun, MK19 40mm Machine Gun, M249 Light Machine Gun, M240 Series Machine Gun, M14 EBR, M4/16 Rifle), larger manufacturing capabilities (Add-on Armor upgrades for HMMWV, MRAP, and Stryker series vehicles; towed artillery spares and gun carriages; HUMVEE Ambulance kits, and line of Communication Bridge components. At Rock Island Arsenal (RIA) efforts are being made to support the Army's movement toward reducing the load placed upon the Warfighter by participating in ongoing initiatives to reduce the overall weight of major weapons systems through utilization of RIA's Titanium Investment Casting facility to cast major components of the weapons

LI GC0050 - Production Base Support (WOCV-WTCV) Army

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P-1 Line #35

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army	Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat Vehicles / BSA 30: Support Equipment & Facilities	P-1 Line Item Number / Title: GC0050 / Production Base Support (WOCV-WTCV)
ID Code (A=Service Ready, B=Not Service Ready) : Program Elements for Code E	Items: Other Related Program Elements:
systems. Efforts are also underway to implement new technologies at RIA such as Friction Stir Weldin Department of Defense requirements and leverage partnership programs in support of private industry of composites have resulted in RIA's Composite Armor Center being capable of supporting the needs of need for armor advancements needed to do so. RIA's capability to utilize sophisticated software for real in an effort to constantly improve the efficiency at which RIA is able to operate, RIA is improving product materials storage and retrieval systems, and machining centers capable of 7-axis articulation to signific a full service foundry, not available elsewhere throughout the Department of the Army, to support Department partnership programs. Advantages subsequent to maintaining and upgrading this unique capar resulting in sizeable cost savings for the Department of the Army. Replacing older equipment and confacility but also a more profitable facility as the Department of Defense, Department of the Army, and partnership.	g that will allow RIA the capability to not only support Department of the Army but also to support other to manufacture unique products with limited suppliers worldwide. Significant advancements in the realm of the Warfighter in the ongoing battle to defeat rapidly evolving insurgent devices and the subsequent verse engineering coupled with rapid response manufacturing offers significant savings in time and money. ctivity through an increased use of robotics and automation systems, material handling equipment and cantly reduce machining time requirements. Rock Island Arsenal continues to maintain technologies such as artment of the Army requirements and to complement the capabilities of local private industry corporations ability will ensure no disruptions for critical spare or repair parts by offering this capability as an organic asset, tinually investing in new technologies will result in not only a more efficient and productive manufacturing rivate industry would be able to leverage the unique manufacturing capabilities available at Rock Island obtain new state-of-the-art equipment to produce medium to large caliber weapons. The goal in replacing on. Replacing the equipment will keep WVA technologically current and provide the added ability and as of service support and spare parts will be readily available. This will ensure flexible response to the

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<b>Exhibit P-25, Production Sup</b>	port and li	16 Army	Date: February 2015					
Appropriation / Budget Activ 2033A / 02 / 30	ity / Budge	et Sub Activi	ity:			P-1 Line Item Number / Ti GC0050 / Production Base		
Project Title: Hot & Cold Forge	e emergen	cy repairs and	d mainter	nance.		Project Number: U7668	Project Category: Production Support	
End Item Supported Model:						,	Annual Capacity Before / After (1-8-5): /	
Cost Flements	FY 2016 FY 2016 Facility Name: GD-ATP/Watervliet/Rock Island PBS Provisioning of Industrial Facilities							

Cost Elements (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	Facility Loc	ne: GD-ATP/Watervlie ation: Saco, ME		Provisioning	of Industrial	Facilities	
A. Construction Cost	-	-	-	-	-	Facility Type	e (GOGO, GOCO, CO	<b>CO</b> ): GOGO				
B. Equipment Cost	0.018	0.018	0.018	-	0.018	Principal Mi	lestones			Month & Ye	ar	
C. Equipment Installation Cost	0.005	0.005	0.005	-	0.005	Concept Des	sign Complete:					
D. Contractor Support Cost	-	-	-	-	-	Final Design	Complete: Project Award:					
E. Corps of Engineers Support Cost	-	-	-	-	-	Construction	,					
F. Other In-House Support Cost	-	-	-	-	-	Equipment In	nstallation Complete:					
G. Total Facility Project Cost	-	-	-	-	-	Prove Out B Prove Out C	•					
H. Other Costs	-	-	-	-	-	Piove Out C	ompiete.	Related	Projects			
Total Project Cost	0.023	0.023	0.023	-	0.023	Project		Related	•			Compl
		J			I.	Number	Title	FY & Appn	<b>Value</b> (\$ M)	Facing	Start Date	Date

# **Narrative Explanation:**

Hot and cold forge emergency repairs and maintenance to prevent failure and excessive down time of unique forges.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis: PB	Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 30	P-1 Line Item Number / Ti GC0050 / Production Base					
Project Title: Large Capacity Mills (Small Arms) and laboratory relocation	Project Title: Large Capacity Mills (Small Arms) and laboratory relocation Project Number: U7669					
End Item Supported Model:	Annual Capacity Before / After (1-8-5): /					

Cost Elements (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	Facility Name: Rock Island Arsenal - JMTC Facility Location: Rock Island, IL						
A. Construction Cost	-	-	-	-	-	Facility Type (GOGO, GOCO, COCO): GOGO						
B. Equipment Cost	1.500	1.518	1.518	-	1.518	8 Principal Milestones Month & Year						
C. Equipment Installation Cost	0.865	0.865	0.865	-	0.592	Concept Des	sign Complete:					
D. Contractor Support Cost	-	-	-	-	-	Final Design Complete:						
E. Corps of Engineers Support Cost	-	-	-	-	-	Initial/Final Project Award: Construction Complete:						
F. Other In-House Support Cost	-	-	-	-	-	Equipment Ir	nstallation Complete:					
G. Total Facility Project Cost	-	-	-	-	-	Prove Out Book Prove Out Co	•					
H. Other Costs	-	-	-	-	-	Prove Out C	ompiete.	Related	Projects			
Total Project Cost	2.365	2.383	2.383	-	2.110					Compl		
					J.	Number	Title	FY & Appn	<b>Value</b> (\$ M)	Facing	Start Date	Date
									. ,			

# **Narrative Explanation:**

Machinery equipment and laboratory move for health, safety and environmental reasons.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis:	Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 30	tle: Support (WOCV-WTCV)
Project Title: Machine Equipment installation with site preparation.	Project Category: Production Support
End Item Supported Model:	Annual Capacity Before / After (1-8-5): /

A. Construction Cost	-				Total	Facility Name: Watervliet Arsenal Facility Location: Watervliet, NY Facility Type (GOGO, GOCO, COCO): COCO						
	I	-	-	-	-							
B. Equipment Cost	1.500	1.518	1.518	-	1.518	8 Principal Milestones Month & Year						
C. Equipment Installation Cost	0.865	0.865	0.865	-	0.593	Concept Design	Complete:					
D. Contractor Support Cost	-	-	-	-	-	Final Design Complete: Initial/Final Project Award:						
E. Corps of Engineers Support Cost	-	-	-	-	-	Construction Complete:						
F. Other In-House Support Cost	-	-	-	-	-	Equipment Insta	llation Complete:					
G. Total Facility Project Cost	-	-	-	-	-	Prove Out Begir Prove Out Comp						
H. Other Costs	-	-	-	-	-	Flove Out Comp	лете.	Related I	Projects			
Total Project Cost	2.365	2.383	2.383	-	2.111	Bustant						Compl
			,			Number Title		FY & Appn	<b>Value</b> (\$ M)	Facing	Start Date	Date

# **Narrative Explanation:**

Machine equipment installation with associated site preparation activities.

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Exhibit P-25, Production Support and Industrial Facilities Cost Analysis: Pl	3 2016 Army	Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 30	P-1 Line Item Number / Tit GC0050 / Production Base	
Project Title: Instrumentation for production testing of WTCV systems.	Project Category: Production Support	
End Item Supported Model: All WTCV Systems	Annual Capacity Before / After (1-8-5): /	

Cost Elements (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	Facility Name: ATEC Test Range Instrumentation Facility Location: Yuma, AZ; Aberdeen, MD; White Sands, NM Facility Type (GOGO, GOCO, COCO): GOGO						
A. Construction Cost	-	-	-	-	-							
B. Equipment Cost	4.753	3.503	3.106	-	3.106	Principal Milestones Month & Year						
C. Equipment Installation Cost	-	-	-	-	-	Concept Design Complete:						
D. Contractor Support Cost	-	-	-	-	-	Final Design Complete: Initial/Final Project Award: Oct 2015 / Mar 2016						
E. Corps of Engineers Support Cost	-	-	-	-	-	Construction Complete:						
F. Other In-House Support Cost	-	-	-	-	-	Equipment Ir	stallation Complete:			Oct 2016		
G. Total Facility Project Cost	-	-	-	-	-	Prove Out Be Prove Out Co	•			Oct 2016 Dec 2016		
H. Other Costs	-	-	-	-	-	Piove Out Co	ompiete.	Related I	Projects	Dec 2016		
Total Project Cost	4.753	3.503	3.106	-	3.106						Compl	
-			ļ		1	Project Number	Title	FY & Appn	Value (\$ M)	Facing	Start Date	Date

### **Narrative Explanation:**

Funds will be used to upgrade or replace production test instrumentation and equipment at Aberdeen Test Center (ATC), Aberdeen Proving Ground, MD; White Sands Test Center (WSTC), White Sands Missile Range, NM and Yuma Test Center (YTC), Yuma Proving Ground (YPG), AZ. At ATC, replaces and upgrades video cameras, video recorders, digital video tracking systems and telemetry systems used to assess fire control system performance; upgrades laboratory test equipment that simulate extremely harsh vibration environments that prime movers experience in the field used for reliability and durability tests and replaces aging, failing mobile environmental test chambers that simulate environmental conditions for vehicle components and ammunition. At WSTC, provides badly needed upgrades to Directed Energy, High Power Electromagnetic Pulse and Lightning effects test simulators to provide a realistic threat environment. At YTC, purchases pyroshock accelerometers, blast over pressure gages, infrared flash detectors and triggers and various types of displacement transducers used to assess weapons ballistic performance; and procures high speed digital cameras for capturing test events. 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.

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P-1 Line #35

**Exhibit P-40, Budget Line Item Justification:** PB 2016 Army **Date:** February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

GC0075 / Industrial Preparedness

Vehicles / BSA 30: Support Equipment & Facilities

ID Code (A=Service Ready, B=Not Service Ready) :			Program Elei	ments for Co	de B Items:			Other Related Program Elements:				
	Prior			FY 2016	FY 2016	FY 2016					То	
Resource Summary	Years	FY 2014	FY 2015	Base	oco	Total	FY 2017	FY 2018	FY 2019	FY 2020	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	120.543	0.459	0.414	0.304	-	0.304	0.308	0.313	0.317	0.326	-	122.984
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	120.543	0.459	0.414	0.304	-	0.304	0.308	0.313	0.317	0.326	-	122.984
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	120.543	0.459	0.414	0.304	-	0.304	0.308	0.313	0.317	0.326	-	122.984
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	ne corresponding	g budget request	s are documente	ed elsewhere.)			1	
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

#### **Description:**

This program provides for Maintenance of Laid-away Industrial Facilities (MLIF), the maintenance of laid away portions of active weapons production plants, and the storage, protection, and maintenance of laid away Government-owned equipment being stored on-site at Government-owned plants. The funding represents the storage costs for laid away production items from Watervliet Arsenal and Rock Island Arsenal. The funds also pay for storage, facilities/equipment maintenance, and inspection of Industrial Plant Equipment (IPE), laid away machine tools, gauges, special measuring equipment, tooling and fixturing stored at Watervliet Arsenal and Rock Island Arsenal.

Secondar	ry Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	0.459	0.414	0.304	-	0.304	0.308	0.313	0.317	0.326
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	0.459	0.414	0.304	-	0.304	0.308	0.313	0.317	0.326

#### Justification:

FY 2016 Base procurement dollars in the amount of \$ 0.304 million support the maintenance of laid-away weapons production facilities to include utilities, buildings, non-severable equipment, plant equipment, special tooling, special test equipment, and partial layaway of manufacturing equipment (machine tools and tooling) unique to self-propelled, towed and transportable artillery systems being retained as part of approved Army Reserve Plants, which are required to support future production and replenishment requirements. Funds are used to perform periodic inspection and maintenance of the laid away equipment to prevent this unique equipment from deteriorating and jeopardizing planned reactivation capabilities and timelines. This program also includes recurring overhead costs associated with the laid away facilities and equipment such as roads and grounds maintenance, fire protection, plant security, and administrative support. Funding supports Active Component.

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Exhibit P-40, Budget Line Item Justification	on: PB 2016 Army		Date: February 2015
<b>Appropriation / Budget Activity / Budget</b> 3 2033A: Procurement of W&TCV, Army / BA Vehicles / BSA 30: Support Equipment & Fa	02: Weapons and Other Combat	P-1 Line Item I GC0075 / Indus	Number / Title: strial Preparedness
ID Code (A=Service Ready, B=Not Service Ready) :	Program Elements for Code	B Items:	Other Related Program Elements:
In accordance with Section 1815 of the FY 2008 Natio defense missions, domestic emergency responses, an	nal Defense Authorization Act (P.L.110-181), the defense Authorities. It is an authorities.	nis item is necessary for t	use by the active and reserve components of the Armed Forces for homeland

LI GC0075 - Industrial Preparedness Army

Exhibit P-40, Budget Line Item Justification: PB 2016 Army

Date: February 2015

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 02: Weapons and Other Combat

GC0076 / Small Arms Equipment (Soldier Enh Prog)

Vehicles / BSA 30: Support Equipment & Facilities

ID Code (A=Service Ready, B=Not Service Ready) :		Program Ele	ments for Co	de B Items:			Other Related Program Elements:					
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	106.402	1.267	1.682	2.392	-	2.392	2.591	2.793	2.759	2.828	-	122.714
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	106.402	1.267	1.682	2.392	-	2.392	2.591	2.793	2.759	2.828	-	122.714
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	106.402	1.267	1.682	2.392	-	2.392	2.591	2.793	2.759	2.828	-	122.714
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	ne corresponding	budget request	s are documente	ed elsewhere.)	•			
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

#### **Description:**

The Soldier Enhancement Program (SEP) was established by the National Defense Authorization Act for Fiscal Years 1990 and 1991. The purpose of the SEP is to evaluate readily available Commercial Off the Shelf (COTS), Government Off the Shelf (GOTS) and Non-Developmental Items (NDI) equipment to increase the combat effectiveness of the Soldier. This Soldier Enhancement Program WTCV provides a means of procuring lighter, more lethal infantry weapons and various types of equipment designed to increase Soldiers' survivability and lethality.

The FY 16 funding request was reduced for \$.100 million to account for the availability of prior year execution balances

Secondar	ry Distribution	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	1.267	1.682	2.392	-	2.392	2.591	2.793	2.759	2.828
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	1.267	1.682	2.392	-	2.392	2.591	2.793	2.759	2.828

#### Justification:

FY2016 base procurement supports procurement (COTS/GOTS/NDI) of approved hardware for the purpose of Soldier evaluation. Items in this category include COTS/GOTS/NDI small arms, individual and crew served weapons, components, sights, and accessories.

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Exhibit P-40, Budget Line Item Justificatio	<b>n:</b> PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget S	ub Activity:	P-1 Line Item N	umber / Title:
2033A: Procurement of W&TCV, Army / BA 0		GC0076 / Small	Arms Equipment (Soldier Enh Prog)
Vehicles / BSA 30: Support Equipment & Fac	ilities		
ID Code (A=Service Ready, B=Not Service Ready) :	Program Elements for Code E	Items:	Other Related Program Elements:
		nis item is necessary for	use by the active and reserve components of the Armed Forces for homeland
defense missions, domestic emergency responses, and	providing military support to civil authorities."		

LI GC0076 - Small Arms Equipment (Soldier Enh Prog) Army