Department of Defense Fiscal Year (FY) 2019 Budget Estimates

February 2018



Army

Justification Book of

Procurement of W&TCV, Army

UNCLASSIFIED

Army • Budget Estimates FY 2019 • Procurement

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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, \$5,596,301 to remain available for obligation until September 30, 2021.

The following Justification Books were prepared at a cost of \$226,413: 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.

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Department of the Army FY 2019 President's Budget Exhibit P-1 FY 2019 President's Budget Total Obligational Authority (Dollars in Thousands)

25 Jan 2018

Appropriation	FY 2017 (Base + OCO)	FY 2018 PB Request with CR Adj Base	FY 2018 Total PB Requests* with CR Adj Base	FY 2018 PB Request with CR Adj OCO
Procurement of W&TCV, Army	2,828,746	2,214,315	2,214,315	457,162
Total Department of the Army	2,828,746	2,214,315	2,214,315	457,162

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Department of the Army
FY 2019 President's Budget
Exhibit P-1 FY 2019 President's Budget
Total Obligational Authority
(Dollars in Thousands)

Appropriation	FY 2018 Total PB Requests+ with CR Adj OCO	FY 2018 Emergency Requests** Emergency	FY 2018 Less Enacted Div B P.L.115-96*** MDDE + Ship Repairs	FY 2018 Remaining Req Emergency
Procurement of W&TCV, Army	457,162			
Total Department of the Army	457,162			

Department of the Army FY 2019 President's Budget Exhibit P-1 FY 2019 President's Budget Total Obligational Authority (Dollars in Thousands)

Appropriation	FY 2018 Total PB Requests* with CR Adj Base + OCO + Emergency**	FY 2018 Less Enacted DIV B P.L.115-96*** MDDE + Ship Repairs	FY 2018 Remaining Req with CR Adj Base + OCO + Emergency
Procurement of W&TCV, Army	2,671,477		2,671,477
Total Department of the Army	2,671,477		2,671,477

Department of the Army FY 2019 President's Budget Exhibit P-1 FY 2019 President's Budget Total Obligational Authority (Dollars in Thousands)

Appropriation	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement of W&TCV, Army	4,489,118	1,107,183	5,596,301
Total Department of the Army	4,489,118	1,107,183	5,596,301

Department of the Army FY 2019 President's Budget Exhibit P-1 FY 2019 President's Budget Total Obligational Authority (Dollars in Thousands)

25 Jan 2018

FY 2018

Budget Activity	FY 2017 (Base + OCO)	FY 2018 PB Request with CR Adj Base	Total PB Requests* with CR Adj Base	FY 2018 PB Request with CR Adj OCO
01. Tracked Combat Vehicles	2,542,398	2,216,241	2,216,241	1,191,139
02. Weapons and Other Combat Vehicles	286,348	207,367	207,367	
20. Undistributed		-209,293	-209,293	-733,977
Total Procurement of W&TCV, Army	2,828,746	2,214,315	2,214,315	457,162

Department of the Army FY 2019 President's Budget Exhibit P-1 FY 2019 President's Budget Total Obligational Authority (Dollars in Thousands)

25 Jan 2018

EV 2018

Budget Activity	FY 2018 Total PB Requests+ with CR Adj OCO	FY 2018 Emergency Requests** Emergency	Less Enacted Div B P.L.115-96*** MDDE + Ship Repairs	FY 2018 Remaining Req Emergency
01. Tracked Combat Vehicles	1,191,139			
02. Weapons and Other Combat Vehicles				
20. Undistributed	-733,977			
Total Procurement of W&TCV, Army	457,162			

Department of the Army FY 2019 President's Budget Exhibit P-1 FY 2019 President's Budget Total Obligational Authority (Dollars in Thousands)

25 Jan 2018

Budget Activity	FY 2018 Total PB Requests* with CR Adj Base + OCO + Emergency**	FY 2018 Less Enacted DIV B P.L.115-96*** MDDE + Ship Repairs	FY 2018 Remaining Req with CR Adj Base + OCO + Emergency
01. Tracked Combat Vehicles	3,407,380		3,407,380
02. Weapons and Other Combat Vehicles	207,367		207,367
20. Undistributed	-943,270		-943,270
Total Procurement of W&TCV, Army	2,671,477		2,671,477

Department of the Army FY 2019 President's Budget Exhibit P-1 FY 2019 President's Budget Total Obligational Authority (Dollars in Thousands)

25 Jan 2018

	FY 2019	FY 2019	FY 2019
Budget Activity	Base	oco	Total
01. Tracked Combat Vehicles	4,118,297	1,083,713	5,202,010
	8000 0000		
02. Weapons and Other Combat Vehicles	370,821	23,470	394,291
20. Undistributed			
	4 400 110	1 107 102	E E06 201
Total Procurement of W&TCV, Army	4,489,118	1,107,183	5,596,301

Department of the Army FY 2019 President's Budget Exhibit P-1 FY 2019 President's Budget Total Obligational Authority (Dollars in Thousands)

25 Jan 2018

Appropriation: 2033A Procurement of W&TCV, Army

Li: No	o Item Nomenclature	Ident Code		-	PB Rowith	2018 equest CR Adj ase Cost	with (al quests*	PB Ro with (2018 equest CR Adj CO Cost	S e c
	dget Activity 01: Tracked Combat Vehicles										
T	räcked Combat Vehicles		4								
	l Bradley Program	В	17	72,800					60	200,000	U
	2 Armored Multi Purpose Vehicle (AMPV)	A			42	193,715	42	193,715	65	253,903	U
:	3 Stryker Vehicle			71,680							U
M	odification of Tracked Combat Vehicles										
	4 Stryker (MOD)	A		82,681		97,552		97,552			U
	Stryker Upgrade	A	70	418,561				ø			U
	6 Bradley Program (MOD)	A		265,333		444,851		444,851		30,000	U
	7 M109 FOV Modifications	A		63,138		64,230		64,230			U
:	3 Paladin Integrated Management (PIM)	A	48	584,089	59	646,413	59	646,413	12	125,736	U
	9 Improved Recovery Vehicle (M88A2 Hercules)	A	18	91,963	16	72,402	16	72,402			U
1	O Assault Bridge (Mod)		79	9,415		5,855		5,855	4		U
1	l Assault Breacher Vehicle	A		2,928	7	34,221	7	34,221			U
1:	2 M88 FOV MODS	A		8,685		4,826		4,826			U
1	3 Joint Assault Bridge	A	14	64,752	27	128,350	27	128,350			U
1	4 M1 Abrams Tank (MOD)	A		492,044		248,826		248,826		138,700	U
1	5 Abrams Upgrade Program	A	24	276,829	20	275,000	20	275,000	36	442,800	U

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Department of the Army -FY 2019 President's Budget Exhibit P-1 FY 2019 President's Budget Total Obligational Authority (Dollars in Thousands)

25 Jan 2018

Appropriation: 2033A Procurement of W&TCV, Army

Line £	Ident	To PB Re with	2018 tal quests+ CR Adj	FY 20 Emerge Reques Emerge	ncy ts**	FY 20 Less E Div P.L.115 MDDE + Repa:	nacted B -96*** Ship	FY 20 Remainin Emerge	ig Req	S e
No Item Nomenclature	Code	Quantity		Quantity	Cost	Quantity	Cost	Quantity	Cost	C
										_
Budget Activity 01: Tracked Combat Vehicles										
Tracked Combat Vehicles										
1 Bradley Program	В	60	200,000							U
2 Armored Multi Purpose Vehicle (AMPV)	A	65	253,903							U
3 Stryker Vehicle										U
Modification of Tracked Combat Vehicles										
4 Stryker (MOD)	A									Ü
5 Stryker Upgrade	A									U
6 Bradley Program (MOD)	A		30,000							U
7 M109 FOV Modifications	A									U
8 Paladin Integrated Management (PIM)	A	12	125,736							U
9 Improved Recovery Vehicle (M88A2 Hercules)	A									U
10 Assault Bridge (Mod)										U
11 Assault Breacher Vehicle	A									U
12 M88 FOV MODS	A									U
13 Joint Assault Bridge	A									U
14 M1 Abrams Tank (MOD)	A		138,700							U
15 Abrams Upgrade Program	A	36	442,800							U

Department of the Army FY 2019 President's Budget Exhibit P-1 FY 2019 President's Budget Total Obligational Authority (Dollars in Thousands)

25 Jan 2018

Appropriation: 2033A Procurement of W&TCV, Army

Line	Ident	PB I with Base	Y 2018 Total Requests* h CR Adj e + OCO + rgency**	FY 20 Less En DIV P.L.115- MDDE + Repai	acted B 96*** Ship	Remai with Base	2018 ining Req cR Adj e + OCO + ergency	S e
No Item Nomenclature	Code	Quanti	ty Cost	Quantity	Cost	Quantit		С
****	-							_
Budget Activity 01: Tracked Combat Vehicles								
Tracked Combat Vehicles								
1 Bradley Program	В	60	200,000			60	200,000	Ū
2 Armored Multi Purpose Vehicle (AMPV)	A	107	447,618			107	447,618	U
3 Stryker Vehicle								U
Modification of Tracked Combat Vehicles								
4 Stryker (MOD)	А		97,552			e e	97,552	U
5 Stryker Upgrade	A							U
6 Bradley Program (MOD)	A		474,851				474,851	U
7 M109 FOV Modifications	A		64,230				64,230	U
8 Paladin Integrated Management (PIM)	A	71	772,149			71	772,149	U
9 Improved Recovery Vehicle (M88A2 Hercules)	A	16	72,402		×	16	72,402	Ū
10 Assault Bridge (Mod)			5,855				5,855	U
11 Assault Breacher Vehicle	A	7	34,221			7	34,221	U
12 M88 FOV MODS	A		4,826				4,826	U
13 Joint Assault Bridge	A	27	128,350			27	128,350	U
14 M1 Abrams Tank (MOD)	A		387,526				387,526	U
15 Abrams Upgrade Program	А	56	717,800			56	717,800	U

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Department of the Army FY 2019 President's Budget Exhibit P-1 FY 2019 President's Budget Total Obligational Authority (Dollars in Thousands)

ational Authority 25 Jan 2018

Appropriation: 2033A Procurement of W&TCV, Army

Line	Ident		FY 2019 Base	F	Y 2019 OCO		TY 2019 Total	s e
No Item Nomenclature	Code	Quant.	-	Quanti	-	Quanti	ity Cost	С
	Section for the sec							_
Budget Activity 01: Tracked Combat Vehic	les							
Tracked Combat Vehicles								
1 Bradley Program	В			61	205,000	61	205,000	U
2 Armored Multi Purpose Vehicle (AMPV)	A	131	479,801	66	230,359	197	710,160	Ū
3 Stryker Vehicle								Ū
Modification of Tracked Combat Vehicles								
4 Stryker (MOD)	A		287,490				287,490	U
5 Stryker Upgrade	А	3	21,900			3	21,900	U
6 Bradley Program (MOD)	A		625,424		50,000		675,424	Ü
7 M109 FOV Modifications	A		26,482				26,482	U
8 Paladin Integrated Management (PIM)	A	30	351,802	6	67,000	36	418,802	U
9 Improved Recovery Vehicle (M88A2 Herc	ules) A	26	110,500	12	42,354	38	152,854	U
10 Assault Bridge (Mod)			2,120	\$			2,120	U
11 Assault Breacher Vehicle	A	12	62,407			12	62,407	U
12 M88 FOV MODS	A		4,517				4,517	U
13 Joint Assault Bridge	A	30	142,255			30	142,255	Ü
14 Ml Abrams Tank (MOD)	А		927,600		34,000		961,600	Ü
15 Abrams Upgrade Program	A	95	1,075,999	40	455,000	135	1,530,999	U

Department of the Army FY 2019 President's Budget Exhibit P-1 FY 2019 President's Budget Total Obligational Authority (Dollars in Thousands)

25 Jan 2018

Appropriation: 2033A Procurement of W&TCV, Army

Support Equipment & Facilities 16 Production Base Support (TCV-WTCV) Total Tracked Combat Vehicles 2,542,398 2,216,241 2,216,241 1,191,138 Budget Activity 02: Weapons and Other Combat Vehicles Weapons & Other Combat Vehicles 17 Integrated Air Burst Weapon System Family 18 M240 Medium Machine Gun (7.62MM) 19 MULTI-ROLE ANTI-ARMOR ANTI-PERSONNEL WEAPON S 20 GUN AUTOMATIC SOMM M230 21 Machine Gun, Cal .50 M2 Roll 22 Mortar Systems 30,742 21,452 23 XM320 Grenade Launcher Module (GLM) A 3,062 4,524 4,524 4,524 24 Compact Semi-Automatic Sniper System A 40,493 43,150 43,150 26 Small Arms - Fire Control B 27 Common Remotely Operated Weapons Station A 2,000 8,326 8,326	Line No	Item Nomenclature	Ident Code	FY 2017 (Base + OCO) Quantity Cost	FY 2018 PB Request with CR Adj Base Quantity Cost	FY 2018 Total PB Requests* with CR Adj Base Quantity Cost	FY 2018 PB Request with CR Adj S OCO e Quantity Cost c
### Total Tracked Combat Vehicles 2,542,398 2,216,241 2,216,241 1,191,139 ### Budget Activity 02: Weapons and Other Combat Vehicles ### Weapons & Other Combat Vehicles ### 17,064 ### M240 Medium Machine Gun (7.62MM)	Supp	ort Equipment & Facilities					
### Total Tracked Combat Vehicles	16 P	roduction Base Support (TCV-WTCV)					U
Weapons & Other Combat Vehicles 17 Integrated Air Burst Weapon System Family A 7,064 18 M240 Medium Machine Gun (7.62MM) A 1,992 1,992 19 MULTI-ROLE ANTI-ARMOR ANTI-PERSONNEL WEAPON S A 6,520 6,520 20 GUN AUTOMATIC 30MM M230 A 21 Machine Gun, Cal .50 M2 Roll A 22 Mortar Systems 30,742 21,452 21,452 23 XM320 Grenade Launcher Module (GLM) A 3,062 4,524 4,524 24 Compact Semi-Automatic Sniper System A 40,493 43,150 43,150 26 Small Arms - Fire Control B 25,164 750 750 27 Common Remotely Operated Weapons Station 25,164 750 750	Total	Tracked Combat Vehicles				2,216,241	1,191,139
17 Integrated Air Burst Weapon System Family A 7,064 18 M240 Medium Machine Gun (7.62MM) A 1,992 1,992 19 MULTI-ROLE ANTI-ARMOR ANTI-PERSONNEL WEAPON S A 6,520 6,520 20 GUN AUTOMATIC 30MM M230 A 2 21,452 21,452 21 Machine Gun, Cal .50 M2 Roll A 30,742 21,452 21,452 23 XM320 Grenade Launcher Module (GLM) A 3,062 4,524 4,524 24 Compact Semi-Automatic Sniper System A 40,493 43,150 43,150 26 Small Arms - Fire Control B 27 Common Remotely Operated Weapons Station 25,164 750 750	_	•	.es				
18 M240 Medium Machine Gun (7.62MM) 1,992 1,992 19 MULTI-ROLE ANTI-ARMOR ANTI-PERSONNEL WEAPON S A 6,520 6,520 20 GUN AUTOMATIC 30MM M230 A 21 Machine Gun, Cal .50 M2 Roll A 22 Mortar Systems 30,742 21,452 23 XM320 Grenade Launcher Module (GLM) A 3,062 4,524 4,524 24 Compact Semi-Automatic Sniper System A 25 Carbine A 40,493 43,150 43,150 26 Small Arms - Fire Control B 27 Common Remotely Operated Weapons Station 25,164 750 750	Weap	ons & Other Combat Vehicles					
19 MULTI-ROLE ANTI-ARMOR ANTI-PERSONNEL WEAPON S A 6,520 6,520 20 GUN AUTOMATIC 30MM M230 A 21 Machine Gun, Cal .50 M2 Roll A 22 Mortar Systems 30,742 21,452 21,452 23 XM320 Grenade Launcher Module (GLM) A 3,062 4,524 4,524 24 Compact Semi-Automatic Sniper System A 25 Carbine A 40,493 43,150 43,150 26 Small Arms - Fire Control B 27 Common Remotely Operated Weapons Station 25,164 750 750	17 I:	ntegrated Air Burst Weapon System Family	A	7,064			υ
20 GUN AUTOMATIC 30MM M230 A 21 Machine Gun, Cal .50 M2 Roll A 22 Mortar Systems 30,742 21,452 21,452 23 XM320 Grenade Launcher Module (GLM) A 3,062 4,524 4,524 24 Compact Semi-Automatic Sniper System A 25 Carbine A 40,493 43,150 43,150 26 Small Arms - Fire Control B 27 Common Remotely Operated Weapons Station 25,164 750 750	18 M	240 Medium Machine Gun (7.62MM)	A		1,992	1,992	ט
21 Machine Gun, Cal .50 M2 Roll 22 Mortar Systems 30,742 21,452 21,452 23 XM320 Grenade Launcher Module (GLM) A 3,062 4,524 4,524 24 Compact Semi-Automatic Sniper System A 25 Carbine A 40,493 43,150 43,150 26 Small Arms - Fire Control B 27 Common Remotely Operated Weapons Station 25,164 750 750	19 M	ULTI-ROLE ANTI-ARMOR ANTI-PERSONNEL WEAPON S	A		6,520	6,520	υ
22 Mortar Systems 30,742 21,452 22,452 23 XM320 Grenade Launcher Module (GLM) A 3,062 4,524 4,524 24 Compact Semi-Automatic Sniper System A 40,493 43,150 26 Small Arms - Fire Control B 27 Common Remotely Operated Weapons Station 25,164 750 750	20 G	UN AUTOMATIC 30MM M230	A		s .		U
23 XM320 Grenade Launcher Module (GLM) A 3,062 4,524 4,524 24 Compact Semi-Automatic Sniper System A 40,493 43,150 43,150 26 Small Arms - Fire Control B 25,164 750 750	21 M	achine Gun, Cal .50 M2 Roll	A				υ
24 Compact Semi-Automatic Sniper System A 25 Carbine A 40,493 43,150 43,150 26 Small Arms - Fire Control B 27 Common Remotely Operated Weapons Station 25,164 750 750	22 M	ortar Systems		30,742	21,452	21,452	Ū
25 Carbine A 40,493 43,150 43,150 26 Small Arms - Fire Control B 27 Common Remotely Operated Weapons Station 25,164 750 750	23 X	M320 Grenade Launcher Module (GLM)	A	3,062	4,524	4,524	U
26 Small Arms - Fire Control B 27 Common Remotely Operated Weapons Station 25,164 750 750	24 C	ompact Semi-Automatic Sniper System	A				υ
27 Common Remotely Operated Weapons Station 25,164 750 750	25 C	arbine	A	40,493	43,150	43,150	Ū
27 Common Remotely operation beaution	26 S	mall Arms - Fire Control	В				Ū
28 Handgun A 2,000 8,326 8,326	27 C	ommon Remotely Operated Weapons Station		25,164	750	750	Ū
	28 Н	andgun	A	2,000	8,326	8,326	σ
Mod of Weapons and Other Combat Veh	Mod	of Weapons and Other Combat Veh					
29 MK-19 Grenade Machine Gun Mods 4,959 2,000 2,000	29 M	K-19 Grenade Machine Gun Mods		4,959	2,000	2,000	U

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Department of the Army FY 2019 President's Budget Exhibit P-1 FY 2019 President's Budget Total Obligational Authority

(Dollars in Thousands)

Appropriation: 2033A Procurement of W&TCV, Army

Line	Ident Code	FY 2018 Total PB Requests+ with CR Adj OCO Ouantity Cost	FY 2 Emerg Reque Emerg	ency sts**	FY 20 Less En Div P.L.115- MDDE + Repai Quantity	acted B 96*** Ship	FY 20 Remainin Emerge Quantity	ig Req	S e c
No Item Nomenclature	code	Quantity Cost	-		Qualitity				-
Support Equipment & Facilities									
16 Production Base Support (TCV-WTCV)		~~~~							U
Total Tracked Combat Vehicles		1,191,139				A	57757		
Budget Activity 02: Weapons and Other Combat Vehicles	3								
Weapons & Other Combat Vehicles									
17 Integrated Air Burst Weapon System Family	A	A			8				υ
18 M240 Medium Machine Gun (7.62MM)	A								Ū
19 MULTI-ROLE ANTI-ARMOR ANTI-PERSONNEL WEAPON S	A								U
20 GUN AUTOMATIC 30MM M230	A								U
21 Machine Gun, Cal .50 M2 Roll	A								Ū
22 Mortar Systems									U
23 XM320 Grenade Launcher Module (GLM)	A								U
24 Compact Semi-Automatic Sniper System	A								Ū
25 Carbine	A								U
26 Small Arms - Fire Control	В						23		U
27 Common Remotely Operated Weapons Station									U
28 Handgun	A								Ü
Mod of Weapons and Other Combat Veh									
29 MK-19 Grenade Machine Gun Mods									U

25 Jan 2018

Department of the Army FY 2019 President's Budget Exhibit P-1 FY 2019 President's Budget Total Obligational Authority

(Dollars in Thousands)

Appropriation: 2033A Procurement of W&TCV, Army

		FY 2018 Total PB Requests* with CR Adj	P.L.115-96***	FY 2018 Remaining Req with CR Adj	0	
Line No Item Nomenclature	Ident Code	Base + OCO + Emergency** Quantity Cos		Base + OCO + Emergency Quantity Cost	S e C	
Support Equipment & Facilities						
16 Production Base Support (TCV-WTCV)					U	
Total Tracked Combat Vehicles		3,407,38		3,407,380		
Budget Activity 02: Weapons and Other Combat Vehicle	es					
Weapons & Other Combat Vehicles						
17 Integrated Air Burst Weapon System Family	A				U	
18 M240 Medium Machine Gun (7.62MM)	A	1,99	2	1,992	U	
19 MULTI-ROLE ANTI-ARMOR ANTI-PERSONNEL WEAPON S	A	6,52	0	6,520	U	
20 GUN AUTOMATIC 30MM M230	A				U	
21 Machine Gun, Cal .50 M2 Roll	A		90		U	
22 Mortar Systems		21,45	2	21,452	Ū	
23 XM320 Grenade Launcher Module (GLM)	A	4,52	4	4,524	U	
24 Compact Semi-Automatic Sniper System	А				U	
25 Carbine	А	43,15	0	43,150	U	
26 Small Arms - Fire Control	В				U	
27 Common Remotely Operated Weapons Station		75	0	750	U	
28 Handgun	A	8,32	6	8,326	U	
Mod of Weapons and Other Combat Veh						
29 MK-19 Grenade Machine Gun Mods		2,00	0	2,000	U	

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Department of the Army FY 2019 President's Budget Exhibit P-1 FY 2019 President's Budget Total Obligational Authority

(Dollars in Thousands)

Appropriation: 2033A Procurement of W&TCV, Army

Line	Ident	FY 20 Bas		FY 20		FY 2019 Total		
No Item Nomenclature	Code	Quantity	Cost	Quantity	Cost	Quantity	Cost	C -
Support Equipment & Facilities			S					
16 Production Base Support (TCV-WTCV)		Patricia		10000				Ū
Total Tracked Combat Vehicles			18,297	1,0	83,713	5,20	2,010	
Budget Activity 02: Weapons and Other Combat Vehic	les							
Weapons & Other Combat Vehicles								
17 Integrated Air Burst Weapon System Family	A							U
18 M240 Medium Machine Gun (7.62MM)	A		1,955		126		2,081	U
19 MULTI-ROLE ANTI-ARMOR ANTI-PERSONNEL WEAPON S	A		23,345			2	3,345	U
20 GUN AUTOMATIC 30MM M230	A		7,434				7,434	U
21 Machine Gun, Cal .50 M2 Roll	A		22,330			2	2,330	U
22 Mortar Systems			12,470		11,842	2	24,312	U
23 XM320 Grenade Launcher Module (GLM)	A		697				697	Ū
24 Compact Semi-Automatic Sniper System	A		46,236			4	16,236	U
25 Carbine	A		69,306		1,800	7	1,106	Ū
26 Small Arms - Fire Control	В	55	7,929				7,929	Ū
27 Common Remotely Operated Weapons Station			35,968		3,378	3	39,346	U
28 Handgun	A		48,251			4	18,251	U
Mod of Weapons and Other Combat Veh								
29 MK-19 Grenade Machine Gun Mods			1,684				1,684	U

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Department of the Army FY 2019 President's Budget Exhibit P-1 FY 2019 President's Budget Total Obligational Authority (Dollars in Thousands)

tional Authority 25 Jan 2018

Appropriation: 2033A Procurement of W&TCV, Army

Line	Ident	FY 2017 (Base + OCO)	FY 2018 PB Request with CR Adj Base	FY 2018 Total PB Requests* with CR Adj Base	FY 2018 PB Request with CR Adj S OCO e
No Item Nomenclature	Code	Quantity Cost	Quantity Cost	Quantity Cost	Quantity Cost c
30 M777 Mods	A	33,600	3,985	3,985	U
31 M4 Carbine Mods	A	27,752	31,315	31,315	U
32 M2 50 Cal Machine Gun Mods	В	48,582	47,414	47,414	U
33 M249 Saw Machine Gun Mods		1,179	3,339	3,339	U
34 M240 Medium Machine Gun Mods	A	1,784	4,577	4,577	U
35 Sniper Rifles Modifications		1,963	1,488	1,488	Ŭ
36 M119 Modifications	A	37,243	12,678	12,678	U
37 Mortar Modification	A	12,118	3,998	3,998	U
38 Modifications Less Than \$5.0m (WOCV-WTCV)		3,157	2,219	2,219	U
Support Equipment & Facilities					
39 Items Less Than \$5.0m (WOCV-WTCV)		2,331	5,075	5,075	Ŭ
40 Production Base Support (WOCV-WTCV)			992	992	U
41 Small Arms Equipment (Soldier Enh Prog)		3,155	1,573	1,573	Ŭ.
Total Weapons and Other Combat Vehicles		286,348	207,367	207,367	
Budget Activity 20: Undistributed					
Undistributed					
42 Adj to Match Continuing Resolution	A		-209,293	-209,293	-733,977 U
Total Undistributed			-209,293	-209,293	-733,977
Total Procurement of W&TCV, Army		2,828,746	2,214,315	2,214,315	457,162

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Department of the Army FY 2019 President's Budget Exhibit P-1 FY 2019 President's Budget Total Obligational Authority (Dollars in Thousands)

25 Jan 2018

FY 2018

Appropriation: 2033A Procurement of W&TCV, Army

Line	Ident	FY 2018 Total PB Requests+ with CR Adj OCO	FY 2018 Emergency Requests** Emergency	Less Enacted Div B P.L.115-96*** MDDE + Ship Repairs	FY 2018 Remaining Req S Emergency e
No Item Nomenclature	Code	Quantity Cost	Quantity Cost	Quantity Cost	Quantity Cost c
30 M777 Mods	A				U
31 M4 Carbine Mods	A				U
32 M2 50 Cal Machine Gun Mods	В				U U
33 M249 Saw Machine Gun Mods					U
34 M240 Medium Machine Gun Mods	A				Ü
35 Sniper Rifles Modifications					U
36 M119 Modifications	A				Ū
37 Mortar Modification	A				υ
38 Modifications Less Than \$5.0m (WOCV-WTCV)					Ū
Support Equipment & Facilities					
39 Items Less Than \$5.0m (WOCV-WTCV)					U
40 Production Base Support (WOCV-WTCV)					U
41 Small Arms Equipment (Soldier Enh Prog)			***		U
Total Weapons and Other Combat Vehicles					
Budget Activity 20: Undistributed					
Undistributed			8		
42 Adj to Match Continuing Resolution	A	-733 , 977			U
Total Undistributed		-733,977			
Total Procurement of W&TCV, Army		457,162			

Department of the Army FY 2019 President's Budget Exhibit P-1 FY 2019 President's Budget Total Obligational Authority (Dollars in Thousands)

25 Jan 2018

Appropriation: 2033A Procurement of W&TCV, Army

Line	Ident	FY 2018 Total PB Requests* with CR Adj Base + OCO + Emergency**	FY 2018 Less Enacted DIV B P.L.115-96*** MDDE + Ship Repairs	FY 2018 Remaining Req with CR Adj Base + OCO + S Emergency e	
No Item Nomenclature	Code	Quantity Cost	Quantity Cost	Quantity Cost c	
30 M777 Mods	A	3,985		3,985 U	
31 M4 Carbine Mods	А	31,315		31,315 U	
32 M2 50 Cal Machine Gun Mods	В	47,414		47,414 U	
33 M249 Saw Machine Gun Mods		3,339		3,339 U	
34 M240 Medium Machine Gun Mods	А	4,577		4,577 ປ	
35 Sniper Rifles Modifications		1,488		1,488 U	i
36 M119 Modifications	А	12,678		12,678 U	
37 Mortar Modification ·	А	3,998		3,998 U	
38 Modifications Less Than \$5.0m (WOCV-WTCV)		2,219		2,219 U	
Support Equipment & Facilities		*			
39 Items Less Than \$5.0m (WOCV-WTCV)		5,075		5,075 U	i
40 Production Base Support (WOCV-WTCV)		992		992 U	i
41 Small Arms Equipment (Soldier Enh Prog)		1,573		1,573 U	i
Total Weapons and Other Combat Vehicles		207,367		207,367	
Budget Activity 20: Undistributed					
Undistributed					
42 Adj to Match Continuing Resolution	А	-943,270		-943,270 U	i
Total Undistributed		-943,270		-943,270	
Total Procurement of W&TCV, Army		2,671,477		2,671,477	

Department of the Army FY 2019 President's Budget Exhibit P-1 FY 2019 President's Budget Total Obligational Authority (Dollars in Thousands)

25 Jan 2018

Appropriation: 2033A Procurement of W&TCV, Army

Line No Item Nomenclature	Ident Code	FY 2019 Base Quantity Cost	FY 2019 OCO Quantity Cost	FY 2019 Total Quantity Cost	s e c
30 M777 Mods	A	3,086		3,086	U
31 M4 Carbine Mods	A	31,575		31,575	U
32 M2 50 Cal Machine Gun Mods	В	21,600	4,920	26,520	U
33 M249 Saw Machine Gun Mods		3,924		3,924	U
34 M240 Medium Machine Gun Mods	A	6,940	7	6,947	Ū
35 Sniper Rifles Modifications		2,747		2,747	Ū
36 M119 Modifications	A	5,704		5,704	U
37 Mortar Modification	A	3,965		3,965	U
38 Modifications Less Than \$5.0m (WOCV-WTCV)		5,577		5,577	U
Support Equipment & Facilities					
39 Items Less Than \$5.0m (WOCV-WTCV)		3,174	1,397	4,571	Ü
40 Production Base Support (WOCV-WTCV)		3,284		3,284	U
41 Small Arms Equipment (Soldier Enh Prog)		1,640	VII 4-740 1-7404000000000	1,640	
Total Weapons and Other Combat Vehicles		370,821	23,470	394,291	
Budget Activity 20: Undistributed					
Undistributed					
42 Adj to Match Continuing Resolution	A			Y	U
Total Undistributed					
Total Procurement of W&TCV, Army		4,489,118	1,107,183	5,596,301	

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Line Item Table of Contents (by Appropriation then Line Number)

Appropriation 2033A: Procurement of W&TCV, Army

Line #	ВА	BSA	Line Item Number	Line Item Title	Page
1	01	10	2897G80718	BRADLEY PROGRAM	1
2	01	10	2944G80819	Armored Multi Purpose Vehicle (AMPV)	10
3	01	10	7180G85100	Stryker Vehicle	
4	01	20	0230GM0100	Stryker (Mod)	20
5	01	20	0363G85200	Stryker Upgrade	
6	01	20	1678GZ2400	Bradley Program (MOD)	
7	01	20	2072GA0400	M109 FOV Modifications	
8	01	20	2073GZ0410	Paladin Integrated Management (PIM)	
9	01	20	3700GA0570	Improved Recovery Vehicle (M88A2 HERCULES)	106
10	01	20	4520GZ3250	Assault Bridge (Mod)	115
11	01	20	4872G82925	Assault Breacher Vehicle	117
12	01	20	5129G80571	M88 FOV MODS	125
13	01	20	5225GZ3001	Joint Assault Bridge	126
14	01	20	6406GA0700	M1 Abrams Tank (MOD)	135
15	01	20	6500GA0750	Abrams Upgrade Program	152
16	01	30	5960GA0050	Production Base Support (TCV-WTCV)	161

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Appropriation 2033A: Procurement of W&TCV, Army

Line #	ВА	BSA	Line Item Number	Line Item Title	Page
17	02	10	1696G16101	Integrated Air Burst Weapon System Family	162
18	02	10	2472G13000	M240 Medium Machine Gun (7.62mm)	163
19	02	10	3736G13101	MULTI-ROLE ANTI-ARMOR ANTI-PERSONNEL WEAPON SYSTEM	165
20	02	10	4368G13800	GUN AUTOMATIC 30MM M230	
21	02	10	5000GB2000	Machine Gun, Cal .50 M2 Roll	
22	02	10	6580G02200	Mortar Systems	182
23	02	10	8181G01501	XM320 Grenade Launcher Module (GLM)	191
24	02	10	8194G01507	COMPACT SEMI-AUTOMATIC SNIPER SYSTEM	193
25	02	10	8201G13501	Carbine	198
26	02	10	8212G17200	Small Arms - Fire Control	208
27	02	10	8310G04700	Common Remotely Operated Weapons Station	214
28	02	10	8635G15325	Handgun	222
29	02	20	3000GB3000	MK-19 Grenade Machine Gun MODS	228
30	02	20	3005GZ1700	M777 Mods	230
31	02	20	3010GB3007	M4 Carbine Mods	232
32	02	20	3015GB4000	M2 50 Cal Machine Gun MODS	242

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Line #	ВА	BSA	Line Item Number	Line Item Title	Page
33	02	20	3020GZ1290	M249 SAW Machine Gun MODS	252
34	02	20	3030GZ1300	M240 Medium Machine Gun MODS	254
35	02	20	3181GZ1500	Sniper Rifles Modifications	259
36	02	20	3640GC0401	M119 Modifications	261
37	02	20	7054G02100	Mortar Modification	277
38	02	20	9280GC0925	Modifications Less Than \$5.0m (WOCV-WTCV)	278
39	02	30	1862GL3200	Items Less Than \$5.0m (WOCV-WTCV)	292
40	02	30	3270GC0050	Production Base Support (WOCV-WTCV)	294
41	02	30	4010GC0076	Small Arms Equipment (Soldier Enh Prog)	296

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

Line Item Title	Line Item Number	Line #	ВА	BSA Page
Abrams Upgrade Program	6500GA0750	15	01	20 152
Armored Multi Purpose Vehicle (AMPV)	2944G80819	2	01	10 10
Assault Breacher Vehicle	4872G82925	11	01	20 117
Assault Bridge (Mod)	4520GZ3250	10	01	20 115
BRADLEY PROGRAM	2897G80718	1	01	10 1
Bradley Program (MOD)	1678GZ2400	6	01	20 52
COMPACT SEMI-AUTOMATIC SNIPER SYSTEM	8194G01507	24	02	10 193
Carbine	8201G13501	25	02	10 198
Common Remotely Operated Weapons Station	8310G04700	27	02	10 214
GUN AUTOMATIC 30MM M230	4368G13800	20	02	10 170
Handgun	8635G15325	28	02	10 222
Improved Recovery Vehicle (M88A2 HERCULES)	3700GA0570	9	01	20 106
Integrated Air Burst Weapon System Family	1696G16101	17	02	10 162
Items Less Than \$5.0m (WOCV-WTCV)	1862GL3200	39	02	30 292
Joint Assault Bridge	5225GZ3001	13	01	20 126
M1 Abrams Tank (MOD)	6406GA0700	14	01	20 135
M109 FOV Modifications	2072GA0400	7	01	20 71

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Line Item Title	Line Item Number	Line #	ВА	BSA	Page
M119 Modifications	3640GC0401	36	02	20	261
M2 50 Cal Machine Gun MODS	3015GB4000	32	02	20	242
M240 Medium Machine Gun (7.62mm)	2472G13000	18	02	10	163
M240 Medium Machine Gun MODS	3030GZ1300	34	02	20	254
M249 SAW Machine Gun MODS	3020GZ1290	33	02	20	252
M4 Carbine Mods	3010GB3007	31	02	20	232
M777 Mods	3005GZ1700	30	02	20	230
M88 FOV MODS	5129G80571	12	01	20	125
MK-19 Grenade Machine Gun MODS	3000GB3000	29	02	20	228
MULTI-ROLE ANTI-ARMOR ANTI-PERSONNEL WEAPON SYSTEM	3736G13101	19	02	10	165
Machine Gun, Cal .50 M2 Roll	5000GB2000	21	02	10	175
Modifications Less Than \$5.0m (WOCV-WTCV)	9280GC0925	38	02	20	278
Mortar Modification	7054G02100	37	02	20	277
Mortar Systems	6580G02200	22	02	10	182
Paladin Integrated Management (PIM)	2073GZ0410	8	01	20	95
Production Base Support (TCV-WTCV)	5960GA0050	16	01	30	161
Production Base Support (WOCV-WTCV)	3270GC0050	40	02	30	294
Small Arms - Fire Control	8212G17200	26	02	10	208
Small Arms Equipment (Soldier Enh Prog)	4010GC0076	41	02	30	296
Sniper Rifles Modifications	3181GZ1500	35	02	20	259

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Line Item Title	Line Item Number	Line #	ВА	BSA Page
Stryker (Mod)	0230GM0100	4	01	20 20
Stryker Upgrade	0363G85200	5	01	20 42
Stryker Vehicle	7180G85100	3	01	10 18
XM320 Grenade Launcher Module (GLM)	8181G01501	23	02	10 191

Exhibit P-40, Budget Line Item Justification: PB 2019 Army Date: February 2018

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: 2897G80718 / BRADLEY PROGRAM

Tracked Combat Vehicles

Program Elements for Code B Items: N/A

Other Related Program Elements: 0203735A

Line Item MDAP/MAIS Code: N/A

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

	Prior			FY 2019	FY 2019	FY 2019					То	
Resource Summary	Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total
Procurement Quantity (Units in Each)	-	17	60	-	61	61	-	-	-	-	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	-	72.800	200.000	-	205.000	205.000	-	-	-	-	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	72.800	200.000	-	205.000	205.000	-	-	-	-	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	72.800	200.000	-	205.000	205.000	-	-	-	-	Continuing	Continuing
(The following	Resource Sum	mary rows are fo	r informational p	urposes only. Th	ne corresponding	budget request	s are documente	ed elsewhere.)	•	3		
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	
Gross/Weapon System Unit Cost (\$ in Thousands)	-	4,282.353	3,333.333	-	3,360.656	3,360.656	-	-	-	-	Continuing	Continuing

Description:

The Bradley Program upgrades the existing Bradley M2A2 ODS and M2A2 ODS - Situational Awareness (ODS-SA)/M7A3 vehicle to the Bradley M2A4/M7A4 configuration to support the COCOM requirement for unit equipment sets to deter potential adversaries and support the European Deterrence Initiative (EDI). Improvements to the Bradley M7A2 ODS-SA vehicle include increasing lethality by installing a Commander's Independent Viewer (CIV) providing a hunter-killer capability to the Bradley Gunner and Vehicle Commander, increasing survivability by incorporating improved suspension and track components, increasing mobility by integrating an upgraded engine and transmission improving vehicle acceleration, top speed, and braking capacity, and increasing vehicle electrical power generation and distribution by improving the system architecture and generation capabilities. Current projections indicate that the M2/M7A4 Bradley Fighting Vehicle will be critical for the ABCT formation until FY 2050.

				FY 2019	FY 2019	FY 2019				
Secondar	Secondary Distribution		FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	17	60	0	61	61	-	-	-	-
	Total Obligation Authority	72.800	200.000	0.000	205.000	205.000	-	-	-	-
Total:	Quantity	17	60	0	61	61	-	-	-	-
Secondary Distribution	Total Obligation Authority	72.800	200.000	-	205.000	205.000	-	-	-	-

Exhibit P-40, Budget Line Item Justification: PB 2019 Army Date: February 2018

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: 2897G80718 / BRADLEY PROGRAM

Tracked Combat Vehicles

Program Elements for Code B Items: N/A

Other Related Program Elements: 0203735A

Line Item MDAP/MAIS Code: N/A

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

	Exhibits Schedule				Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	G80723 / Bradley Program (M2A4)	P-5a, P-21			- / -	17 / 72.800	60 / 200.000	- / -	61 / 205.000	61 / 205.000
P-40	Total Gross/Weapon System Cost		- 1 -	17 / 72.800	60 / 200.000	- 1 -	61 / 205.000	61 / 205.000		

^{*}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 sum exactly due to rounding.

Justification:

FY 2019 Overseas Contingency Operations (OCO) Procurement funding in the amount of \$205.000 million funds the upgrade of sixty-one (61) M7A2 ODS-SA vehicle to the M2A4/M7A4 configuration to support the COCOM requirement for unit equipment sets to deter potential adversaries and support the European Deterrence Initiative (EDI). Funding supports all aspects of the vehicle upgrade program as well as all of the Government and Contractor System Engineering/Program Management required for management of the program.

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.

AAO: 3344

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Date: February 2018 Exhibit P-5, Cost Analysis: PB 2019 Army Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Item Number / Title [DODIC]: 2033A / 01 / 10 2897G80718 / BRADLEY PROGRAM G80723 / Bradley Program (M2A4)

ID Code (A=Service Ready, B=Not Service Ready):		М	OAP/MAIS Code:			
Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity (Units in Each)	-	17	60	-	61	61
Gross/Weapon System Cost (\$ in Millions)	-	72.800	200.000	-	205.000	205.000
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	72.800	200.000	-	205.000	205.000
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	72.800	200.000	-	205.000	205.000
(The following Resource Summary rows are for information	onal purposes only. The co	responding budget request	s are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	4,282.353	3,333.333	-	3,360.656	3,360.656

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

	P	rior Years	;		FY 2017			FY 2018		FY	′ 2019 Ba	se	FY	2019 OC	0	F۱	2019 Tot	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					1		,							1				
Recurring Cost																		
Manufacturing ^(†)	-	-	-	2,270.294	17	38.595	1,767.183	60	106.031	-	-	-	1,781.672	61	108.682	1,781.672	61	108.68
TPF (ASL, BII, OPNET, FMNET)	-	-	-	-	-	4.316	-	-	11.858	-	-	-	-	-	12.154	-	-	12.1
Subtotal: Recurring Cost	-	-	-	-	-	42.911	-	-	117.889	-	-	0.000	-	-	120.836	-	-	120.8
Subtotal: Flyaway Cost	-	-	-	-	-	42.911	-	-	117.889	-	-	0.000	-	-	120.836	-	-	120.8
Support - Government Furnisl	hed Materials C	ost					,			,								,
Government Furnished Materials	-	-	-	-	-	26.816	-	-	73.670	-	-	-	-	-	75.512	-	-	75.5°
Subtotal: Support - Government Furnished Materials Cost	-	-	-	-	-	26.816	-	-	73.670	-	-	0.000	-	-	75.512	-	-	75.5
Support - Program Manageme	ent Cost				·					,			,	,				
Government Management	-	-	-	-	-	2.516	-	-	6.911	-	-	-	-	-	7.084	-	-	7.08
Contractor Management	-	-	-	-	-	0.557	-	-	1.530	-	-	-	-	-	1.568	-	-	1.56
Subtotal: Support - Program Management Cost	-	-	-	-	-	3.073	-	-	8.441	-	-	0.000	-	-	8.652	-	-	8.65
Gross/Weapon System Cost	-	-	-	4,282.353	17	72.800	3,333.333	60	200.000	-	-	-	3,360.656	61	205.000	3,360.656	61	205.00

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Exhibit P-5, Cost Analysis: PB 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 01 / 10	P-1 Line Item Number / Title: 2897G80718 / BRADLEY PROGRAM	Item Number / Title [DODIC]: G80723 / Bradley Program (M2A4)

ID Code (A=Service Ready, B=Not Service Rea	dy):		MDAP/MAIS Code) :		
Secondar	y Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Army	Quantity	17	60	0	61	61
	Total Obligation Authority	72.800	200.000	0.000	205.000	205.000
Total:	Quantity	17	60	•	61	61
Secondary Distribution	Total Obligation Authority	72.800	200.000	-	205.000	205.000

^(†) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2019	Army	Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 01 / 10	P-1 Line Item Number / Title: 2897G80718 / BRADLEY PROGRAM	Item Number / Title [DODIC]: G80723 / Bradley Program (M2A4)

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
Manufacturing ^(†)		2017	BAE / York, PA	C / FPIF	TACOM, Warren, MI	Mar 2018	Sep 2019	17	2,270.290			
Manufacturing ^(†)		2018	BAE / York, PA	Option / FPIF	TACOM, Warren, MI	Sep 2018	Sep 2020	60	1,767.180			
Manufacturing ^(†)	1	2019	BAE / York, PA	Option / FPIF	TACOM, Warren, MI	Jul 2019	Sep 2021	61	1,781.670			

^(†) indicates the presence of a P-21

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Exl	hibi	it P	-21, Pro	oducti	ion Sc	hedu	le: PE	3 2019	9 Arm	าy														Date	: Feb	oruary	2018	}			
			ation / 1	Budge	et Acti	vity /	Budg	jet Sı	ıb Ac	tivity	:		Line 97G80		-			GRA	M								Title ley Pr			A4)	
				lements in Each)								Fiscal Y	ear 2018											Fiscal Y	ear 2019						В
					ACCEPT						Calendar Year 2018									Calendar Year 2019							j L I				
	M F R			PROC	PRIOR TO 1 OCT	BAL DUE AS OF	0	N O	D E	J A	F E	M	A P	M A	Ŋ	Ŋ	A U	S E	0 C	N O	D E	J A	F E	M A	A P	M A	J	J	A U	S E	A N C
O i	# F lufactu	uring	SERVICE	QTY	2017	1 OCT	Т	V	С	N	В	R	R	Y	N	L	G	P	Т	V	С	N	В	R	R	Υ	N	L	G	Р	E
IVIG.	_		ARMY	17	0	17						Α -	_	_	_	_	_			_	_	_	_	_	_	_		_	_	2	15
H.		-	ARMY	60	_	60						1						Α -		_	_	-		-	-	-		-	_		60
1	_	_	ARMY	61	0	61																						Α -	-	-	61
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Ex	thik	nibit P-21, Production Schedule: PB 2019 Army															Date: February 2018														
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 01 / 10											1	P-1 Line Item Number / Title: 2897G80718 / BRADLEY PROGRAM												Item Number / Title [DODIC]: G80723 / Bradley Program (M2A4)							
Cost Elements (Units in Each)									Fiscal Y	Fiscal Year 2020									Fiscal Year 2021												
					ACCEPT									C	alendar	lendar Year 202									Calen	dar Year	2021				Ĺ
0 0	M F R #	FY	SERVICE	PROC QTY	PRIOR TO 1 OCT 2019	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 L	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	J U L	A U G	S E P	A N C E
Ma	nufac	cturing																								1					
	1	2017	ARMY	17	2	15	1	1	1	1	1	1	2	1	2	2	2														
	1	2018	ARMY	60	0	60	-	-	-	-	-	-	-	-	-	-	-	5	5	5	5	5	5	5	5	5	5	5	5		
1	1	2019	ARMY	61	0	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	5
							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	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	J U	A U G	S E P	

2033A / 01 / 10 2897G80718 / BRADLEY PROGRAM G80723 / Bradley Program (M. Cost Elements (Units in Each) Fiscal Year 2022 Fiscal Year 2023 Fiscal Year 2023 Fiscal Year 2023 Calendar Year 2022 Calendar Year 2022 Calendar Year 2023 Fiscal Year 2023 Fiscal Year 2023 Calendar Year 2022 Calendar Year 2023 Fiscal Year 2023 Calendar Year 2023 Fiscal Year 2023 Calendar Year 2023 Fiscal Year 2023 Calendar Year 2023 Calendar Year 2023 Fiscal Year 2023 Calendar Year 2023 Fiscal Year 2023 Calendar Year 2022 Calendar Year 2023 Calendar Year 2024 Calendar Year 2024	2897G80718 / BRADLEY PROGRAM G80723 / Bradley Program (M2A4) Fiscal Year 2022 Fiscal Year 2023
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Exhibit P-21, Production Schedule: PB 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 01 / 10	P-1 Line Item Number / Title: 2897G80718 / BRADLEY PROGRAM	Item Number / Title [DODIC]: G80723 / Bradley Program (M2A4)

		Produc	tion Rates (Each	Month)				Procurement Lea	adtime (Months)			
MF	R					In	itial			Reo	rder	
Re	I	MSR For 2019	1-8-5 For 2019	MAX For 2019	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
	1 BAE - York, PA	1	5	18	0	18	18	36	0	10	26	36

[&]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).

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Exhibit P-40, Budget Line Item Justification: PB 2019 Army Date: February 2018

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: 2944G80819 / Armored Multi Purpose Vehicle (AMPV)

Tracked Combat Vehicles

Program Elements for Code B Items: N/A

Other Related Program Elements: 0605028A

Line Item MDAP/MAIS Code: 471

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

	Delan			EV 2040	EV 2040	EV 2040					Т-	
	Prior	->//-	->//-	FY 2019	FY 2019	FY 2019		->//	=>/.0000		То	
Resource Summary	Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total
Procurement Quantity (Units in Each)	-	-	107	131	66	197	130	204	139	139	1,981	2,897
Gross/Weapon System Cost (\$ in Millions)	-	-	447.618	479.801	230.359	710.160	486.557	826.316	599.540	621.139	9,179.670	12,871.000
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	=	-	=	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	-	447.618	479.801	230.359	710.160	486.557	826.316	599.540	621.139	9,179.670	12,871.000
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	-	447.618	479.801	230.359	710.160	486.557	826.316	599.540	621.139	9,179.670	12,871.000
(The following	Resource Sum	mary rows are fo	or informational p	urposes only. Th	ne corresponding	budget requests	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	4,183.346	3,662.603	3,490.288	3,604.873	3,742.746	4,050.569	4,313.237	4,468.626	4,633.857	4,442.872

Description:

The Armored Multi-Purpose Vehicle (AMPV) is the materiel solution for replacement of the Army's Armored Personnel Carrier (M113) Family of Vehicles (FoV) within the Armored Brigade Combat Team (ABCT). It will mitigate current and future capability gaps in force protection, mobility, reliability, and interoperability across the Spectrum of Conflict. The AMPV will replace five mission roles currently performed by the M113 FoV by transferring the current M113 Mission Equipment Packages (MEP) to a new Military Vehicle Derivative (MVD) platform. In total, the AMPV FOV will account for approximately 30% of the ABCT's tracked fleet and consists of the following five variants:

- 1. Mission Command (MCmd) Vehicle: This platform enables effective mission command planning and execution for both the Tactical Operations Center (TOC) and Tactical Command Vehicle (TAC) versions of the MCmd. It will host current Battle Command Systems, future replacements, and upgrades of hardware and software.
- 2. Medical Treatment (MT) Vehicle: This platform will provide a protected surgical environment, with adequate lighting and accessible medical equipment. It will provide a capability for immediate medical care for one patient by a medical crew of four.
- 3. Medical Evacuation (ME) Vehicle: This platform will conduct ambulance type activities and provide casualty evacuation for up to four litter or six ambulatory patients, with a crew of three medical attendants.
- 4. General Purpose (GP) Vehicle: This platform will operate throughout the battle space by conducting re-supply, maintenance, casualty evacuation, and other tasks within the formation.
- 5. Mortar Carrier (MC) Vehicle: This platform will provide immediate responsive fire support to conduct fast-paced offensive operations.

Secondar	y Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	107	131	66	197	130	204	139	139
	Total Obligation Authority	-	447.618	479.801	230.359	710.160	486.557	826.316	599.540	621.139
Total:	Quantity	-	107	131	66	197	130	204	139	139
Secondary Distribution	Total Obligation Authority	-	447.618	479.801	230.359	710.160	486.557	826.316	599.540	621.139

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Exhibit P-40, Budget Line Item Justification: PB 2019 Army Date: February 2018

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: 2944G80819 / Armored Multi Purpose Vehicle (AMPV)

Tracked Combat Vehicles

Program Elements for Code B Items: N/A

Other Related Program Elements: 0605028A

Line Item MDAP/MAIS Code: 471

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

	Exhibits Schedule				Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	G80819 / Armored Multi Purpose Vehicle (AMPV)	P-5a, P-21			- / -	- / -	107 / 447.618	131 / 479.801	66 / 230.359	197 / 710.160
P-40	Total Gross/Weapon System Cost		- 1 -	- 1 -	107 / 447.618	131 / 479.801	66 / 230.359	197 / 710.160		

^{*}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 sum exactly due to rounding.

Justification:

FY2019 Base Procurement dollars in the amount of \$479.801 million procures 131 Armored Multi-Purpose Vehicles (AMPVs). This represents the second year of Low Rate Initial Production (LRIP-2). In accordance with the Full Funding Policy, the entire procurement cost of the LRIP-2 assets is being budgeted in the fiscal year in which long lead time items are initially procured. Accordingly, the FY2019 procurement cost covers all contractor efforts related to recurring production and production support, government efforts related to award of the LRIP-2 contract, and testing/training/fielding support related to the 131 LRIP-2 vehicles.

FY2019 OCO procurement dollars in the amount of \$230.359 million supports COCOM requirement for unit equipment sets to deter potential adversaries and support European Deterrence Initiative (EDI). Funding will procure 66 AMPVs platforms, select Mission Equipment Packages, associated training and fielding support, and additional oversight/testing efforts not required for the OCO program.

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): 2,897 vehicles.

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Date: February 2018 Exhibit P-5, Cost Analysis: PB 2019 Army Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Item Number / Title [DODIC]: 2033A / 01 / 10 2944G80819 / Armored Multi Purpose Vehicle (AMPV) G80819 / Armored Multi Purpose Vehicle (AMPV)

ID Code (A=Service Ready, B=Not Service Ready):		М	DAP/MAIS Code:			
Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity (Units in Each)	-	-	107	131	66	197
Gross/Weapon System Cost (\$ in Millions)	-	-	447.618	479.801	230.359	710.160
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	-	447.618	479.801	230.359	710.160
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	-	447.618	479.801	230.359	710.160
(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)	-	-	4,183.346	3,662.603	3,490.288	3,604.873

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

	F	Prior Years	S		FY 2017			FY 2018		F۱	' 2019 Bas	e	FY	' 2019 OC	0	FY	2019 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)									
Flyaway Cost						1	1			l							l	
Recurring Cost																		
Vehicle Manufacturing - Contractor ^(†)	-	-	-	-	-	-	3,705.664	107	396.506	3,123.481	131	409.176	3,200.394	66	211.226	3,149.249	197	620.4
Engineering Change Orders	-	-	-	-	-	-	-	-	9.019	-	-	12.491	-	-	4.169	-	-	16.0
Sys Eng / Prog Mgmt (Government)	-	-	-	-	-	-	-	-	2.670	-	-	6.164	-	-	1.355	-	-	7.
Sys Test & Evaluation (Government)	-	-	-	-	-	-	-	-	3.205	-	-	2.715	-	-	1.015	-	-	3.
Training Devices	-	-	-	-	-	-	-	-	2.184	-	-	13.596	-	-	1.109	-	-	14.7
Total Package Fielding (TPF)	-	-	-	-	-	-	-	-	15.892	-	-	18.119	-	-	11.485	-	-	29.
Subtotal: Recurring Cost	-	-	-	-	-	-	-	-	429.476	-	-	462.261	-	-	230.359	-	-	692.
Non Recurring Cost																		
Production Facilitization	-	-	-	-	-	-	-	-	18.142	-	-	17.540	-	-	-	-	-	17.
Subtotal: Non Recurring Cost	-	-	-	-	-	-	-	-	18.142	-	-	17.540	-	-	-	-	-	17.
Subtotal: Flyaway Cost	-		-	-	-	-	-	-	447.618	-	-	479.801	-	-	230.359	-	-	710.
Gross/Weapon System	-	-	-	-	-	-	4,183.346	107	447.618	3,662.603	131	479.801	3,490.288	66	230.359	3,604.873	197	710.

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Exhibit P-5, Cost Analysis: PB 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 01 / 10	P-1 Line Item Number / Title: 2944G80819 / Armored Multi Purpose Vehicle (AMPV)	Item Number / Title [DODIC]: G80819 / Armored Multi Purpose Vehicle (AMPV)

ID Code (A=Service Ready, B=Not Service Rea	dy):					
Secondar	y Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Army	Quantity	-	107	131	66	197
	Total Obligation Authority	-	447.618	479.801	230.359	710.160
Total:	Quantity	-	107	131	66	197
Secondary Distribution	Total Obligation Authority	-	447.618	479.801	230.359	710.160

^(†) indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: PB 2019 A	Army	Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 01 / 10	P-1 Line Item Number / Title: 2944G80819 / Armored Multi Purpose Vehicle (AMPV)	Item Number / Title [DODIC]: G80819 / Armored Multi Purpose Vehicle (AMPV)

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
Vehicle Manufacturing - Contractor ^(†)		2018	BAE / York, PA	Option / FPIF	Warren, MI	Jan 2018	Sep 2019	107	3,705.660			
Vehicle Manufacturing - Contractor ^(†)		2019	BAE / York, PA	Option / FPIF	Warren, MI	Mar 2019	Sep 2020	197	3,149.250			

^(†) indicates the presence of a P-21

Ext	nib	it P	2-21, Pro	oduct	ion Sc	hedu	le: PE	3 201	9 Arm	ıy														Date	e: Feb	oruary	2018	3			
	•	•	i ation / I 01 / 10	Budg	et Acti	vity /	Budç	get Sı	ıb Ac	tivity	:		_			iber / ored N		Purpo	se Ve	hicle	(AMF	°V)						-	_	se Vel	nicle
				ements n Each)								Fiscal Y	ear 2018	1										Fiscal Y	ear 2019						В
					ACCEPT									(Calendar	Year 201	18								Caler	ıdar Yeaı	r 2019				L
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Vehi	cle N	Manufa	acturing - Coi	ntractor				,			,																	,			
1	1 2	2018	ARMY	107	0	107				Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	104
1	1 2	2019	ARMY	197	0	197																•		Α -	-	-	-	-	-	-	197
,							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	

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				ation / 1 / 10	Budg	et Act	ivity /	Budg	jet Sı	ıb Ac	tivity				Item 1819 /				urpos	se Ve	hicle	(AMP	V)			819 <i>1</i>		Title red M	-	DIC]: urpos	e Ve	hicle
					lements in Each)								Fiscal Y	ear 2020										F	iscal Ye	ear 2021						В
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0 0 0	M F R #	FY	,	SERVICE	PROC QTY	PRIOR TO 1 OCT 2019	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 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	A N C E
Vel	nicle	Mar	nufac	cturing - Co	ntractor				,	,									<u> </u>					· ·								
	1 2	201	18 <i>A</i>	ARMY	107	:	3 104	4	6	8	8	10	10	10	4	14	15	15	_													0
	1 2	201	19 A	ARMY	197	-	197	-	-	-	-	-	-	-	-	-	-	-	16	16	16	16	16	16	16	17	17	17	17	17		0
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Exhibit P-21, Production Schedule: PB 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 01 / 10	P-1 Line Item Number / Title: 2944G80819 / Armored Multi Purpose Vehicle (AMPV)	Item Number / Title [DODIC]: G80819 / Armored Multi Purpose Vehicle (AMPV)

		Produc	tion Rates (Each /	Month)				Procurement Le	adtime (Months)			
MFR						Ini	tial			Reo	rder	
Ref		MSR For 2019	1-8-5 For 2019	MAX For 2019	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	BAE - York, PA	3	7	18	0	4	20	24	0	6	18	24

[&]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).

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Exhibit P-40, Budget Line Item Justification: PB 2019 Army Date: February 2018

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: |7180G85100 / Stryker Vehicle

Tracked Combat Vehicles

Program Elements for Code B Items: N/A

Other Related Program Elements: 0203735A

Line Item MDAP/MAIS Code: N/A

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

	Prior			FY 2019	FY 2019	FY 2019					То	
Resource Summary	Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	15,153.373	71.680	-	-	-	-	-	-	-	-	-	15,225.053
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	15,153.373	71.680	-	-	-	-	-	-	-	-	-	15,225.053
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	15,153.373	71.680	-	-	-	-	-	-	-	-	-	15,225.053
(The following	Resource Sumi	mary rows are fo	r informational p	ourposes only. Th	ne corresponding	budget request	s are documente	ed elsewhere.)		3	[
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	100,353.464	-	-	-	-	-	-	-	-	-	-	100,828.166

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 SBCT 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 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.

Nuclear, Biological, Chemical 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.

UNCLASSIFIED LI 7180G85100 - Stryker Vehicle 18 Page 1 of 2 P-1 Line #3 Army

Exhibit P-40, Budget Line Item Justification: PB 2019 Army **Date:** February 2018

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: 7180G85100 / Stryker Vehicle

Tracked Combat Vehicles

Program Elements for Code B Items: N/A

Other Related Program Elements: 0203735A

Line Item MDAP/MAIS Code: N/A

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

Secondary	/ Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	71.680	-	-	-	-	-	-	-	-
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	71.680	-	-	-	-	-	-	-	-

Justification:

FY 2019 Base procurement dollars are in the amount of \$0.000 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-40, Budget Line Item Justification: PB 2019 Army Date: February 2018

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: 0230GM0100 / Stryker (Mod)

Modification of Tracked Combat Vehicles

Program Elements for Code B Items: N/A Other Related Program Elements: 0273735A ID Code (A=Service Ready, B=Not Service Ready): A

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2019	FY 2019	FY 2019					То	
Resource Summary	Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	635.846	82.681	97.552	287.490	-	287.490	465.780	570.391	544.979	500.041	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	635.846	82.681	97.552	287.490	-	287.490	465.780	570.391	544.979	500.041	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	635.846	82.681	97.552	287.490	-	287.490	465.780	570.391	544.979	500.041	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	ne corresponding	g budget request:	s are documente	d elsewhere.)			ĺ	
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	7,660.795	-	-	981.195	-	981.195	1,188.214	1,314.265	1,866.366	1,930.660	Continuing	Continuing

Description:

Modifications to the Stryker Family of Vehicles (FOV) to resolve reliability, lethality, safety, operational, performance degradation, and chemical detection and Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) obsolescence issues. Primary efforts involve the incorporation of a 30mm-equipped weapon system onto the Stryker Infantry Carrier Vehicle (ICV). application of Double V Hull (DVH) A1 Engineering Change Proposal (ECP) (formerly ECP 1) engine, alternator, suspension, and in-vehicle network upgrades into the Stryker Double "V" Hull (DVH) fleet, and the retrofit of Lethality Engineering Change Proposals (ECPs) (formerly ECP 2) lethality upgrades to enhance the suppressive fire and armored vehicle engagement capabilities of the Army's Stryker Brigade Combat Teams (SBCTs).

Secondar	y Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	82.681	97.552	287.490	-	287.490	465.780	570.391	544.979	500.041
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	82.681	97.552	287.490	-	287.490	465.780	570.391	544.979	500.041

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LI 0230GM0100 - Stryker (Mod) Army

Exhibit P-40, Budget Line Item Justification: PB 2019 Army Date: February 2018

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: 0230GM0100 / Stryker (Mod)

Modification of Tracked Combat Vehicles

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

Program Elements for Code B Items: N/A

Other Related Program Elements: 0273735A

Line Item MDAP/MAIS Code: N/A

	Exhibits Schedule				Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-3a	GM0100 / STRYKER MODIFICATION (Increase Performance)		Α		- / 635.846	- / 82.681	- / 97.552	- / 287.490	- / -	- / 287.490
P-40	Total Gross/Weapon System Cost				- / 635.846	- / 82.681	- / 97.552	- / 287.490	- 1 -	- / 287.490
	Exhibits Schedule				FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-3a	GM0100 / STRYKER MODIFICATION (Increase Performance)		Α		- / 465.780	- / 570.391	- / 544.979	- /500.041	Continuing	Continuing
P-40	Total Gross/Weapon System Cost				- / 465.780	- / 570.391	- / 544.979	- / 500.041	Continuing	Continuing

^{*}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 sum exactly due to rounding.

Justification:

FY 2019 Base procurement dollars in the amount \$287,490 million supports the application of multiple fleet-wide modifications to address Fire Support Vehicle (FSV) Mission Equipment Package obsolescence: resolves reliability, capability and performance degradation, safety, and operational-related issues; provides for maintenance of the Stryker test fleet to ensure test assets are positioned to provide accurate, verifiable test results; continues retrofit planning and site management efforts to ensure procured modification kits are applied in an efficient and effective fashion; designs, modifies, and procures Stryker Training Aids, Devices, Simulators, and Simulations (TADSS) to ensure Stryker soldiers train with equipment that reflects the configuration and behavior of the current fielded vehicles; provides Interim Contractor Logistics Support (ICLS) for a 30mm Infantry Carrier Vehicle Dragoon (ICVD) to address a March 2015 United States Army Europe (USAREUR) Urgent Operational Needs Statement (ONS), initiates conversions of Double V Hull (DVH) A1 Engineering Change Proposal (ECP) (formerly ECP 1) upgrades onto Stryker DVH, and supports retrofit of Lethality Engineering Change Proposals (ECPs) (formerly ECP 2) lethality upgrades across the Stryker Family of Vehicles. Supports the Active Army.

Double V Hull (DVH) A1 ECP (formerly ECP 1) is a new start in FY 2019.

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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LI 0230GM0100 - Stryker (Mod) Army

Exhibit P-3a, Individual Modification: PB 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Modification Number / Title:
2033A / 01 / 20	0230GM0100 / Stryker (Mod)	GM0100 / STRYKER MODIFICATION

ID Code (A=Service Ready, B=Not Service Ready):	A					MDAP/MAI	S Code:					
Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	635.846	82.681	97.552	287.490	-	287.490	465.780	570.391	544.979	500.041	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	635.846	82.681	97.552	287.490	-	287.490	465.780	570.391	544.979	500.041	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	635.846	82.681	97.552	287.490	-	287.490	465.780	570.391	544.979	500.041	Continuing	Continuing
(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)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	7,660.795	-	-	981.195	-	981.195	1,188.214	1,314.265	1,866.366	1,930.660	Continuing	Continuing

Description:

Modifications are needed to address safety and operational-related, and chassis, chemical detection, and Command, Control, Communications, Computer, and Intelligence (C4I) obsolescence issues within the Stryker fleet. Modifications to the Stryker Family of Vehicles (FoV) are also required to address mid and long-term deficiencies needed to achieve Mobile Gun System (MGS) Full Materiel Release (FMR) and increase direct and suppressive firepower of United States Army Europe (USAREUR) assets to satisfy an urgent operational need. 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.

Mobile Gun System (MGS) Full Materiel Release (FMR): The MGS variant has been granted Conditional Materiel Release (CMR) and efforts to correct deficiencies required to obtain FMR are ongoing. Modifications to correct MGS deficiencies 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, commanders display with shock mounts and color situational awareness, Extended Low Rate Initial Production (ELRIP) Electronic Handle Electronic Trigger (EHET), hydraulic circuit check valve, engine cold start warm-up circuit, carousel improvement, rammer improvement, and open protected hatches. Installation of hardware is conducted by field modification teams, subject to vehicle/hardware availability.

Fleet Modifications: Fleet modifications address changes to the vehicle configurations resulting from identified safety issues, performance degradation issues, obsolescence issues, Modified Table of Organization & Equipment (MTO&E) changes, or Operational Need Statements (ONS). Planned modifications include: Joint Chemical Agent Detector (JCAD), VRC-103 for the Commander's Vehicle (CV) variant, Energy Attenuating seats for Flat Bottom Hull (FBH) vehicles, Mortar Carrier Fire Control Computer, RMS6-L N2 Recuperator gauge, Improved Battery Box, Troop Heater improvements, Short Range Air Defense, In Vehicle Network (IVN), Mounted LRAS and refresh of the Fire Support Vehicle (FSV) Mission Equipment package (MEP). Modifications will be conducted by field modification teams, subject to vehicle/hardware availability.

C4I Obsolescence and Next Generation Items: Modifications are needed to address modifications and obsolescence issues with Command, Control, Communications, Computer, and Intelligence (C4I) components of the Stryker Family of Vehicles (FoV). Efforts include Handheld, Manpack, Small Form Fit Radio (HMS), Nett Warrior upgrades, Blue-Force Tracking 2 (BFT-2), Warfighter Information Network-Tactical (WIN-T) Next Generation, and the Stryker In-Vehicle Network 2 (IVN2). Also including software efforts for Cyber Security upgrades, Vehicle Software Updates, and improved embedded training.

Test Fleet Maintenance: Maintains the Stryker test fleet, to include contractor repair labor and operation of Stryker repair parts warehouses 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 and verifiable test results.

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

 LI 0230GM0100 - Stryker (Mod)
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 Army
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 P-1 Line #4

Exhibit P-3a, Individual Modification: PB 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Modification Number / Title:
2033A / 01 / 20	0230GM0100 / Stryker (Mod)	GM0100 / STRYKER MODIFICATION

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

Training Aids, Devices, Simulators, and Simulations (TADSS): Funding provides for the integration of the Vehicle Tactical Engagement Simulation System (V-TESS) and supports the United States Army Combined Arms Support Command (CASCOM) validated the requirement for the Stryker Vehicle Maintainer Training Course to support establishment of 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.

Double V Hull (DVH) A1 Engineering Change Proposal (ECP) (formerly ECP 1): DVH A1 ECP incorporates a 910 amp alternator, in-vehicle network, 450 HP engine, and upgraded suspension that will restore vehicle space, weight, and power margin lost due to the addition of numerous kits integrated during prior deployment operations, and allow for the integration of the future Army Network, DVH A1 ECP conversion will be executed by a joint contractor and depot team in a production-like environment.

Lethality Engineering Change Proposals (ECPs) (formerly ECP 2): Lethality ECPs will integrate a medium caliber weapon, under armor Javelin fire capability, improved optics and targeting systems, and other capabilities into the Stryker fleet. These improvements will provide for increased under armor fire capability, target identification range, provide overmatch against peer threats and supporting infantry assault, and address obsolescence within the targeting and reconnaissance systems utilized on the Stryker Family of Vehicle (FoV).

30mm ICVD Operational Needs Statement (ONS) (Formerly Stryker ONS Lethality): Addresses a lethality capability gap identified by 2nd Cavalry Regiment (2CR) in a March 2015 Urgent Operational Needs Statement (ONS). The ONS Lethality upgrade incorporates a 30mm weapon system onto the Flat Bottom Hull (FBH) Infantry Carrier Vehicle (ICV).

Program Management Support: Program management, engineering, and logistics support necessary to execute Stryker modifications to include Fleet Modifications, C4I Obsolescence and Next Generation items, 30mm ICVD ONS, DVH A1 ECP (beginning FY 2019), and Lethality ECPs (beginning FY 2019).

				FY 2019	FY 2019	FY 2019				
Seconda	ary Distribution	FY 2017	FY 2018	Base	осо	Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	=	-	-	-	-	-	-	-
	Total Obligation Authority	82.681	97.552	287.490	-	287.490	465.780	570.391	544.979	500.041
Total:	Quantity	-		-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	82.681	97.552	287.490	-	287.490	465.780	570.391	544.979	500.041

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Exhibit P-3a, Individual Modification: PB 2019 Army Date: February 2018 Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: **Modification Number / Title:** GM0100 / STRYKER MODIFICATION 2033A / 01 / 20 0230GM0100 / Stryker (Mod) ID Code (A=Service Ready, B=Not Service Ready): A MDAP/MAIS Code: Related RDT&E PEs: Models of Systems Affected: VARIOUS **Modification Type:** Increase Performance FY 2019 FY 2019 FY 2019 To FY 2017 FY 2018 oco FY 2020 FY 2021 **Prior Years** Base Total FY 2022 FY 2023 Complete Total Qtv (Each) I Qty (Each) I Qtv (Each) I **Financial Plan** Total Cost (\$ M) Total Cost (\$ M) | Total Cost (\$ Total Cost (\$ M) Total Cost (\$ M) Total Cost (\$ M) Total Cost (\$ M) **Procurement** Modification Item 1 of 13: Mobile Gun System (MGS) Full Materiel Release(FMR) A Kits Recurring Hardware 851 / 38.676 139 / 0.960 - 1 -- 1 -- 1 -- 1 -- / -- / -- 1 -Continuina Continuina 851 / 38.676 139 / 0.960 Subtotal: Recurring - / -- / -- / -- / -- / -- / -- / -- / -Continuina Continuina Non-Recurring Fielding - / 14.159 - /6.251 - 1 -- 1 -- / -- / -- 1 -- 1 -- 1 -- 1 -Continuing Continuing Engineer Support - / 11.310 - / 0.964 - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -Continuing Continuina - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -Test - /2.650 - / -Continuing Continuing - / -- /28.119 - /6.251 - /0.964 - / -- / -- / -- / -- / -Subtotal: Non-Recurring - / -Continuina Continuina Subtotal: Mobile Gun System (MGS) Full Materiel - / -851 / 66.795 - /6.251 139 / 1.924 - /0.000 - / -- /0.000 - / -- / -- / -Continuing Continuing Release(FMR) Modification Item 2 of 13: Fleet Modifications A Kits Recurring Continuing Fieldina - / 0.892 - / -- 1 -- 1 -- / -- 1 -- 1 -- 1 -- / -- 1 -Continuina 49 / 3.470 - 1 -Hardware 3,338 / 45.075 328 / 10.521 155 / 3.675 49 / 3.470 30 / 2.232 57 / 5.693 170 / 11.165 355 / 16.264 Continuing Continuing 3,338 / 45.967 328 / 10.521 155 / 3.675 49/3.470 - / -49 / 3.470 30 / 2.232 57 / 5.693 170 / 11.165 355 / 16.264 Subtotal: Recurring Continuina Continuina Non-Recurring **Engineer Support** - /24.522 - 18.245 - 17.859 - / 0.458 - 1 -- / 0.458 - / 0.125 - / 0.127 - 1 -- / -Continuing Continuing - / 0.650 - 1 -- 1 -- 1 -- 1 -- / 10.350 - / 1.689 - 1 -- 1 -- 1 -Continuing Continuing Test - /34.872 - /9.934 - /8.509 - /0.458 - / -- /0.458 - /0.125 - /0.127 - / -- / -Subtotal: Non-Recurring Continuing Continuing 3.338 / 80.839 328 / 20 455 155 / 12.184 49 / 3.928 49 / 3 928 30 / 2.357 57 / 5.820 Subtotal: Fleet Modifications - / -170 / 11.165 355 / 16.264 Continuina Continuina

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Subtotal: Recurring

Non-Recurring

Engineer Support

Terminal (VDET)
A Kits
Recurring
Hardware

Modification Item 3 of 13: Video Display Electronic

664 / 19.521

664 / 19.521

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P-1 Line #4

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Exhibit P-3a, Individual Modification: PB 2019 Army

Appropriation / Budget Activity / Budget Sub Activity:

2033A / 01 / 20

Date: February 2018

Modification Number / Title:

0230GM0100 / Stryker (Mod)

GM0100 / STRYKER MODIFICATION

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

MDAP/MAIS Code:

Models of Systems Affected: VARIOUS

Modification Type: Increase Performance

Related RDT&F PEs:

lodels of Systems Affected: VARIOUS		Modifi	cation Typ	e: Increas	e Performa	ance	Re	lated RDT	&E PEs:			
	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)	Qty (Each Total Cost (
Test	- / 0.136	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	Continuing	Continuing
Subtotal: Non-Recurring	- /0.179	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuir
Subtotal: Video Display Electronic Terminal (VDET)	664 / 19.700	- / -	- / -	- /0.000	- / -	- /0.000	- / -	- / -	- / -	- / -	Continuing	Continuir
Modification Item 4 of 13: C4I Obsolescence and Next Generation Items												
A Kits												
Recurring												
Hardware	475 / 12.352	789 / 4.888	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	118 / 1.360	803 / 6.518	Continuing	Continuing
Subtotal: Recurring	475 / 12.352	789 / 4.888	- / -	- / -	- / -	- / -	- / -	- / -	118 / 1.360	803 / 6.518	Continuing	Continui
Non-Recurring									,			,
Engineer Support	- / 16.252	- 17.232	- /5.845	- 1 -	- 1 -	- 1 -	- <i>I</i> 17.289	- / 9.659	- 1 -	- 1 -	Continuing	Continuin
Test	- / 0.189	- 1 -	- / 0.468	- 1 -	- 1 -	- 1 -	- /6.809	- /20.003	- / 15.397	- /1.282	Continuing	Continuin
Fielding	- / 0.180	- / 0.030	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	Continuing	Continuin
Subtotal: Non-Recurring	- /16.621	- /7.262	- /6.313	- / -	- / -	- / -	- /24.098	- /29.662	- /15.397	- /1.282	Continuing	Continui
Subtotal: C4I Obsolescence and Next Generation Items	475 / 28.973	789 / 12.150	- /6.313	- /0.000	- / -	- /0.000	- /24.098	- /29.662	118 / 16.757	803 / 7.800	Continuing	Continui
Modification Item 5 of 13: Block Mod Retrofit												
A Kits												
Recurring												
Hardware	2,336 / 34.697	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	Continuing	Continuin
Subtotal: Recurring	2,336 / 34.697	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continui
Subtotal: Block Mod Retrofit	2,336 / 34.697	- / -	- / -	- /0.000	- / -	- /0.000	- / -	- / -	- / -	- / -	Continuing	Continui
Modification Item 6 of 13: Test Fleet Maintenance												
A Kits												
Recurring												
Labor (Contractor)	- /20.141	- /5.990	- /7.009	- /6.376	- 1 -	- /6.376	- /6.497	- /6.620	- /6.779	- /6.921	Continuing	Continuin
Subtotal: Recurring	- /20.141	- /5.990	- /7.009	- /6.376	- / -	- /6.376	- /6.497	- /6.620	- /6.779	- /6.921	Continuing	Continui
Subtotal: Test Fleet Maintenance	- /20.141	- /5.990	- /7.009	- /6.376	- / -	- /6.376	- /6.497	- /6.620	- /6.779	- /6.921	Continuing	Continui
Modification Item 7 of 13: Retrofit Planning and Site Management												,
A Kits												
Recurring												
	- /20.659	- /8.143	- 17.753	- 17.534	- 1 -	- /7.534	- /5.801	- /5.940	- /6.059	- /6.186		Continuin

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Exhibit P-3a, Individual Modification: PB 2019 Army

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

Date: February 2018

Modification Number / Title:
0230GM0100 / Stryker (Mod)
GM0100 / STRYKER MODIFICATION

ID Code (A=Service Ready, B=Not Service Ready): A MDAP/MAIS Code: Models of Systems Affected: VARIOUS Modification Type: Increase Performance **Related RDT&E PEs:** FY 2019 FY 2019 FY 2019 То **Prior Years** FY 2017 FY 2018 Base oco Total FY 2020 FY 2021 FY 2022 FY 2023 Complete Total Qty (Each) I Qty (Each) I
Total Cost (\$ M) Qty (Each) I Qtv (Each) I Qty (Each) I Qtv (Each) I Qty (Each) I Qty (Each) I Qtv (Each) I Qtv (Each) I Qtv (Each) I Qty (Each) I **Financial Plan** Total Cost (\$ M) - /20.659 - /8.143 - /7.753 - /7.534 - / -- /7.534 - /5.801 - /5.940 - /6.059 - /6.186 Subtotal: Recurring Continuing Continuing

Subtotal: Retrofit Planning and Site Management	- /20.659	- /8.143	- /7.753	- /7.534	- / -	- /7.534	- /5.801	- /5.940	- /6.059	- /6.186	Continuing	Continuing
Modification Item 8 of 13: Training Aids, Devices, Simulators and Simulations												
A Kits												
Recurring												
	10.000		10 101 000	5 1 10 077		5 / 10 077	700 / 45 /00	055 / // 000	055 / 40 000	100 101 171	0 11 1	0 11 1

Hardware	- / 0.283	- 1 -	18 / 24.389	5 / 18.677	- / -	5 / 18.677	709 / 15.129	355 / 11.899	355 / 16.390	406 / 21.474	Continuing	Continuing
Life Cycle Management Plan	- / 22.686	- /4.439	- /7.651	- 1 -	- / -	- 1 -	- / -	- 1 -	- 1 -	- 1 -	Continuing	Continuing
Subtotal: Recurring	- /22.969	- /4.439	18 / 32.040	5 / 18.677	- / -	5 / 18.677	709 / 15.129	355 / 11.899	355 / 16.390	406 / 21.474	Continuing	Continuing
Subtotal: Training Aids, Devices, Simulators and Simulations	- /22.969	- /4.439	18 / 32.040	5 / 18.677	- / -	5 / 18.677	709 / 15.129	355 / 11.899	355 / 16.390	406 / 21.474	Continuing	Continuing

Subtotal: Training Aids, Devices, Simulators and Simulations	- /22.969	- /4.439	18 / 32.040	5 / 18.677	- / -	5 / 18.677	709 / 15.129	355 / 11.899	355 / 16.390	406 / 21.474	Continuing	Continuing
Modification Item 9 of 13: Double V Hull (DVH) A1 ECP												
A Kits												

Hardware	- 1 -	- / -	- / -	52 / 106.141	- / -	52 / 106.141	96 / 194.559	141 / 272.456	90 / 190.958	62 / 151.480	Continuing	Continuing
Fielding	- 1 -	- 1 -	- 1 -	- /8.549	- 1 -	- /8.549	- / 48.966	- /73.970	- / 51.587	- / 48.529	Continuing	Continuing
Subtotal: Recurring	- / -	- / -	- / -	52 / 114.690	- / -	52 / 114.690	96 / 243.525	141 / 346.426	90 / 242.545	62 / 200.009	Continuing	Continuing
Non-Recurring												
Labor (Production Line Set Un)	- 1 -	- 1 -	- 1 -	- /5 163	- 1 -	- /5163	- 12957	- 1 -	- / -	- 1 -	Continuing	Continuing

Labor (Production Line Set Up)	- / -	- 1 -	- 1 -	- /5.163	- / -	- /5.163	- /2.957	- / -	- 1 -	- 1 -	Continuing	Continuing
Engineering Support	- 1 -	- 1 -	- 1 -	- /21.450	- / -	- / 21.450	- 1 -	- 1 -	- 1 -	- / -	Continuing	Continuing
Subtotal: Non-Recurring	- / -	- / -	- / -	- /26.613	- / -	- /26.613	- /2.957	- / -	- / -	- / -	Continuing	Continuing
Subtotal: Double V Hull (DVH) A1 ECP	- / -	- / -	- / -	52 / 141.303	- / -	52 / 141.303	96 / 246.482	141 / 346.426	90 / 242.545	62 / 200.009	Continuing	Continuing
Modification Item 10 of 13: Lethality Engineering												

Change Proposals (ECPs)												
A Kits												
Recurring												
Hardware	- 1 -	- 1 -	- 1 -	240 / 68.027	- 1 -	240 / 68.027	300 / 77.510	293 / 87.080	202 / 157.320	197 / 151.767	Continuing	Continuing
Fielding	- 1 -	- 1 -	- 1 -	- /6.847	- 1 -	- /6.847	- /9.746	- / 10.029	- / 12.142	- / 10.896	Continuing	Continuing
Subtotal: Recurring	- / -	- / -	- / -	240 / 74.874	- / -	240 / 74.874	300 / 87.256	293 / 97.109	202 / 169.462	197 / 162.663	Continuing	Continuing
Non-Recurring												
Facilitization	- 1 -	- 1 -	- /4.200	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /5.481	- 1 -	Continuing	Continuing

LI 0230GM0100 - Stryker (Mod)
Army

Recurring

Subtotal: Non-Recurring

- /4.200

- /5.481

Continuina

Continuina

Exhibit P-3a, Individual Modification: PB 2019 Army

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

Date: February 2018

Modification Number / Title:
0230GM0100 / Stryker (Mod)

GM0100 / STRYKER MODIFICATION

2033A / 01 / 20 ID Code (A=Service Ready, B=Not Service Ready): A MDAP/MAIS Code: Related RDT&E PEs: Models of Systems Affected: VARIOUS **Modification Type:** Increase Performance FY 2019 FY 2019 То FY 2019 **Prior Years** FY 2017 FY 2018 oco FY 2020 FY 2021 FY 2022 FY 2023 Base Total Complete Total Qtv (Each) I **Financial Plan** Total Cost (\$ M) - / -- /4.200 240 / 74.874 240 / 74.874 300 / 87.256 293 / 97.109 202 / 174.943 197 / 162.663 Subtotal: Lethality Engineering Change Proposals Continuing Continuing (ECPs) Modification Item 11 of 13: Double V Hull (DVH) Survivability and Safety Mods A Kits Recurring 1,224 / 11.812 - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -Hardware - 1 -Continuing Continuing Subtotal: Recurring 1,224 / 11.812 - / -- / -- / -- / -- / -- / -- / -- / -- / -Continuing Continuing Non-Recurring Labor (Engineering Support) - / 0.230 - 1 -- 1 -- 1 -- / -- / -- 1 -- / -- 1 -- / -Continuing Continuing - / -- / -- / -- / -- / -- / -Subtotal: Non-Recurring - /0.230 - / -- / -- / -Continuing Continuing - / -- / -- / -Subtotal: Double V Hull (DVH) Survivability and Safety 1.224 / 12.042 - /0.000 - / -- /0.000 - / -- / -- / -Continuina Continuina Mods Modification Item 12 of 13: 30mm ICVD Operational Needs Statement (ONS) A Kits Recurring Fieldina - / 0.606 - /6.471 - / 18.937 - / 16.149 - 1 -- / 16.149 - /9.376 - 1 -- 1 -- 1 -Continuing Continuina - 1 -Hardware 83 / 314.767 - I 10.827 - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -Continuing Continuing Subtotal: Recurring 83 / 315.373 - /17.298 - /18.937 - /16.149 - / -- /16.149 - /9.376 - / -- / -- / -Continuing Continuing Subtotal: 30mm ICVD Operational Needs Statement - /17.298 - /18.937 - /16.149 - / -- /16.149 - /9.376 - / -- / -- / -83 / 315.373 Continuing Continuing Modification Item 13 of 13: Program Management Support A Kits Recurring Continuing Program Management Support - / 13.658 - 17.955 - /7.192 - / 18.649 - 1 -- / 18.649 - /68.784 - /66.915 - /70.341 - 178.724 Continuing - /13.658 - /7.955 - /7.192 - /18.649 - / -- /18.649 - /68.784 - /66.915 - /70.341 - /78.724 Continuing Subtotal: Recurring Continuing Subtotal: Program Management Support - /13.658 - /7.955 - /7.192 - /18.649 - / -- /18.649 - /68.784 - /66.915 - /70.341 - /78.724 Continuing Continuing 346 / 287.490 - / -846 / 570.391 935 / 544.979 Subtotal: Procurement, All Modification Items 8,971 / 635.846 1,117 / 82.681 312 / 97.552 346 / 287.490 1,135 / 465.780 1,823 / 500.041 Continuing Continuing Installation 851 / 0.000 139 / 0.000 - 1 -- 1 -- 1 -- 1 -- / -- 1 -990 / 0.000 Modification Item 1 of 13: Mobile Gun System (MGS) - / -- / -- / -Full Materiel Release(FMR)

LI 0230GM0100 - Stryker (Mod) Army UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2019 Army

Appropriation / Budget Activity / Budget Sub Activity:

2033A / 01 / 20

Date: February 2018

P-1 Line Item Number / Title:
0230GM0100 / Stryker (Mod)

GM0100 / STRYKER MODIFICATION

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

ID Odde (A-Service Ready, B-Not Service Ready) . A		MDAI /MAIO COUE.										
Models of Systems Affected: VARIOUS		Modifi	cation Typ	e: Increas	e Performa	ance	Re	Related RDT&E PEs:				
	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)											
Modification Item 2 of 13: Fleet Modifications	3,338 / 0.000	328 / 0.000	155 / 0.000	49 / 0.000	- / -	49 / 0.000	30 / 0.000	57 / 0.000	170 / 0.000	355 / 0.000	- 1 -	4,482 / 0.000
Modification Item 4 of 13: C4I Obsolescence and Next Generation Items	475 / 0.000	789 / 0.000	- 1 -	- 1 -	- / -	- / -	- 1 -	- / -	118 / 0.000	803 / 0.000	- 1 -	2,185 / 0.000
Modification Item 9 of 13: Double V Hull (DVH) A1 ECP	- / -	- 1 -	- / -	14 / 0.000	- / -	14 / 0.000	86 / 0.000	118 / 0.000	117 / 0.000	76 / 0.000	718 / 0.000	1,129 / 0.000
Modification Item 10 of 13: Lethality Engineering Change Proposals (ECPs)	- 1 -	- 1 -	- 1 -	60 / 0.000	- / -	60 / 0.000	255 / 0.000	299 / 0.000	270 / 0.000	201 / 0.000	2,114 / 0.000	3,199 / 0.000
Modification Item 12 of 13: 30mm ICVD Operational Needs Statement (ONS)	- 1 -	16 / 0.000	67 / 0.000	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	83 / 0.000
Subtotal: Installation	4,664 / 0.000	1,133 / 0.000	361 / 0.000	123 / 0.000	0/0.000	123 / 0.000	371 / 0.000	474 / 0.000	675 / 0.000	1,435 / 0.000	2,832 / 0.000	12,068 / 0.000
Total						•		•				
Total Cost (Procurement + Support + Installation)	635.846	82.681	97.552	287.490	_	287.490	465.780	570.391	544.979	500.041	Continuing	Continuing

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Exhibit P-3a, Individual Modification: PB 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 01 / 20	P-1 Line Item Number / Title: 0230GM0100 / Stryker (Mod)	Modification Number / Title: GM0100 / STRYKER MODIFICATION
ID Code (A=Service Ready, B=Not Service Ready): A	MDAP/MAIS Code:	

Modification Item 1 of 13: Mobile Gun System (MGS) Full Materiel Release(FMR)

Manufacturer Information

Manufacturer Name: GM GDLS Defense Group, L.L.C	Manufacturer Location: Sterling Heights, Michigan
Administrative Leadtime (in Months): 2	Production Leadtime (in Months): 3

riaminotrativo Edadtimo (r	in monthly. L			i readotteri Eedattiirie (iii ii	nontrio): o		
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates		Feb 2018					
Delivery Dates		May 2018					

Installation Information

Method of Implementation: Installs conducted by contractor retrofit team.

	. ,	E)/ 00/E	E)/ 00/10	FY 2019	FY 2019	FY 2019	F)/ 0000	EV 0004	F)/ 0000	5 1/ 0000	То	
	Prior Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	851 / 0.000	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	851 / 0.000
FY 2017	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	- 1 -	- 1 -	139 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	139 / 0.000
FY 2019	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2021	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- / -	- / -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2022	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2023	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	851 / 0.000	0 / 0.000	139 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	990 / 0.000

Installation Schedule

- 1				-																												
				FY 2	2017			FY 2	2018			FY 2	2019			FY 2	2020			FY 2	2021			FY 2	022			FY 2	2023			
		PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	тс	Tot																
	ln	851	-	-	-	-	-	139	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 1	-	-	990
	Out	851	-	-	-	-	-	-	70	69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	990

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P-1 Line #4

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Exhibit P-3a, Individual Modification: PB 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Modification Number / Title:
2033A / 01 / 20	0230GM0100 / Stryker (Mod)	GM0100 / STRYKER MODIFICATION

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

Modification Item 2 of 13: Fleet Modifications

Manufacturer Information

	·/						
Manufacturer Name: GM	GDLS Defense Group, LLC	;		Manufacturer Location: St	erling Heights, Michigan		
Administrative Leadtime	(in Months): 2			Production Leadtime (in M	fonths): 3		
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates	Jan 2017	Jan 2018	Jan 2019	Jan 2020	Jan 2021	Jan 2022	Jan 2023
Delivery Dates	Apr 2017	Apr 2018	Apr 2019	Apr 2020	Apr 2021	Apr 2022	Apr 2023

Installation Information

Method of Implementation: Prime contractor to produce hardware, installation by both Depot and contractor personnel

	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	3,338 / 0.000	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	3,338 / 0.000
FY 2017	- 1 -	328 / 0.000	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	328 / 0.000
FY 2018	- 1 -	- 1 -	155 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	155 / 0.000
FY 2019	- 1 -	- 1 -	- 1 -	49 / 0.000	- 1 -	49 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	49 / 0.000
FY 2020	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	30 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	30 / 0.000
FY 2021	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	57 / 0.000	- 1 -	- 1 -	- 1 -	57 / 0.000
FY 2022	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	170 / 0.000	- 1 -	- 1 -	170 / 0.000
FY 2023	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	355 / 0.000	- 1 -	355 / 0.000
To Complete	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	3,338 / 0.000	328 / 0.000	155 / 0.000	49 / 0.000	0 / 0.000	49 / 0.000	30 / 0.000	57 / 0.000	170 / 0.000	355 / 0.000	- 1 -	4,482 / 0.000

Installation Schedule

			FY 2	2017			FY 2	2018			FY 2	019			FY 2	020			FY 2	2021			FY 2	022			FY 2	023			
	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	3,338	-	328	-	-	155	-	-	-	-	49	-	-	-	30	-	-	-	57	-	-	-	170	-	-	-	355	-	-	-	4,482
Out	3,338	-	-	164	164	-	51	52	52	-	-	24	25	-	-	15	15	-	-	28	29	-	-	85	85	-	-	177	178	-	4,482

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LI 0230GM0100 - Stryker (Mod) Army

Exhibit P-3a, Indivi	dual Modification: P	B 2019 Army				Date: February 2018	
Appropriation / Bu 2033A / 01 / 20	dget Activity / Budge	et Sub Activity:	P-1 Line Item Nu 0230GM0100 / St			Modification Number GM0100 / STRYKER	
ID Code (A=Service Ready,	B=Not Service Ready) : A			MDAP/MAIS Co	ode:	1	
Modification Item 3 of 1	3: Video Display Electronic	Terminal (VDET)					
Manufacturer Informati	on						
Manufacturer Name: GM	GDLS Defense Group, L.L	.C		Manufacturer Location: St	erling Heights, Michigar		
Administrative Leadtime	(in Months):			Production Leadtime (in M	fonths):		
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates							
Delivery Dates							
Installation Information							
		o of Army Denot person	nel and contractors at a go	vernment facility	Installation Q	uantity: 0	
	, , , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , , ,	3.	, , , , , , , , , , , , , , , , , , ,			

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Exhibit P-3a, Individual Modification: PB 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Modification Number / Title:
2033A / 01 / 20	0230GM0100 / Stryker (Mod)	GM0100 / STRYKER MODIFICATION

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

Modification Item 4 of 13: C4I Obsolescence and Next Generation Items

Manufacturer Information

Detec	EV 2047	EV 2040	EV 2040	EV 2020	EV 2024	EV 2022	EV 0
Administrative Leadtime (i	n Months): 4			Production Leadtime (in N	fonths): 3		
Manufacturer Name: GM (GDLS Defense Group, L.L.	C.		Manufacturer Location: St	erling Heights, Michigan		

Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates	Jan 2017					Jan 2022	Jan 2023
Delivery Dates	Apr 2017					Apr 2022	Apr 2023

Installation Information

Method of Implementation: Combination of Army Depot personnel and contractors at a government facility.

	Prior Years	FY 2017	FY 2018	FY 2019	FY 2019 OCO	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	To	Total
	FIIOI TEATS	F1 2017	F1 2010	Base	000	Total	F1 2020	F1 2021	F1 2022	F1 2023	Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	475 / 0.000	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- / -	- 1 -	- 1 -	- / -	- / -	475 / 0.000
FY 2017	- 1 -	789 / 0.000	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	789 / 0.000
FY 2018	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2021	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2022	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	118 / 0.000	- 1 -	- 1 -	118 / 0.000
FY 2023	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	803 / 0.000	- 1 -	803 / 0.000
To Complete	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	475 / 0.000	789 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	- 1 -	118 / 0.000	803 / 0.000	- 1 -	2,185 / 0.000

Installation Schedule

			FY 2	2017			FY 2	2018			FY 2	2019			FY 2	2020			FY 2	2021			FY 2	022			FY 2	023			
	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	475	-	789	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	118	-	-	-	803	-	-	-	2,185
Out	475	-	-	394	395	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	59	59	-	-	401	402	-	2,185

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Exhibit P-3a, Indivi	idual Modification: P	B 2019 Army				Date: February 2018	<u> </u>							
Appropriation / Bu 2033A / 01 / 20	dget Activity / Budge	et Sub Activity:	P-1 Line Item Nu 0230GM0100 / St			Modification Number GM0100 / STRYKER								
ID Code (A=Service Ready,	B=Not Service Ready) : A			MDAP/MAIS Co	ode:									
Modification Item 5 of 1	13: Block Mod Retrofit													
Manufacturer Informati	on													
Manufacturer Name: GM	GDLS Defense Group, L.L	.C.		Manufacturer Location: St	erling Heights, Michigar	1								
Administrative Leadtime	(in Months):			Production Leadtime (in M	fonths):									
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021									
Contract Dates														
Delivery Dates														
Installation Information														
	ion (Organic): Combination	of Army Donat naroan	nol and contractors at a go	vornment facility	Installation C	wantitu 0								
metriou or implementat	ion (Organic): Combination	Tol Alliny Depot person	ner and contractors at a go	verninent facility.	mstanation	danaty.								

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Exhibit P-3a, Individual Modification: PB 2019 Army	ebruary 2018
	cation Number / Title: 0 / STRYKER MODIFICATION
ID Code (A=Service Ready, B=Not Service Ready): A MDAP/MAIS Code:	
Modification Item 6 of 13: Test Fleet Maintenance	
Manufacturer Information	
Manufacturer Name: GM GDLS Defense Group, L.L.C Manufacturer Location: Sterling Heights, Michigan	
Administrative Leadtime (in Months): 4 Production Leadtime (in Months):	
Dates FY 2017 FY 2018 FY 2019 FY 2020 FY 2021	FY 2022 FY 2023
Contract Dates Jan 2017 Jan 2018 Jan 2019 Jan 2020 Jan 2021	an 2022 Jan 2023
Delivery Dates Jan 2017 Jan 2018 Jan 2019 Jan 2020 Jan 2021	an 2022 Jan 2023
Installation Information	
Method of Implementation (Organic): Maintenance is provided by contractor at government test sites. Installation Quantity: 0	

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			UNCL	ASSIFIED			
Exhibit P-3a, Indivi	idual Modification: Pl	B 2019 Army				Date: February 2018	3
Appropriation / Bu 2033A / 01 / 20	dget Activity / Budge	et Sub Activity:	P-1 Line Item Nu 0230GM0100 / St			Modification Numb	
ID Code (A=Service Ready,	B=Not Service Ready) : A			MDAP/MAIS Co	ode:		
Modification Item 7 of 1	13: Retrofit Planning and Site	e Management					
Manufacturer Informati	on						
Manufacturer Name: GM	GDLS Defense Group, L.L.	.C		Manufacturer Location: St	erling Heights, Michiga	n	
Administrative Leadtime	(in Months): 5			Production Leadtime (in N	Months):		
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates	Feb 2017	Feb 2018	Feb 2019	Feb 2020	Feb 2021	Feb 2022	Feb 2023
Delivery Dates	Feb 2017	Feb 2018	Feb 2019	Feb 2020	Feb 2021	Feb 2022	Feb 2023
Installation Information							
Method of Implementat	ion (Organic): Prime Contr	actor located at contrac	tor and Government owner	d facilities.	Installation	Quantity: 0	

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			UNCL	ASSIFIED			
Exhibit P-3a, Indiv	idual Modification: P	B 2019 Army				Date: February 201	8
Appropriation / Bu 2033A / 01 / 20	idget Activity / Budge	et Sub Activity:	P-1 Line Item Nui 0230GM0100 / Str			Modification Numb	
ID Code (A=Service Ready	, B=Not Service Ready):A		'	MDAP/MAIS C	ode:	'	
Modification Item 8 of	13: Training Aids, Devices,	Simulators and Simulati	ons	_			
Manufacturer Informat	ion						
Manufacturer Name: Ro	ckwell Collins Simulation &	Training		Manufacturer Location: Co	edar Rapids, Iowa		
Administrative Leadtime	(in Months): 4			Production Leadtime (in N	Months): 7		
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates	Jan 2017	Jan 2018	Jan 2019	Jan 2020	Jan 2021	Jan 2022	Jan 2023
Delivery Dates	0230GM Service Ready, B=Not Service Ready): A In Item 8 of 13: Training Aids, Devices, Simulators and Simulations For Information To Name: Rockwell Collins Simulation & Training The Leadtime (in Months): 4 Ites FY 2017 FY 2018 FY The Ses Jan 2017 Jan 2018 Jan The Ses Aug 2017 Aug 2018 Aug The Service Ready, B=Not Service Ready): A			Aug 2020	Aug 2021	Aug 2022	Aug 2023
I II I	-						
Installation Information							
Method of Implementa	tion (Organic): Contractor				Installation (Quantity: 0	

LI 0230GM0100 - Stryker (Mod) Army

Exhibit P-3a, Individual Modification: PB 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Modification Number / Title:
2033A / 01 / 20	0230GM0100 / Stryker (Mod)	GM0100 / STRYKER MODIFICATION

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

Modification Item 9 of 13: Double V Hull (DVH) A1 ECP

MDAP/MAIS Code:

Manufacturer Information

Manuacturer information	JII										
Manufacturer Name: GM	GDLS Defense Group, L.L.	С		Manufacturer Location: St	erling Heights, Michgan						
Administrative Leadtime	(in Months): 2			Production Leadtime (in M	fonths): 6						
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023				
Contract Dates			Nov 2018	Nov 2019	Nov 2020	Nov 2021	Nov 2022				
Delivery Dates			May 2019	May 2020	May 2020 May 2021 May 2022						

Installation Information

Method of Implementation: Combination of Army Depot personnel and contractors at a government facility.

	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	- 1 -	- 1 -	- 1 -	14 / 0.000	- 1 -	14 / 0.000	38 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	52 / 0.000
FY 2020	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	48 / 0.000	48 / 0.000	- 1 -	- 1 -	- 1 -	96 / 0.000
FY 2021	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	70 / 0.000	71 / 0.000	- 1 -	- 1 -	141 / 0.000
FY 2022	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	46 / 0.000	44 / 0.000	- 1 -	90 / 0.000
FY 2023	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	32 / 0.000	30 / 0.000	62 / 0.000
To Complete	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	688 / 0.000	688 / 0.000
Total	0 / 0.000	0 / 0.000	0 / 0.000	14 / 0.000	0 / 0.000	14 / 0.000	86 / 0.000	118 / 0.000	117 / 0.000	76 / 0.000	718 / 0.000	1,129 / 0.000

Installation Schedule

			FY 2	2017			FY 2	2018			FY 2019				FY 2	2020			FY 2	2021			FY 2	2022			FY 2				
	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	-	-	-	-	-	-	-	-	-	52	-	-	-	96	-	-	-	141	-	-	-	90	-	-	-	62	-	-	-	688	1,129
Out	-	-	-	-	-	-	-	-	-	-	-	7	7	19	19	24	24	24	24	35	35	36	35	23	23	22	22	16	16	718	1,129

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Exhibit P-3a, Individual Modification: PB 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Modification Number / Title:
2033A / 01 / 20	0230GM0100 / Stryker (Mod)	GM0100 / STRYKER MODIFICATION

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

Modification Item 10 of 13: Lethality Engineering Change Proposals (ECPs)

Manufacturer Information

Manufacturer Name: TB	D			Manufacturer Location: St	erling Heights, Michigan					
Administrative Leadtime	(in Months): 3			Production Leadtime (in M	fonths): 9					
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023			
Contract Dates	ontract Dates Dec 2018		Dec 2018	Dec 2019	Dec 2020	Dec 2021	Dec 2022			

Sep 2020

Sep 2019

Installation Information

Delivery Dates

Method of Implementation: Contractor and depot team

	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	- 1 -	- 1 -	- 1 -	60 / 0.000	- 1 -	60 / 0.000	180 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	240 / 0.000
FY 2020	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	75 / 0.000	225 / 0.000	- 1 -	- 1 -	- 1 -	300 / 0.000
FY 2021	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	74 / 0.000	219 / 0.000	- 1 -	- 1 -	293 / 0.000
FY 2022	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	51 / 0.000	151 / 0.000	- 1 -	202 / 0.000
FY 2023	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	50 / 0.000	147 / 0.000	197 / 0.000
To Complete	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	1,967 / 0.000	1,967 / 0.000
Total	0 / 0.000	0 / 0.000	0 / 0.000	60 / 0.000	0 / 0.000	60 / 0.000	255 / 0.000	299 / 0.000	270 / 0.000	201 / 0.000	2,114 / 0.000	3,199 / 0.000

Installation Schedule

			FY 2	2017			FY 2	2018			FY 2019				FY 2	020			FY 2	2021			FY 2	022			FY 2				
	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	-	-	-	-	-	-	-	-	-	-	240	-	-	-	300	-	-	-	293	-	-	-	202	-	-	-	197	-	-	1,967	3,199
Out	-	-	-	-	-	-	-	-	-	-	-	-	60	60	60	60	75	75	75	75	74	73	73	73	51	51	50	50	50	2,114	3,199

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Army

LI 0230GM0100 - Stryker (Mod)

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Sep 2023

Sep 2022

Sep 2021

Exhibit P-3a, Indiv	idual Modification: F	PB 2019 Army				Date: February 2018	3						
Appropriation / Bu 2033A / 01 / 20	idget Activity / Budg	et Sub Activity:	P-1 Line Item Nu 0230GM0100 / St		Modification Number / Title: GM0100 / STRYKER MODIFICATION								
ID Code (A=Service Ready,	, B=Not Service Ready):A		•	MDAP/MAIS C	ode:	,							
Modification Item 11 of	f 13: Double V Hull (DVH) S	Survivability and Safety N	Mods										
Manufacturer Informat	ion												
Manufacturer Name: GM	1 GDLS Defense Group, L.L	C.		Manufacturer Location: St	terling Heights, Michigar	1							
Administrative Leadtime	(in Months): 4			Production Leadtime (in Months): 4									
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023						
Contract Dates													
Delivery Dates													
	-												
Installation Information					ļ								
Method of Implementat	tion (Organic): Prime Cont	ractor			Installation C	luantity: 0							

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Exhibit P-3a, Indiv	vidual Modification: P	B 2019 Army				Date: February 201	8
Appropriation / Bu 2033A / 01 / 20	udget Activity / Budge	et Sub Activity:	P-1 Line Item Nu 0230GM0100 / St			Modification Numb GM0100 / STRYKE	
ID Code (A=Service Ready	, B=Not Service Ready): A		•	MDAP/MAIS	Code:		
Modification Item 12 o	f 13: 30mm ICVD Operation	al Needs Statement (Of	NS)	,			
Manufacturer Informat	tion						
Manufacturer Name: GN	M GDLS Defense Group, L.L	.C.		Manufacturer Location:	Sterling Heights, Michiga	n	
Administrative Leadtime	e (in Months): 8			Production Leadtime (in	Months): 16		
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: Prime Contactor

	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	- 1 -	16 / 0.000	67 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	83 / 0.000
FY 2017	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2021	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2022	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2023	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	0 / 0.000	16 / 0.000	67 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	83 / 0.000

Installation Schedule

	FY 2017 FY 2018				FY 2019 FY 2020				FY 2021			FY 2022				FY 2023															
	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	83	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	83
Out	-	-	-	-	16	22	22	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	83

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Exhibit P-3a, Indiv	idual Modification: Pl	3 2019 Army				Date: February 201	8				
Appropriation / Bu 2033A / 01 / 20	Idget Activity / Budge	t Sub Activity:	P-1 Line Item Nu 0230GM0100 / St			Modification Number / Title: GM0100 / STRYKER MODIFICATION					
ID Code (A=Service Ready,	, B=Not Service Ready) : A		1	MDAP/MAIS Code:							
Modification Item 13 of	f 13: Program Management S	Support		<u>. </u>							
Manufacturer Informat	ion										
Manufacturer Name: PM	SBCT and GM GDLS Defer	nse Group, L.L.C.		Manufacturer Location: W	arren and Sterling Heigh	its, Michigan					
Administrative Leadtime	(in Months): 3			Production Leadtime (in N	Months):						
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023				
Contract Dates	Dec 2016	Dec 2017	Dec 2018	Dec 2019	Dec 2020	Dec 2021	Dec 2022				
Delivery Dates	Dec 2016	Dec 2017	Dec 2018	Dec 2019	Dec 2020	Dec 2021	Dec 2022				
Installation Information	1										
Method of Implementa	tion (Organic): Government	and contractor person	nel		Installation Q	uantity: 0					

LI 0230GM0100 - Stryker (Mod) Army

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Exhibit P-40, Budget Line Item Justification: PB 2019 Army Date: February 2018

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: 0363G85200 / Stryker Upgrade

Modification of Tracked Combat Vehicles

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

Line Itom MDAD/MAIS Code: N/A

Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Procurement Quantity (Units in Each)	133	70	-	3	-	3	-	-	-	-	-	206
Gross/Weapon System Cost (\$ in Millions)	412.043	418.561	-	21.900	-	21.900	-	-	-	-	-	852.504
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	412.043	418.561	-	21.900	-	21.900	-	-	-	-	-	852.504
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	412.043	418.561	-	21.900	-	21.900	-	-	-	-	-	852.504
(The following	Resource Sumi	mary rows are fo	r informational p	ourposes only. Th	e corresponding	p budget requests	s are documente	ed elsewhere.)	•			
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	3,098.068	5,979.443	-	7,300.000	-	7,300.000	-	-	-	-	-	4,138.369

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. The May 2011 ADM approved production of two Brigades, a 3rd DVH Brigade was approved in September 2011 with a 4th approved in September 2014. A DVH brigade is constructed through an exchange effort by which components and mission equipment packages are removed from flat bottom Strykers to be reassembled in the DVH structure along with the associated DVH-unique components. In May 2012, Phase 1 (Technology Development), Stryker DVH A1 Engineer Change Proposal (ECP), formally ECP1, development effort was approved to provide power generation, suspension, and network upgrades to restore Stryker DVH Space. Weight, and Power-Cooling (SWaP-C) lost as a result of incorporating vehicle changes to counter threats encountered during deployment operations. In May 2013, Phase II (On the DVH A1 ECP) development was approved. The DVH A1 ECP had a successful production decision in Aug 2016. DVH A1 ECP vehicle changes will be incorporated into the build of DVH-equipped Stryker vehicles using the exchange process. The Stryker Brigade Combat Team (SBCT), equipped with DVH A1 ECP vehicles, can be used across the full spectrum of military operations. The SBCT 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 A1 ECP vehicles are:

DVH A1 ECP Infantry Carrier: The DVH A1 ECP 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 A1 ECP Infantry Carrier Vehicles with a Scout Dismount Kit provide for dismounted force situational awareness, gathering and transmitting real time intelligence while moving throughout the battlefield in close, complex, and urban terrain.

DVH A1 ECP Mortar Carrier: The DVH A1 ECP 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 A1 ECP Commander's Vehicle: The DVH A1 ECP 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 A1 ECP Fire Support Vehicle: The DVH A1 ECP 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.

UNCLASSIFIED LI 0363G85200 - Stryker Upgrade 42 Page 1 of 10 P-1 Line #5 Army

Exhibit P-40, Budget Line Item Justification: PB 2019 Army Date: February 2018

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: 0363G85200 / Stryker Upgrade

Modification of Tracked Combat Vehicles

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

Program Elements for Code B Items: N/A

Other Related Program Elements: 0203735A

Line Item MDAP/MAIS Code: N/A

DVH A1 ECP Engineer Squad Vehicle: The DVH A1 ECP 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 A1 ECP Medical Evacuation Vehicle: The DVH A1 ECP Medical Evacuation Vehicle (MEVV) is the Battalion Aid Station for brigade units, providing treatment for serious injury and advanced trauma cases.

DVH A1 ECP Antitank Guided Missile Vehicle: The DVH A1 ECP 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.

Secondar	y Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	70	-	3	-	3	-	-	-	-
	Total Obligation Authority	418.561	-	21.900	-	21.900	-	-	-	-
Total:	Quantity	70	-	3	-	3	-	-	-	-
Secondary Distribution	Total Obligation Authority	418.561	-	21.900	-	21.900	-	-	-	-

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Exhibit P-40, Budget Line Item Justification: PB 2019 Army Date: February 2018

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: 0363G85200 / Stryker Upgrade

Modification of Tracked Combat Vehicles

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

Program Elements for Code B Items: N/A

Other Related Program Elements: 0203735A

Line Item MDAP/MAIS Code: N/A

	Exhibits Schedule				Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	G85200 / Stryker Upgrade	P-5a, P-21	Α		133 / 412.043	70 / 418.561	- / -	3 / 21.900	- / -	3 / 21.900
P-40	Total Gross/Weapon System Cost				133 / 412.043	70 / 418.561	- 1 -	3 / 21.900	- 1 -	3 / 21.900

^{*}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 sum exactly due to rounding.

Justification:

FY 2019 Base procurement dollars in the amount of \$21.900 million supports the exchange of 3 Stryker Flat Bottom vehicles configured as a Double V Hull (DVH) A1 Engineering Change Proposal (ECP) vehicles. DVH A1 ECP vehicles will provide increased electrical power, mechanical power, weight margin, and cooling. Combined with a digital backbone, the enhanced DVH A1 ECP fleet will be able to host the future network while maintaining protection and mobility characteristics.

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 0363G85200 - Stryker Upgrade Army

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Exhibit P-5, Cost Analysis: PB 2019 Army

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

Date: February 2018

Item Number / Title [DODIC]:
0363G85200 / Stryker Upgrade

ADAP/MAIS Code:

ADAP/MAIS Code:

ID Code (A=Service Ready, B=Not Service Ready): A		M	DAP/MAIS Code:			
Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity (Units in Each)	133	70	-	3	-	3
Gross/Weapon System Cost (\$ in Millions)	412.043	418.561	-	21.900	-	21.900
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	412.043	418.561	-	21.900	-	21.900
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	412.043	418.561	-	21.900	-	21.900
(The following Resource Summary rows are for information	onal purposes only. The cor	responding budget reques	s are documented elsewhe	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	3,098.068	5,979.443	-	7,300.000	-	7,300.000

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

	P	rior Years	S		FY 2017			FY 2018		FY	/ 2019 Ba	se	F	/ 2019 OC	:0	F	Y 2019 T ot	tal
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Tota Cost (\$ M)									
lyaway Cost																		
Recurring Cost																		
DVH A1 ECP Infantry Carrier Vehicle ^(†)	3,032.219	64	194.062	3,047.176	34	103.604	-	-	-	-	-	-	-	-	-	-	-	
DVH A1 ECP Anti- Tank Guided Missile Veh ^(†)	3,005.800	5	15.029	3,162.800	5	15.814	-	-	-	-	-	-	-	-	-	-	-	
DVH A1 ECP Mortar Carrier Vehicle ^(†)	3,002.450	20	60.049	3,245.000	6	19.470	-	-	-	-	-	-	-	-	-	-	-	
DVH A1 ECP Fire Support Vehicle ^(†)	3,018.200	5	15.091	3,166.125	8	25.329	-	-	-	-	-	-	-	-	-	-	-	
DVH A1 ECP Engineer Squad Vehicle ^(†)	2,934.200	5	14.671	3,080.857	7	21.566	-	-	-	-	-	-	-	-	-	-	-	
DVH A1 ECP Commander's Vehicle ^(†)	2,990.250	16	47.844	3,229.500	10	32.295	-	-	-	3,364.000	3	10.092	-	-	-	3,364.000	3	10
Program Management Support (Govt)	-	-	1.495	-	-	86.751	-	-	-	-	-	11.391	-	-	-	-	-	1
System Fielding Support	-	-	1.915	-	-	81.499	-	-	-	-	-	0.043	-	-	-	-	-	
DVH A1 ECP Medical Evacuation Vehicle ^(†)	2,911.444	18	52.406	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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Exhibit P-5, Cost Analysis: PB 2019 Army

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

Date: February 2018

Item Number / Title [DODIC]:
0363G85200 / Stryker Upgrade

G85200 / Stryker Upgrade

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

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

MDAP/MAIS Code:

	F	Prior Years	;		FY 2017			FY 2018		FY	′ 2019 Ba	se	F	Y 2019 OC	0	F	/ 2019 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)									
Government Furnished Equipment (GFE)	-	-	5.274	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	407.836	-	-	386.328	-	-	-	-	-	21.526	-	-	-	-	-	21.526
Subtotal: Flyaway Cost	-	-	407.836	-	-	386.328	-	-	-	-	-	21.526	-	-	-	-	-	21.520
Package Fielding Cost																		
Non Recurring Cost																		
Authorized Stockage List	-	-	4.207	-	-	7.212	-	-	-	-	-	0.374	-	-	-	-	-	0.374
Subtotal: Non Recurring Cost	-	-	4.207	-	=	7.212	-	-	-	-	-	0.374	-	-	-	-	-	0.374
Subtotal: Package Fielding Cost	-	-	4.207	-	-	7.212	-	-	-	-	-	0.374	-	-	-	-	-	0.374
Support - System Engineering	Cost																	
System Engineering	-	-	-	-	-	25.021	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Support - System Engineering Cost	-	-	-	-	-	25.021	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost	3,098.068	133	412.043	5,979.443	70	418.561	-	-	-	7,300.000	3	21.900	-	-	-	7,300.000	3	21.900

Secondar	y Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Army	Quantity	70	-	3	-	3
	Total Obligation Authority	418.561	-	21.900	-	21.900
Total:	Quantity	70	-	3	-	3
Secondary Distribution	Total Obligation Authority	418.561	-	21.900	=	21.900

^(†) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2019 Army

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

Date: February 2018

Item Number / Title [DODIC]:
0363G85200 / Stryker Upgrade

G85200 / Stryker Upgrade

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
DVH A1 ECP Infantry Carrier Vehicle		2016	GM GDLS Defense Group L.L.C. / Shelby Township	SS / FFP	TACOM	Sep 2016	Sep 2017	64	2,442.030	Y		Sep 2015
DVH A1 ECP Infantry Carrier Vehicle		2017	GM GDLS Defense Group L.L.C. / Shelby Township	SS / FFP	TACOM	Aug 2017	Aug 2018	34	3,047.180	Y		Sep 2015
DVH A1 ECP Anti-Tank Guided Missile Veh		2016	GM GDLS Defense Group L.L.C. / Shelby Township	SS / FFP	TACOM	Sep 2016	Apr 2018	5	3,015.000	Y		
DVH A1 ECP Anti-Tank Guided Missile Veh		2017	GM GDLS Defense Group L.L.C. / Shelby Township	SS / FFP	TACOM	Aug 2017	Feb 2019	5	3,162.800	Y		
DVH A1 ECP Mortar Carrier Vehicle		2016	GM GDLS Defense Group L.L.C. / Shelby Township	SS / FFP	TACOM	Sep 2016	Dec 2017	20	3,012.000	Y		
DVH A1 ECP Mortar Carrier Vehicle		2017	GM GDLS Defense Group L.L.C. / Shelby Township	SS / FFP	TACOM	Aug 2017	Jan 2019	6	3,245.000	Y		
DVH A1 ECP Fire Support Vehicle		2016	GM GDLS Defense Group L.L.C. / Shelby Township	SS / FFP	TACOM	Sep 2016	Feb 2018	5	3,028.000	Y		
DVH A1 ECP Fire Support Vehicle		2017	GM GDLS Defense Group L.L.C. / Shelby Township	SS / FFP	TACOM	Aug 2017	Jan 2019	8	3,166.130	Υ		
DVH A1 ECP Engineer Squad Vehicle		2016	GM GDLS Defense Group L.L.C. / Shelby Township	SS/FFP	TACOM	Sep 2016	Nov 2017	5	2,944.000	Y		
DVH A1 ECP Engineer Squad Vehicle		2017	GM GDLS Defense Group L.L.C. / Shelby Township	SS / FFP	TACOM	Aug 2017	Nov 2018	7	3,080.860	Y		
DVH A1 ECP Commander's Vehicle ^(†)		2016	GM GDLS Defense Group L.L.C. / Shelby Township	SS / FFP	TACOM	Sep 2016	Oct 2017	16	3,000.000	Y		
DVH A1 ECP Commander's Vehicle ^(†)		2017	GM GDLS Defense Group L.L.C. / Shelby Township	SS / FFP	TACOM	Aug 2017	Sep 2018	10	3,229.500	Y		
DVH A1 ECP Commander's Vehicle ^(†)		2019	GM GDLS Defense Group L.L.C. / Shelby Township	SS / FPIF	TACOM	Nov 2018	Oct 2019	3	3,364.000	Y		
DVH A1 ECP Medical Evacuation Vehicle		2016	GM GDLS Defense Group L.L.C. / Shelby Township	SS/FFP	TACOM	Sep 2016	Mar 2018	18	2,911.440	Y		

^(†) indicates the presence of a P-21

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Ex	thi	bit F	P-21, Pro	oduct	ion Sc	hedu	le: P	3 201	9 Arm	าy														Date	e: Fel	oruary	/ 2018	3			
	-	•	iation / 01 / 20	Budg	et Acti	vity /	Bud	get S	ub Ac	tivity	:		Line 33G85														Title cer Up				
				lements in Each)								Fiscal Y	ear 2016											Fiscal Y	ear 2017						В
					ACCEPT									C	alendar	Year 201	16								Cale	ndar Yea	r 2017				L
0 C 0	R	FY	SERVICE	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	J U	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	A U G	S E P	A N C E
DV	ΉΑ	1 ECP	Commander's	Vehicle									·																		
	1	2016	ARMY	16	0	16											_	Α -	-	-	-	-	-	-	-	-	-	-	-	-	16
	1	2017	ARMY	10	0	10																							Α -	-	10
	1	2019	ARMY	3	0	3																									3
	•		,				O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U	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	

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Exh	ibit	P-21, Pr	oduct	ion Sc	hedu	e: PE	3 201	9 Arm	ıy														Date	: Fel	oruary	/ 2018	3			
		riation / 01 / 20	Budg	et Acti	vity /	Budç	get Sı	ıb Ac	tivity	:	1					Title:										Title er Up				
			lements in Each)								Fiscal Y	ear 2018	1										Fiscal Y	ear 2019						В
				ACCEPT									(Calendar	Year 20	18								Caler	ndar Yea	r 2019				Ĺ
M D F C R	FY	SERVICE	PROC QTY	PRIOR TO 1 OCT 2017	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	J U	A U G	S E P	A N C
DVH A	A1 ECI	Commander	s Vehicle														ll													
1	2016	ARMY	16	0	16	4	7	-	-	-	-	-	-	-	3	2														
1	2017	ARMY	10	0	10	-	-	-	-	-	-	-	-	-	-	-	5	4	1											
1	2019	ARMY	3	0	3											•			Α -	-	-	-	-	-	-	-	-	-	-	
					,	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	J U	A U G	S E P	

Exh	ibit F	P-21, Pro	oduct	ion Sc	hedu	le: PE	3 201	9 Arn	ıy														Date	: Feb	oruary	/ 2018	3			
	-	iation / 01 / 20	Budg	et Acti	vity /	Budç	get Sı	ıb Ac	tivity	:				Num Stryk													[DOI			
			lements in Each)								Fiscal Y	ear 2020											Fiscal Y	ear 2021						В
				ACCEPT				_					(Calendar	Year 202	20								Caler	ndar Yea	r 2021				Ļ
0 F C R O #	FY	SERVICE	PROC QTY	PRIOR TO 1 OCT 2019	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	J J	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	N U	J J	O C >	S E P	N C
DVH	A1 ECP	Commander's	s Vehicle																											
1	2016	ARMY	16	16	0																									1
1	2017	ARMY	10	10	0																									
1	2019	ARMY	3	0	3	3																								
	•					O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U	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 2019 Army		Date: February 2018
,	P-1 Line Item Number / Title: 0363G85200 / Stryker Upgrade	Item Number / Title [DODIC]: G85200 / Stryker Upgrade

		Product	tion Rates (Each /	Month)				Procurement Le	adtime (Months)			
MFR						Init	ial			Reo	rder	
Ref #	Manufacturer Name - Location	MSR For 2019	1-8-5 For 2019	MAX For 2019	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	GM GDLS Defense Group L.L.C Shelby Township	10	10	60	12	12	13	25	6	2	10	12

Remarks:

Lead time for Stryker DVH A1 ECP variants is 11-20 months.****

The DVH A1 ECP Production decision Acquisition Decision Memorandum limited the FY16 procurement quantity to 130 vehicles. Therefore, 3 ICVVs of the FY16 total procurement quantity of 133, was procured with the FY17 award in Aug 2017.****

"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 2019 Army Date: February 2018

Program Elements for Code B Items: N/A

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: 1678GZ2400 / Bradley Program (MOD)

Other Related Program Elements: 0203735A

Modification of Tracked Combat Vehicles

Line Item MDAP/MAIS Code: N/A

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

	Prior			FY 2019	FY 2019	FY 2019					То	
Resource Summary	Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	5,117.938	265.333	474.851	625.424	50.000	675.424	637.190	663.460	650.662	840.733	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	5,117.938	265.333	474.851	625.424	50.000	675.424	637.190	663.460	650.662	840.733	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	5,117.938	265.333	474.851	625.424	50.000	675.424	637.190	663.460	650.662	840.733	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	e corresponding	budget requests	s are documente	d elsewhere.)				1
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	3,445.883	4,356.431	9,334.687	3,333.333	8,236.878	5,740.450	6,031.455	6,138.321	5,798.159	Continuing	Continuing

Description:

Bradley Program (MOD) procures upgrades to the family of Bradley Fighting Vehicles. The Bradley Program (MOD) procures hardware for mods from the Engineering Change Proposal (ECP) program approved by the Army Acquisition Executive (AAE) in July 2011. There are three ECPs in this program, ECP 1 improves vehicle suspension with improved shocks, roadarms, torsion bars and extended life track. A4 improves the power train and electrical system to enable the Bradley Vehicle fleet to host inbound technologies from Army Program of Records including Handheld Manpack Small Radios (HMS) and Joint Battle Command-Platform (JBC-P). The Bradley M2A4 and M7A4 Vehicles are the combination of the M2A3 & M7 Base Vehicle with ECP 1 and A4 components installed and integrated. A5 improves the lethality and enables the current fleet to host inbound technologies from Army Programs of Record (i.e. 3GEN FLIR) resulting in an M2A5 / M7A5. Additionally, the Bradley Program (MOD) procures M2 conversions, safety upgrades, upgrades to the transmission, including but not limited to high priority improvements, survivability enhancements and obsolescence mitigation.

Secondar	y Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	265.333	474.851	625.424	50.000	675.424	637.190	663.460	650.662	840.733
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	265.333	474.851	625.424	50.000	675.424	637.190	663.460	650.662	840.733

Exhibit P-40, Budget Line Item Justification: PB 2019 Army Date: February 2018

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: 1678GZ2400 / Bradley Program (MOD)

Modification of Tracked Combat Vehicles

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

Program Elements for Code B Items: N/A

Other Related Program Elements: 0203735A

Line Item MDAP/MAIS Code: N/A

	Exhibits Schedule				Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-3a	GZ2400 / Bradley Program MOD (Increase Performance)		Α		- / 5,117.938	- / 265.333	- / 474.851	- / 625.424	- / 50.000	- / 675.424
P-40	Total Gross/Weapon System Cost				- / 5,117.938	- / 265.333	- / 474.851	- / 625.424	- / 50.000	- / 675.424
	Exhibits Schedule				FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-3a	GZ2400 / Bradley Program MOD (Increase Performance)		Α		- / 637.190	- / 663.460	- / 650.662	- / 840.733	Continuing	Continuing
P-40	Total Gross/Weapon System Cost				- / 637.190	- / 663.460	- / 650.662	- / 840.733	Continuing	Continuing

^{*}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 sum exactly due to rounding.

Justification:

FY 2019 Base procurement dollars in the amount of \$625.424 million supports procurement of multiple modifications to the Bradley Family of Vehicles (FOV) including the following: procurement and installation of upgrade ECP 1 kits; procurement and installation of upgrade A4 kits; High Priority Improvements, Training Aids, Devices, Simulators and Simulations (TADSS) and program/engineering support. Current projections indicate that the Bradley Infantry Fighting Vehicle will likely remain in the ABCT formation until the 2050s.

FY 2019 OCO Procurement dollars in the amount of \$50.000 million supports COCOM requirement for unit equipment sets to deter potential adversaries and support the European Deterrence Initiative (EDI). Funding will support the procurement of 59 Active Protection System (APS) for the Bradley Infantry Fighting 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.

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Appropriation / Budget Activity / Budget Sub Activity: 2033A / 01 / 20 P-1 Line Item Number / Title: 1678GZ2400 / Bradley Program (MOD) Modification Number / Title: GZ2400 / Bradley Program MOD	Exhibit P-3a, Individual Modification: PB 2019 Army	Date: February 2018	3
	1		

ID Code (A=Service Ready, B=Not Service Ready)	: A					MDAP/MAI	S Code:					
Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	5,117.938	265.333	474.851	625.424	50.000	675.424	637.190	663.460	650.662	840.733	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	5,117.938	265.333	474.851	625.424	50.000	675.424	637.190	663.460	650.662	840.733	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	5,117.938	265.333	474.851	625.424	50.000	675.424	637.190	663.460	650.662	840.733	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	ne corresponding	budget requests	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	3,445.883	4,356.431	9,334.687	3,333.333	8,236.878	5,740.450	6,031.455	6,138.321	5,798.159	Continuing	Continuing

Description:

The Bradley Program (MOD) procures hardware for mods from the Engineering Change Proposal (ECP) program approved by the Army Acquisition Executive (AAE) in July 2011. There are three ECPs in this program. ECP 1 improves vehicle suspension with improved shocks, road arms, torsion bars and extended life track. A4 improves the power train and electrical system to enable the Bradley Vehicle fleet to host inbound technologies from Army Program of Records (i.e. HMS, JBC-P). A5 improves the lethality and enables the current fleet to host inbound technologies from Army Programs of Record (i.e. 3GEN FLIR). Funds training device obsolescence mitigation; 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) - Provides funding for the components, application, and engineering support of improvements designed to resolve problems identified in the field, improve safety, integrate new equipment, develop and integrate mod kits, including short range air defense capabilities, and bring the vehicles into compliance with transportability and recovery requirements. Provides funding to maintain software versions and update integrated logistics products while in production.

MOD 3 (Training Equipment Devices) - Provides funding for personnel sustainment support and delivery of BFV Training Aids, Devices, Simulators and Simulations (TADSS). Funding supports ongoing effort to replace the Bradley Advanced Training System (BATS) with Conduct of Fire Trainer-Situational Awareness (COFT-SA) to mitigate obsolescence of the Bradley advanced training system, Table Top Trainers and Maintenance Trainers in support of the Bradley Vehicle systems. Also, system training devices are required to remain current with upgraded fleet configuration/capabilities. TADSS include Maintenance Trainers, Gunnery Trainer Tech Refresh, Desktop Trainer Lesson modifications, and Bradley Common Software Library modifications. Includes nonrecurring 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 ECP 1, A4, & A5 hardware, conversion of Bradley configurations and industrial base mitigation.

MOD 6 (BFVS ECP1 Modification/Field Upgrades) - Provides funding for the components and applications related to fielding modifications to the Bradley Vehicle fleet. ECP 1 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.

MOD 7 (BFVS A4 Modifications) - Provides funding for the components, applications, integration, and engineering support related to modifications to the entire Bradley A3 Fighting Vehicle fleet. A4 improves the power train and electrical system to enable the current fleet to host inbound technologies from Army Programs of Record (i.e. HMS, JBC-P) resulting in an M2A4 / M7A4. Costs associated with kit installations are included in the funding for the prime hardware contracts.

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Exhibit P-3a, Individual Modification: PB 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Modification Number / Title:
2033A / 01 / 20	1678GZ2400 / Bradley Program (MOD)	GZ2400 / Bradley Program MOD

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

MOD 11 (Survivability Enhancements) - Provides funding for procurement and fielding of Survivability Enhancements to include Active Protective Systems (APS) and associated counter measures in support of the European Deterrence Initiative (EDI).

MOD 12 (BFVS A5 Modifications) - Provides funding for the components, installation, and engineering support related to integration of A5 ECP (Lethality) to the Bradley Fighting Vehicle Fleet. A5 improves the lethality and enables the current fleet to host inbound technologies from Army Programs of Record (i.e. 3GEN FLIR) resulting in an M2A5 / M7A5. Costs associated with installations are included in the funding for the prime hardware contracts.

Seconda	ary Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	265.333	474.851	625.424	50.000	675.424	637.190	663.460	650.662	840.733
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	265.333	474.851	625.424	50.000	675.424	637.190	663.460	650.662	840.733

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Exhibit P-3a, Individual Modification: PB 2019 Army

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

P-1 Line Item Number / Title:
1678GZ2400 / Bradley Program (MOD)

GZ2400 / Bradley Program MOD

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

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

Vehicle Variants

	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M										
Procurement												
Modification Item 1 of 11: Bradley Reactive Armor												
A Kits												
Recurring												
Kit Quantity	2,676 / 765.100	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	2,676 / 765.10
Subtotal: Recurring	2,676 / 765.100	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	2,676 / 765.10
Subtotal: Bradley Reactive Armor	2,676 / 765.100	- / -	- / -	- /0.000	- / -	- /0.000	- / -	- / -	- / -	- / -	- / -	2,676 / 765.10
Modification Item 2 of 11: BFVS High Priority Improvements						,						,
A Kits												
Recurring												
CMED Driver Vision Upgrade	617 / 85.500	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 0.000	617 / 85.50
Reset Mods	756 / 10.500	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / -	- /0.000	756 / 10.50
INU/Talon	271 / 5.000	- 1 -	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / -	- /0.000	271 / 5.00
Heat Abatement/Cargo Hatch	2,764 / 2.870	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	2,764 / 2.87
High Priority Mods	- / 140.539	- /41.483	- 160.770	- / 81.684	- 1 -	- / 81.684	- <i>I</i> 42.583	- 142.722	- <i>I</i> 44.078	- /43.926	- /0.000	- / 497.78
Urban Survivability Mods	5,276 <i>l</i> 2,098.985	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / -	- 1 -	- 1 -	- / -	- /0.000	5,276 2,098.98
Subtotal: Recurring	9,684 / 2,343.394	- /41.483	- /60.770	- /81.684	- / -	- /81.684	- /42.583	- /42.722	- /44.078	- /43.926	- / -	9,684 2,700.64
Subtotal: BFVS High Priority Improvements	9,684 / 2,343.394	- /41.483	- /60.770	- /81.684	- / -	- /81.684	- /42.583	- /42.722	- /44.078	- /43.926	- / -	9,684 2,700.64
Modification Item 3 of 11: Training Equipment Devices	:											
A Kits												
Recurring												_
Training Equipment	- / 119.152	- /1.484	- /6.066	- / 14.592	- 1 -	- / 14.592	- /2.279	- /3.527	- /2.619	- /1.999	- / 0.000	- / 151.71
Subtotal: Recurring	- /119.152	- /1.484	- /6.066	- /14.592	- / -	- /14.592	- /2.279	- /3.527	- /2.619	- /1.999	- / -	- /151.71
Subtotal: Training Equipment Devices	- /119.152	- /1.484	- /6.066	- /14.592	- / -	- /14.592	- /2.279	- /3.527	- /2.619	- /1.999	- / -	- /151.71
Modification Item 4 of 11: ODS Situational Awareness				'		'						,
A Kits												-
Recurring												-
ODS Situational Awareness	770 / 1,199.553	- 1 -	- 1 -	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0,000	770 / 1,199.55

Exhibit P-3a, Individual Modification: PB 2019 Army

Date: February 2018

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

P-1 Line Item Number / Title:
1678GZ2400 / Bradley Program (MOD)

Modification Number / Title:
GZ2400 / Bradley Program MOD

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

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

Vehicle Variants

	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ N										
IBAS Refresh	- /8.850	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	- /8.85
ODS-SA VEHICLE VERSION IDENTIFICATION	- / 12.500	- 1 -	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	- / 12.50
Subtotal: Recurring	770 / 1,220.903	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	770 / 1,220.90
Subtotal: ODS Situational Awareness	770 / 1,220.903	- / -	- / -	- /0.000	- / -	- /0.000	- / -	- / -	- / -	- / -	- / -	770 / 1,220.90
Modification Item 5 of 11: Program/Engineering Support												
A Kits												
Recurring												
Government PM support	- / 131.411	- / 15.591	- /20.067	- <i>I</i> 14.474	- 1 -	- <i>I</i> 14.474	- / 14.752	- / 15.053	- / 15.367	- / 15.688	- /0.000	- / 242.40
Contractor PM Support	- /109.271	- /4.060	- /5.226	- /3.619	- 1 -	- /3.619	- /3.688	- /3.764	- /3.842	- /3.922	- /0.000	- / 137.39
Subtotal: Recurring	- /240.682	- /19.651	- /25.293	- /18.093	- / -	- /18.093	- /18.440	- /18.817	- /19.209	- /19.610	- / -	- /379.79
Subtotal: Program/Engineering Support	- /240.682	- /19.651	- /25.293	- /18.093	- / -	- /18.093	- /18.440	- /18.817	- /19.209	- /19.610	- / -	- /379.7
Modification Item 6 of 11: BFVS ECP 1 Modification/ Field Upgrades												
A Kits												
Recurring												
BFVS ECP 1 Modification	1,080 / 151.686	276 / 48.618	345 / 67.637	345 / 59.197	- 1 -	345 / 59.197	345 / 60.610	345 / 62.413	345 / 64.748	263 / 52.040	- /0.000	3,344 / 566.94
BFVS Field Conversion M2 Common Stowage	- / 51.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	- / 51.00
BFVS Underbelly	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	138 / 21.349	138 / 19.942	138 / 19.499	- /0.000	414 / 60.79
Subtotal: Recurring	1,080 / 202.686	276 / 48.618	345 / 67.637	345 / 59.197	- / -	345 / 59.197	345 / 60.610	483 / 83.762	483 / 84.690	401 / 71.539	- / -	3,758 / 678.73
Subtotal: BFVS ECP 1 Modification/Field Upgrades	1,080 / 202.686	276 / 48.618	345 / 67.637	345 / 59.197	- / -	345 / 59.197	345 / 60.610	483 / 83.762	483 / 84.690	401 / 71.539	- / -	3,758 / 678.73
Modification Item 7 of 11: BFVS A4 Modification												
A Kits												
Recurring												
BFVS A4 Modification	- 1 -	45 / 154.097	135 / 285.085	149 / 451.858	- 1 -	149 / 451.858	147 / 513.278	155 / 514.632	152 / 500.066	207 / 403.359	Continuing	Continuing
Subtotal: Recurring	- / -	45 / 154.097	135 / 285.085	149 / 451.858	- / -	149 / 451.858	147 / 513.278	155 / 514.632	152 / 500.066	207 / 403.359	Continuing	Continuing
Subtotal: BFVS A4 Modification	- / -	45 / 154.097	135 / 285.085	149 / 451.858	- / -	149 / 451.858	147 / 513.278	155 / 514.632	152 / 500.066	207 / 403.359	Continuing	Continuing
	1											
Modification Item 8 of 11: Conversion to M2												
Modification Item 8 of 11: Conversion to M2 A Kits												

LI 1678GZ2400 - Bradley Program (MOD) Army

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Exhibit P-3a, Individual Modification: PB 2019 Army

Date: February 2018

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

P-1 Line Item Number / Title:
1678GZ2400 / Bradley Program (MOD)

Modification Number / Title:
GZ2400 / Bradley Program MOD

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

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

Vehicle Variants

	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)											
Fielding	- /5.942	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	- /5.942
Subtotal: Recurring	195 / 138.187	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	195 / 138.187
Subtotal: Conversion to M2	195 / 138.187	- / -	- / -	- /0.000	- / -	- /0.000	- / -	- / -	- / -	- / -	- / -	195 / 138.187
Modification Item 9 of 11: Braking Safety/ Transmission Industrial Base												
A Kits												
Recurring												
Transmission	266 / 87.834	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	266 / 87.834
Subtotal: Recurring	266 / 87.834	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	266 / 87.834
Subtotal: Braking Safety/Transmission Industrial Base	266 / 87.834	- / -	- / -	- /0.000	- / -	- /0.000	- / -	- / -	- / -	- / -	- / -	266 / 87.834
Modification Item 10 of 11: Survivability Enhancements												
A Kits												
Recurring												
Active Protection System (APS)	- 1 -	- 1 -	- /4.571	- /0.000	- 17.758	- 17.758	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	- / 12.329
Subtotal: Recurring	- / -	- / -	- /4.571	- / -	- /7.758	- /7.758	- / -	- / -	- / -	- / -	- / -	- /12.329
B Kits												
Recurring												
Active Protection System (APS)	- 1 -	- 1 -	35 / 25.429	0 / 0.000	59 / 42.242	59 / 42.242	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	94 / 67.671
Subtotal: Recurring	- / -	- / -	35 / 25.429	- / -	59 / 42.242	59 / 42.242	- / -	- / -	- / -	- / -	- / -	94 / 67.671
Subtotal: Survivability Enhancements	- / -	- / -	35 / 30.000	- /0.000	59 / 50.000	59 / 50.000	- / -	- / -	- / -	- / -	- / -	94 / 80.000
Modification Item 11 of 11: BFVS A5 Modification												
A Kits												
Recurring												
BFVS A5 Modification	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	168 / 300.300	Continuing	Continuing
Subtotal: Recurring	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	168 / 300.300	Continuing	Continuing
Subtotal: BFVS A5 Modification	- / -	- / -	- / -	- /0.000	- / -	- /0.000	- / -	- / -	- / -	168 / 300.300	Continuing	Continuing
Subtotal: Procurement, All Modification Items	14,671 / 5,117.938	321 / 265.333	515 / 474.851	494 / 625.424	59 / 50.000	553 / 675.424	492 / 637.190	638 / 663.460	635 / 650.662	776 / 840.733	Continuing	Continuing

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Exhibit P-3a, Individual Modification: PB 2019 Army

Date: February 2018

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

2033A / 01 / 20 | 1678GZ2400 / Bradley Program (MOD) | GZ2400 / Bradley Program MOD

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

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

Vehicle Variants

	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ N										
Modification Item 6 of 11: BFVS ECP 1 Modification/ Field Upgrades	635 / 0.000	414 / 0.000	307 / 0.000	345 / 0.000	- 1 -	345 / 0.000	345 / 0.000	345 / 0.000	345 / 0.000	345 / 0.000	263 / 0.000	3,344 / 0.00
Modification Item 7 of 11: BFVS A4 Modification	- 1 -	- 1 -	- 1 -	11 / 0.000	- 1 -	11 / 0.000	67 / 0.000	139 / 0.000	148 / 0.000	149 / 0.000	2,178 / 0.000	2,692 / 0.00
Modification Item 8 of 11: Conversion to M2	137 / 0.000	42 / 0.000	16 / 0.000	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	195 / 0.00
Modification Item 10 of 11: Survivability Enhancements	- 1 -	- 1 -	35 / 0.000	- 1 -	59 / 0.000	59 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	94 / 0.00
Modification Item 11 of 11: BFVS A5 Modification	- 1 -	- 1 -	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	168 / 0.000	168 / 0.00
Subtotal: Installation	772 / 0.000	456 / 0.000	358 / 0.000	356 / 0.000	59 / 0.000	415 / 0.000	412 / 0.000	484 / 0.000	493 / 0.000	494 / 0.000	2,609 / 0.000	6,493 / 0.00
Total												
Total Cost (Procurement + Support + Installation)	5,117.938	265.333	474.851	625.424	50.000	675.424	637.190	663.460	650.662	840.733	Continuing	Continuing
	-											

Exhibit P-3a, Indivi	idual Modification: P	B 2019 Army				Date: February 2018	
Appropriation / Bu 2033A / 01 / 20	dget Activity / Budge	et Sub Activity:	P-1 Line Item Nur 1678GZ2400 / Bra	mber / Title: dley Program (MOD)		Modification Number GZ2400 / Bradley Pro	
ID Code (A=Service Ready,	B=Not Service Ready) : A			MDAP/MAIS Co	ode:		
Modification Item 1 of 1	11: Bradley Reactive Armor						
Manufacturer Information	on						
Manufacturer Name: GD/	ATP			Manufacturer Location: Bu	rlington, VT		
Administrative Leadtime	(in Months):			Production Leadtime (in Me	onths):		
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates							
Delivery Dates							
Installation Information							
Method of Implementati	ion (Organic): Contractor				Installation (Quantity: 0	

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Exhibit P-3a, Indivi	dual Modification: Pl	3 2019 Army				Date: February 2018	}
Appropriation / Bu	dget Activity / Budge	t Sub Activity:	P-1 Line Item Num	ber / Title:		Modification Number	er / Title:
2033A / 01 / 20			1678GZ2400 / Brad	ley Program (MOD)		GZ2400 / Bradley Pr	ogram MOD
D Code (A=Service Ready,	B=Not Service Ready) : A			MDAP/MAIS Co	ode:		
Modification Item 2 of 1	1: BFVS High Priority Impro	vements		·			
lanufacturer Information	on						
/lanufacturer Name: BAE				Manufacturer Location: YO	ORK, PA		
Administrative Leadtime	(in Months): 6			Production Leadtime (in M	fonths): 12		
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates	Mar 2017	Mar 2018	Mar 2019	Mar 2020	Mar 2021	Mar 2022	Mar 2023
Delivery Dates	Mar 2018	Mar 2019	Mar 2020	Mar 2021	Mar 2022	Mar 2023	Mar 2024
nstallation Information		IWA ZOTO	Wal 2020		Installation Q		inal 2021
nstallation Information		IWA ZOTO	Wal 2020				inal 2021
nstallation Information		INIAI ZOTO	Wal 2020				a. 2021
nstallation Information		IWAI ZOTO	Mai 2020				mai Zoz i
nstallation Information		IWAI ZOTO	Mai 2020				
nstallation Information		IWAI ZOTO	Mai 2020				mai Zoz i
nstallation Information		IWA ZOTO	Mai 2020				
nstallation Information		IWAI ZOTO	Mai 2020				inal 202 i
nstallation Information		IWAI ZOTO	Mai 2020				mai Zoz i
nstallation Information		IWAI ZOTO	Mai 2020				
nstallation Information		IWILA ZOTO	Mai 2020				mai Zoz i
nstallation Information		IWAI ZOTO	Mai 2020				

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Exhibit P-3a, Indiv	vidual Modification: P⊟	3 2019 Army				Date: February 2018	3
Appropriation / Bo 2033A / 01 / 20	udget Activity / Budge	Sub Activity:	P-1 Line Item Nui 1678GZ2400 / Bra	mber / Title: dley Program (MOD)		Modification Number GZ2400 / Bradley Pr	
ID Code (A=Service Ready	y, B=Not Service Ready):A			MDAP/MAIS Co	ode:	I	
Modification Item 3 of	11: Training Equipment Device	es					
Manufacturer Informa	tion						
Manufacturer Name: Oa	asis			Manufacturer Location: Al	JBURN HILLS, MI		
Administrative Leadtime	e (in Months): 5			Production Leadtime (in N	fonths): 12		
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates	Feb 2017	Feb 2018	Feb 2019	Feb 2019	Feb 2020	Feb 2021	Feb 2022
Delivery Dates	Feb 2018	Feb 2019	Feb 2020	Feb 2020	Feb 2021	Feb 2022	Feb 2023
Installation Informatio	n						
Method of Implements	tion (Organic): Contractor				Installation (Quantity: 0	
inctified of implementa	· • · · · · · · · · · · · · · · · · · ·						
meaned of implement							
metrica of implemente							
method of implement							
method of implemente							
method of implement							

P-1 Line #6

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Exhibit P-3a, Individ	ual Modification: PE	3 2019 Army				Date: February 2018	
Appropriation / Bud 2033A / 01 / 20	get Activity / Budge	t Sub Activity:	P-1 Line Item Nui 1678GZ2400 / Bra	mber / Title: adley Program (MOD)		Modification Number GZ2400 / Bradley Pro	
ID Code (A=Service Ready, B=	Not Service Ready): A			MDAP/MAIS Co	de:	'	
Modification Item 4 of 11:		ess					
Manufacturer Information	1						
Manufacturer Name: BAE				Manufacturer Location: YC	PRK, PA		
Administrative Leadtime (ir	n Months):			Production Leadtime (in M	onths):		
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates							
Delivery Dates							
Installation Information							
Method of Implementatio	n (Organic): Contractor				Installation C	Quantity: 0	

LI 1678GZ2400 - Bradley Program (MOD) Army

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Exhibit P-3a, Indivi	dual Modification: Pl	3 2019 Army				Date: February 2018	3
Appropriation / Bu 2033A / 01 / 20	dget Activity / Budge	t Sub Activity:	P-1 Line Item Nui 1678GZ2400 / Bra	mber / Title: idley Program (MOD)		Modification Numb GZ2400 / Bradley Pr	
ID Code (A=Service Ready,	B=Not Service Ready):A			MDAP/MAIS C	ode:		
Modification Item 5 of 1	1: Program/Engineering Su	pport		<u> </u>			
Manufacturer Information	on						
Manufacturer Name: N/A				Manufacturer Location: W	/ARREN, MI		
Administrative Leadtime	(in Months): 3			Production Leadtime (in N	Months): 1		
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates	Dec 2016	Dec 2017	Dec 2018	Dec 2018	Dec 2019	Dec 2020	Dec 2021
Delivery Dates	Jan 2017	Jan 2018	Jan 2019	Jan 2019	Jan 2020	Jan 2021	Jan 2022
Installation Information							
Method of Implementati	ion (Organic): x				Installation (Quantity: 0	

Exhibit P-3a, Individual Modification: PB 2019 Army

Appropriation / Budget Activity / Budget Sub Activity:

2033A / 01 / 20

Date: February 2018

P-1 Line Item Number / Title:

1678GZ2400 / Bradley Program (MOD)

GZ2400 / Bradley Program MOD

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

Modification Item 6 of 11: BFVS ECP 1 Modification/Field Upgrades

Manufacturer Information

Manufacturer Name: Loc	Performance Products Inc,/	Other		Manufacturer Location: Va	arious		
Administrative Leadtime	(in Months): 9			Production Leadtime (in M	fonths): 12		
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates	Jun 2017	Jun 2018	Jun 2019	Sep 2019	Sep 2020	Sep 2021	Sep 2022
Delivery Dates	Jun 2018	Jun 2019	Jun 2020	Sep 2020	Sep 2021	Sep 2022	Sep 2023

Installation Information

Method of Implementation: Contractor

	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	635 / 0.000	414 / 0.000	31 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	1,080 / 0.000
FY 2017	- 1 -	- 1 -	276 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	276 / 0.000
FY 2018	- 1 -	- 1 -	- 1 -	345 / 0.000	- 1 -	345 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	345 / 0.000
FY 2019	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	345 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	345 / 0.000
FY 2020	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	345 / 0.000	- 1 -	- 1 -	- 1 -	345 / 0.000
FY 2021	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	345 / 0.000	- 1 -	- 1 -	345 / 0.000
FY 2022	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	345 / 0.000	- 1 -	345 / 0.000
FY 2023	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	263 / 0.000	263 / 0.000
To Complete	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	635 / 0.000	414 / 0.000	307 / 0.000	345 / 0.000	0 / 0.000	345 / 0.000	345 / 0.000	345 / 0.000	345 / 0.000	345 / 0.000	263 / 0.000	3,344 / 0.000

Installation Schedule

											FY 2	2019			FY 2	2020			FY 2	2021			FY 2	2022			FY 2	023			
	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	1,080	-	-	276	-	-	-	345	-	-	-	345	-	-	-	345	-	-	-	345	-	-	-	345	-	-	-	263	-	-	3,344
Out	635	104	104	103	103	77	77	77	76	87	86	86	86	87	86	86	86	87	86	86	86	87	86	86	86	87	86	86	86	263	3,344

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Date: February 2018 Exhibit P-3a, Individual Modification: PB 2019 Army Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Modification Number / Title: 2033A / 01 / 20 1678GZ2400 / Bradley Program (MOD) GZ2400 / Bradley Program MOD

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

Modification Item 7 of 11: BFVS A4 Modification

Manufacturer Information

Manufacturer Informati	on						
Manufacturer Name: BAI	Ξ			Manufacturer Location: Yo	ork, PA		
Administrative Leadtime	(in Months): 3			Production Leadtime (in M	fonths): 12		
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates	Mar 2018	Sep 2018	Jul 2019	Jul 2020	Jul 2021	Jul 2022	Jul 2023
Delivery Dates	Sep 2019	Sep 2020	Sep 2021	Sep 2022	Sep 2023	Sep 2024	Sep 2025

Installation Information

Method of Implementation: Contractor

	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	- 1 -	- / -	- / -	0 / 0.000	- 1 -	0 / 0.000	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017	- 1 -	- 1 -	- 1 -	11 / 0.000	- 1 -	11 / 0.000	34 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	45 / 0.000
FY 2018	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	33 / 0.000	102 / 0.000	- 1 -	- 1 -	- 1 -	135 / 0.000
FY 2019	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	37 / 0.000	112 / 0.000	- 1 -	- 1 -	149 / 0.000
FY 2020	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	36 / 0.000	111 / 0.000	- 1 -	147 / 0.000
FY 2021	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	38 / 0.000	117 / 0.000	155 / 0.000
FY 2022	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	152 / 0.000	152 / 0.000
FY 2023	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	207 / 0.000	207 / 0.000
To Complete	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	1,702 / 0.000	1,702 / 0.000
Total	0 / 0.000	0 / 0.000	0 / 0.000	11 / 0.000	0 / 0.000	11 / 0.000	67 / 0.000	139 / 0.000	148 / 0.000	149 / 0.000	2,178 / 0.000	2,692 / 0.000

Installation Schedule

			FY 2	2017			FY 2	2018			FY 2	019			FY 2	020			FY 2	2021			FY 2	022			FY 2	023			
	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	-	-	-	-	-	-	11	11	11	12	33	34	34	34	37	37	37	38	36	37	37	37	38	-	-	-	-	-	-	2,692	3,206
Out	-	-	-	-	-	-	-	-	-	-	-	-	11	11	11	12	33	34	34	34	37	37	37	38	36	37	37	37	38	2,692	3,206

UNCLASSIFIED

Exhibit P-3a, Indivi	dual Modification: Pl	3 2019 Army				Date: February 201	8
Appropriation / Bu 2033A / 01 / 20	dget Activity / Budge	t Sub Activity:	P-1 Line Item Nun 1678GZ2400 / Bra	nber / Title: dley Program (MOD)		Modification Numb GZ2400 / Bradley P	
ID Code (A=Service Ready,	B=Not Service Ready):A		·	MDAP/MAIS (Code:		
Modification Item 8 of 1	1: Conversion to M2						
Manufacturer Information	on						
Manufacturer Name: BAE				Manufacturer Location: \	YORK, PA		
Administrative Leadtime	(in Months):			Production Leadtime (in	Months):		
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: Contractor

mountain on impromontations contact												
	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	137 / 0.000	2 / 0.000	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	139 / 0.000
FY 2017	- 1 -	40 / 0.000	16 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	56 / 0.000
FY 2018	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2021	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2022	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2023	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	137 / 0.000	42 / 0.000	16 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	195 / 0.000

Installation Schedule

			FY 2	017			FY 2	2018	-		FY 2	2019			FY 2	2020			FY 2	2021			FY 2	2022			FY 2	2023			
	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	195	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	195
Out	137	2	12	16	12	13	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	195

UNCLASSIFIED

LI 1678GZ2400 - Bradley Program (MOD) Army

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Exhibit P-3a, Indivi	dual Modification: F	B 2019 Army				Date: February 2018	
Appropriation / Bud 2033A / 01 / 20	dget Activity / Budg	et Sub Activity:	P-1 Line Item Nur 1678GZ2400 / Bra	mber / Title: adley Program (MOD)		Modification Number GZ2400 / Bradley Pro	
ID Code (A=Service Ready, B	B=Not Service Ready) : A		<u> </u>	MDAP/MAIS Co	ode:		
Modification Item 9 of 1	1: Braking Safety/Transmis	ssion Industrial Base					
Manufacturer Information	on						
Manufacturer Name: L3C	ОМ			Manufacturer Location: MU	JSKEGON, MI		
Administrative Leadtime (in Months):			Production Leadtime (in M	lonths):		
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates							
Delivery Dates							
Installation Information							
Method of Implementati	on (Organic): Contractor				Installation (Quantity: 0	

LI 1678GZ2400 - Bradley Program (MOD) Army

Date: February 2018 Exhibit P-3a, Individual Modification: PB 2019 Army Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Modification Number / Title: 2033A / 01 / 20 1678GZ2400 / Bradley Program (MOD) GZ2400 / Bradley Program MOD ID Code (A=Service Ready, B=Not Service Ready): A

Modification Item 10 of 11: Survivability Enhancements

MDAP/MAIS Code:

Manufacturer Information

manaractaror information	
Manufacturer Name: BAE	Manufacturer Location: Sterling Heights, MI
Administrative Leadtime (in Months): 4	Production Leadtime (in Months): 18

rtariminos da ro Esdatimio (· · · · · · · · · · · · · · · · · · ·			
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates		Sep 2018	Jan 2019				
Delivery Dates		Mar 2020	Jul 2020				

Installation Information

Method of Implementation: Contractor

	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	- 1 -	- 1 -	35 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	35 / 0.000
FY 2019	- 1 -	- 1 -	- 1 -	0 / 0.000	59 / 0.000	59 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	59 / 0.000
FY 2020	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2021	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2022	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2023	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	0 / 0.000	0 / 0.000	35 / 0.000	0 / 0.000	59 / 0.000	59 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	94 / 0.000

Installation Schedule

			FY 2	2017			FY 2	2018			FY 2	2019			FY 2	2020			FY 2	2021			FY 2	2022			FY 2	2023			
	PYS	Q1	Q2	Q3	Q4	тс	Tot																								
In	-	-	-	-	-	-	-	-	10	25	30	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	94
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	25	30	29	-	-	-	-	-	-	-	-	-	-	-	-	94

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Exhibit P-3a, Individual Modification: PB 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 01 / 20	P-1 Line Item Number / Title: 1678GZ2400 / Bradley Program (MOD)	Modification Number / Title: GZ2400 / Bradley Program MOD
ID Code (A=Service Ready, B=Not Service Ready) : A	MDAP/MAIS Code:	

Modification Item 11 of 11: BFVS A5 Modification

Manufacturer Information

Manufacturer Name: BAE	Manufacturer Location: York, PA
Administrative Leadtime (in Months): 3	Production Leadtime (in Months): 12

Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates							Jul 2023
Delivery Dates							Jul 2024

Installation Information

Method of Implementation: Contractor

	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / -
FY 2018	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2021	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2022	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2023	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	168 / 0.000	168 / 0.000
To Complete	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	168 / 0.000	168 / 0.000

Installation Schedule

			FY 2	2017			FY 2	2018			FY 2	2019			FY 2	2020			FY 2	2021			FY 2	2022			FY 2	023			
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot																				
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	168	168
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	168	168

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2019 Army Date: February 2018

Program Elements for Code B Items: 0604854A

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: 2072GA0400 / M109 FOV Modifications

Other Related Program Elements: 0604854A

Modification of Tracked Combat Vehicles

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

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2019	FY 2019	FY 2019					То	
Resource Summary	Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	2,007.875	63.138	64.230	26.482	-	26.482	31.056	-	-	-	-	2,192.781
Less PY Advance Procurement (\$ in Millions)	16.321	0.000	0.000	0.000	-	0.000	0.000	-	-	-	-	16.321
Net Procurement (P-1) (\$ in Millions)	1,991.554	63.138	64.230	26.482	-	26.482	31.056	-	-	-	-	2,176.460
Plus CY Advance Procurement (\$ in Millions)	16.321	0.000	0.000	0.000	-	0.000	0.000	-	-	-	-	16.321
Total Obligation Authority (\$ in Millions)	2,007.875	63.138	64.230	26.482	-	26.482	31.056	-	-	-	-	2,192.781
(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)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The M109 Family of Vehicles (FOV) program consists of the M109A6 Paladin Self-Propelled Howitzer (SPH) and the M992A2 Field Artillery Ammunition Supply Vehicle (FAASV) as well as M109A7 SPH and M992A3 Carrier, Ammunition, Tracked (Vehicle) (CAT). The funding profile supports all aspects of program management necessary to support the field fleet of 568 SPHs and 568 FAASVs/CATs in 21 Active Duty Army and National Guard Battalions organic to Armored Brigade Combat Team (ABCT); 12 Battalions organic to Army Fires Brigades; 2 Institutional Training Sites, 2 Combat Training Centers, and other facility vehicles for System Technical Support (STS) work for development and qualification of proposed engineering changes and technical improvements.

Seconda	ry Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	36.745	37.460	15.889	-	15.889	18.634	-	-	-
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	26.393	26.770	10.593	-	10.593	12.422	-	-	-
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	63.138	64.230	26.482	-	26.482	31.056	-	-	-

Exhibit P-40, Budget Line Item Justification: PB 2019 Army

Date: February 2018

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: 2072GA0400 / M109 FOV Modifications

Modification of Tracked Combat Vehicles

Program Elements for Code B Items: 0604854A

Other Related Program Elements: 0604854A

Line Item MDAP/MAIS Code: N/A

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

	Exhibits Schedule				Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-3a	GA0400 / M109 Family of Vehicles Modification Program (Increase Performance)		В		- / 2,007.875	- / 63.138	- /64.230	- / 26.482	- / -	- / 26.482
P-40	Total Gross/Weapon System Cost				- / 2,007.875	- / 63.138	- / 64.230	- / 26.482	- 1 -	- / 26.482
	Exhibits Schedule				FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-3a	GA0400 / M109 Family of Vehicles Modification Program (Increase Performance)		В		- / 31.056	- / -	- / -	- / -	- / -	- /2,192.781
P-40	Total Gross/Weapon System Cost				- / 31.056	- 1 -	- 1 -	- 1 -	- 1 -	- / 2,192.781

^{*}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.

Justification:

FY 2019 base procurement funding in the amount of \$26.482 million supports M109 Family of Vehicles (FOV) Systems Technical Support (STS). Program Office requirements, and Paladin Breech Reliability fixes. 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 M109 FOV Combat Vehicle Evaluation (CVE) program; provides quality process management of production for M109 FOV Depot Overhaul operations; provides planning and execution for obsolescence of parts, sub-systems 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 mission accomplishment.

The 2019 funding request was reduced by \$31,330 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.

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

Exhibit P-3a, Individual Modification: PB 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 01 / 20	P-1 Line Item Number / Title: 2072GA0400 / M109 FOV Modifications	Modification Number / Title: GA0400 / M109 Family of Vehicles Modification Program

									iviounice	allorri rogra	2111		
ID Code (A=Service Ready, B=Not Service Ready)	: B		-			MDAP/MAIS Code:							
Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total	
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-	
Gross/Weapon System Cost (\$ in Millions)	2,007.875	63.138	64.230	26.482	-	26.482	31.056	-	-	-	-	2,192.781	
Less PY Advance Procurement (\$ in Millions)	16.321	0.000	0.000	0.000	-	0.000	0.000	-	-	-	-	16.321	
Net Procurement (P-1) (\$ in Millions)	1,991.554	63.138	64.230	26.482	-	26.482	31.056	-	-	-	-	2,176.460	
Plus CY Advance Procurement (\$ in Millions)	16.321	0.000	0.000	0.000	-	0.000	0.000	-	-	-	-	16.321	
Total Obligation Authority (\$ in Millions)	2,007.875	63.138	64.230	26.482	-	26.482	31.056	-	-	-	-	2,192.781	
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	ne corresponding	g budget request	s are documente	ed elsewhere.)	ř	'			
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-	
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-	

Description:

Funding supports modifications to the Paladin/FAASV Stowage capabilities, Training Aids, Devices, Simulators and Simulations-Replacement (TADDS-R0 kits/upgrades, M284 Breech reliability improvement procurement and their issue based on Modular Artillery Charge System (MACS), New Lightweight Bore Evacuators, CREW IIA-Kit Hardware and Program Office Requirements. Cost associated with kit installations are included in the funding for the prime hardware contracts.

M109 FOV Program Office [MOD 1]: Government System Engineering and Program Management support for the M109 FOV 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 M109 FOV Combat Vehicle Evaluation (CVE) program; provides quality process management of production for M109 FOV Depot Overhaul operations; provides planning and execution for obsolescence of parts, sub-systems and systems; develop and coordinate shrinking supply base mitigation strategies with item managers; provides management of Software Support. Manages the Systems Technical Support (STS) contract that provides the direct support to the program and the field.

Paladin Fire Control System [MOD 2]: PFCS combines the Paladin Digital Fire Control System-Replacement (PDFCS-R) and Dynamic Reference Unit Hybrid-Replacement (DRUH-R) into one modification kit. This subsystem provides the automated fire control for the M109 FOV gun system. It allows for the completion of the sensor to shooter fires thread during the conduct of a digital fire mission. 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.

Chrome Tubes [MOD 3]: Completes the M109A6 Fleet requirements for M284 Cannon Tube Replacement. Removes the remaining temporary repaired M284 Cannon Tubes from the fielded M109A6 Fleet as a result of the December 2014 safety of use message.

Lightweight Bore Evacuator [MOD 4]: Lightweight Bore Evacuator (LWBE) provides decreased weight to aid in maintainability from the previous Advance Bore Evacuator (ABE). The LWBE weighs approximately 100 LBS while the ABE weighs 300 LBS and requires four men to move.

M109 FOV System Technical Support, Contr [MOD 5]: Funding supports contractor engineering efforts required to design and produce material solutions/changes to the M109 FOV 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.

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Exhibit P-3a, Individual Modification: PB 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 01 / 20	P-1 Line Item Number / Title: 2072GA0400 / M109 FOV Modifications	Modification Number / Title: GA0400 / M109 Family of Vehicles Modification Program

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

Breech Mod (MACS) [MOD 6 & MOD 13]: Paladin Breech reliability fixes, as they pertain to the impacts of MACS propellant on the gun system, is intended to improve the reliability of the current gun systems in fielded Fires Battalions. These fixes improve the firing chain in the breech system when firing High Zone MACS propellant charges in combat and training.

Paladin Stowage Improvements [MOD 7]: Funding supports safety related and other essential equipment stowage improvements to the M109A6 Paladin and M992A2 FAASV. The M109A6 stowage improvements include: M4 Rifle Brackets for the Drive and Crew Compartment, improved vertical and horizontal ammo stowage, Precision Guided Kit (PGK) stowage mod, Engine Grille Torsion Bar, and Rear Door Latch. The M992A2 stowage improvements includes: M4 Rifle Brackets, PGK stowage mod, Engine Grille Torsion Bar and improved vertical ammo stowage.

FSCATT Phase III Upgrade [MOD 8]: Training Aids, Devices, Simulators and Simulations (TADSS) supports the upgrade of Fire Support Combined Arms Tactical Trainers (FSCATT).

Paladin FSCATT Phase III Upgrade re-establishes the closed-loop training capability for Paladin crews to train in conjunction with Forward Observer and Fire Direction Center personnel. This upgrade will integrate the Government-owned software SE Core Gateway to communicate with the Call For Fire Trainer (CFFT) using the Virtual Distributed Interactive Simulation (V-DIS) message protocol. The upgrade will incorporate the latest Paladin tactical software and Advanced Field Artillery Tactical Data System (AFATDS), which will require migration of all software to run on a new operating system.

CREW II A-Kit HW and Fielding [MOD 9]: To complete CREW DUKE v2 A-Kits fielding across the remainder of the M109 Family of Vehicles (FOV) fleet.

M109 FOV MOD [MOD 10]: Established a modernization line for M109 FOV to address obsolescence, safety and emerging technologies to keep fleet current.

Gun Mount Ballistic Shield (GMBS) Rotor Shield [MOD 14]: Funding supports survivability shortfalls in the M109 FOV gun mount area. This mod increases the armor protection of the M182 Gun Mount Recoil Mechanism as well as provide additional crew protection for small arms direct fire.

Int. Blast Mitigation Retrofit HW/Fielding (M109A7) [MOD 15]: Procures and installs improved floor mat and ammo restraint improvements in the event of an under blast event to reduce secondary projectile.

TARDEC Updated Grille [MOD 16]: Procure and install improved engine air intake grilles for the M109A7/M992A3 vehicle. These provide improved vehicle survivability from overhead blast fragments.

Second	dary Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	36.745	37.460	15.889	-	15.889	18.634	-	-	-
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	26.393	26.770	10.593	-	10.593	12.422	-	-	-
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	63.138	64.230	26.482	-	26.482	31.056	-	-	=

Exhibit P-3a, Individual Modification: PB 2019 Army Date: February 2018 Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: **Modification Number / Title:** 2033A / 01 / 20 2072GA0400 / M109 FOV Modifications GA0400 / M109 Family of Vehicles Modification Program MDAP/MAIS Code: ID Code (A=Service Ready, B=Not Service Ready) : B Models of Systems Affected: M109 Howitzer and Modification Type: Increase Performance Related RDT&E PEs: M992 FAASV/CAT Vehicles FY 2019 FY 2019 FY 2019 То **Prior Years** FY 2017 FY 2020 FY 2021 FY 2022 FY 2018 Base oco Total FY 2023 Complete Total Qtv (Each) I **Financial Plan** Total Cost (\$ M) | Total Cost (\$ Total Cost (\$ M) Total Cost (\$ M) Total Cost (\$ M) Total Cost (\$ M) **Procurement** Modification Item 1 of 16: M109 FOV Program Office A Kits Recurring - 12.424 - 1 -PM Support - /6.169 - 12.265 - 12.298 - 12.424 - 12.472 - 1 -- 1 -- 1 -- /0.000 - / 15.628 - /2.424 - /2.265 - /2.298 - / -- /2.424 - /2.472 - / -- / -Subtotal: Recurring - /6.169 - / -- / -- /15.628 - / -Subtotal: M109 FOV Program Office - /6.169 - /2.265 - /2.298 - /2.424 - / -- /2.424 - /2.472 - / -- / -- / -- /15.628 Modification Item 2 of 16: Paladin Fire Control System A Kits Recurring - /0.000 Hardware 239 / 101.051 - / -- / -- 1 -- / -- 1 -- / -- / -- / -239 / 101.051 - / -- / -- / -- / -- / -239 / 101.051 - / -- / -- / -- / -- / -239 / 101.051 Subtotal: Recurring 239 / 101.051 - / -- / -- /0.000 - / -- /0.000 - / -- / -- / -- / -- / -239 / 101.051 Subtotal: Paladin Fire Control System Modification Item 3 of 16: Chrome Tubes A Kits Recurring Hardware 113 / 10.033 - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- /0.000 113 / 10.033 113 / 10.033 - / -- / -- / -- / -- / -- / -- / -- / -- / -- / -113 / 10.033 Subtotal: Recurring 113 / 10.033 - / -- / -- /0.000 - / -- /0.000 - / -- / -- / -- / -- / -113 / 10.033 Subtotal: Chrome Tubes Modification Item 4 of 16: Lightweight Bore Evacuator A Kits Recurring Hardware 219 / 5.217 - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- / -- /0.000 219 / 5.217 Subtotal: Recurring 219 / 5.217 - / -- / -- / -- / -- / -- / -- / -- / -- / -- / -219 / 5.217 219 / 5.217 - / -- / -- /0.000 - / -- /0.000 - / -- / -- / -219 / 5.217 Subtotal: Lightweight Bore Evacuator Modification Item 5 of 16: M109 FOV System Technical Support - Contr A Kits Recurring

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Exhibit P-3a, Individual Modification: PB 2019 Army **Date:** February 2018

Appropriation / Budget Activity / Budget Sub Activity:
2033A / 01 / 20
P-1 Line Item Number / Title:
2072GA0400 / M109 FOV Modifications
Modification Number / Title:
GA0400 / M109 Family of Vehicles

Modification Program

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

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

	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M										
STS	- /23.770	- /43.851	- /8.626	- / 0.423	- 1 -	- / 0.423	- /1.722	- 1 -	- 1 -	- 1 -	- /0.000	- 178.39
Subtotal: Recurring	- /23.770	- /43.851	- /8.626	- /0.423	- / -	- /0.423	- /1.722	- / -	- / -	- / -	- / -	- / 78.39
Subtotal: M109 FOV System Technical Support - Contr	- /23.770	- /43.851	- /8.626	- /0.423	- / -	- /0.423	- /1.722	- / -	- / -	- / -	- / -	- / 78.39
Modification Item 6 of 16: Breech Mod (MACS)												
A Kits												
Recurring												
Hardware	- 1 -	144 / 11.231	283 / 20.000	178 / 12.880	- 1 -	178 / 12.880	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	605 / 44.11
Subtotal: Recurring	- / -	144 / 11.231	283 / 20.000	178 / 12.880	- / -	178 / 12.880	- / -	- / -	- / -	- / -	- / -	605 / 44.11
Subtotal: Breech Mod (MACS)	- / -	144 / 11.231	283 / 20.000	178 / 12.880	- / -	178 / 12.880	- / -	- / -	- / -	- / -	- / -	605 / 44.11
Modification Item 7 of 16: Paladin Stowage Improvements (M109A6)		'			'				'			
A Kits												
Recurring												
Stowage Improvements	208 / 5.980	241 / 5.791	- 1 -	- /0.076	- / -	- /0.076	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	449 / 11.84
Subtotal: Recurring	208 / 5.980	241 / 5.791	- / -	- /0.076	- / -	- /0.076	- / -	- / -	- / -	- / -	- / -	449 / 11.84
Subtotal: Paladin Stowage Improvements (M109A6)	208 / 5.980	241 / 5.791	- / -	- /0.076	- / -	- /0.076	- / -	- / -	- / -	- / -	- / -	449 / 11.84
Modification Item 8 of 16: FSCATT Phase III Upgrade (M109A6)		'			'	'			'			
A Kits												
Recurring												
Training Equipment Software	- /5.204	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	- /5.204
Subtotal: Recurring	- /5.204	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- /5.20
Subtotal: FSCATT Phase III Upgrade (M109A6)	- /5.204	- / -	- / -	- /0.000	- / -	- /0.000	- / -	- / -	- / -	- / -	- / -	- /5.20-
Modification Item 9 of 16: CREW II A-Kit HW and Fielding (M109A6)											ı	
A Kits												
Recurring												
Installation Kits	- 1 -	- 1 -	265 / 6.692	177 <i>l</i> 4.455	- 1 -	177 <i>l</i> 4.455	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	442 / 11.14
Subtotal: Recurring	- / -	- / -	265 / 6.692	177 / 4.455	- / -	177 / 4.455	- / -	- / -	- / -	- / -	- / -	442 / 11.14

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Exhibit P-3a, Individual Modification: PB 2019 Army

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

P-1 Line Item Number / Title:
2072GA0400 / M109 FOV Modifications

Modification Number / Title:
GA0400 / M109 Family of Vehicles
Modification Program

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

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

	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ N										
Modification Item 10 of 16: M109 FOV Mods												
A Kits												
Recurring												
M109 FOV Mods	- 1 -	- 1 -	- / 26.614	- 1 -	- 1 -	- / -	- / -	- 1 -	- 1 -	- 1 -	- /0.000	- / 26.61
Subtotal: Recurring	- / -	- / -	- /26.614	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- /26.61
Subtotal: M109 FOV Mods	- / -	- / -	- /26.614	- /0.000	- / -	- /0.000	- / -	- / -	- / -	- / -	- / -	- /26.61
Modification Item 11 of 16: Prior Years Closed Mods												
A Kits												
Recurring												
Prior Closed Mods	- / 1,816.451	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	- / 1,816.45
Subtotal: Recurring	- /1,816.451	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- /1,816.4
Subtotal: Prior Years Closed Mods	- /1,816.451	- / -	- / -	- /0.000	- / -	- /0.000	- / -	- / -	- / -	- / -	- / -	- /1,816.4
Modification Item 12 of 16: Gun Tubes												
A Kits												
Recurring												
Hardware	- /34.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	- / 34.00
Subtotal: Recurring	- /34.000	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- /34.00
Subtotal: Gun Tubes	- /34.000	- / -	- / -	- /0.000	- / -	- /0.000	- / -	- / -	- / -	- / -	- / -	- /34.00
Modification Item 13 of 16: Breech (Phase II) HW and Fielding			,		,	'		'				
A Kits												
Recurring												
Hardware	- 1 -	- 1 -	- 1 -	72 <i>l</i> 5.982	- 1 -	72 / 5.982	240 / 16.638	- 1 -	- 1 -	- 1 -	- /0.000	312 / 22.62
Subtotal: Recurring	- / -	- / -	- / -	72 / 5.982	- / -	72 / 5.982	240 / 16.638	- / -	- / -	- / -	- / -	312 / 22.62
Subtotal: Breech (Phase II) HW and Fielding	- / -	- / -	- / -	72 / 5.982	- / -	72 / 5.982	240 / 16.638	- / -	- / -	- / -	- / -	312 / 22.62
Modification Item 14 of 16: Gun Mount Ballistic Shield (GMBS) and Rotor Shield												
A Kits												
Recurring												
Hardware	- 1 -	- 1 -	- 1 -	18 / 0.242	- 1 -	18 / 0.242	59 / 0.810	- 1 -	- 1 -	- 1 -	- / 0.000	77 / 1.05

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Exhibit P-3a, Individual Modification: PB 2019 Army

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

P-1 Line Item Number / Title:
2072GA0400 / M109 FOV Modifications

Modification Number / Title:
GA0400 / M109 Family of Vehicles
Modification Program

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

Models of Systems Affected: M109 Howitzer and M992 FAASV/CAT Vehicles

Modification Type: Increase Performance Related RDT&E PEs:

	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M										
Subtotal: Recurring	- / -	- / -	- / -	18 / 0.242	- / -	18 / 0.242	59 / 0.810	- / -	- / -	- / -	- / -	77 / 1.05
Subtotal: Gun Mount Ballistic Shield (GMBS) and Rotor Shield	- / -	- / -	- / -	18 / 0.242	- / -	18 / 0.242	59 / 0.810	- / -	- / -	- / -	- / -	77 / 1.05
Modification Item 15 of 16: Int. Blast Mitigation Retrofit HW/Fielding(M109A7)												
A Kits												
Recurring												
Hardware	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	118 / 6.910	- 1 -	- 1 -	- 1 -	- /0.000	118 / 6.910
Subtotal: Recurring	- / -	- / -	- / -	- / -	- / -	- / -	118 / 6.910	- / -	- / -	- / -	- / -	118 / 6.91
Subtotal: Int. Blast Mitigation Retrofit HW/ Fielding(M109A7)	- / -	- / -	- / -	- /0.000	- / -	- /0.000	118 / 6.910	- / -	- / -	- / -	- / -	118 / 6.91
Modification Item 16 of 16: TARDEC Updated Grille												
A Kits												
Recurring												
Hardware	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	118 / 2.504	- 1 -	- 1 -	- 1 -	- /0.000	118 / 2.50
Subtotal: Recurring	- / -	- / -	- / -	- / -	- / -	- / -	118 / 2.504	- / -	- / -	- / -	- / -	118 / 2.50
Subtotal: TARDEC Updated Grille	- / -	- / -	- / -	- /0.000	- / -	- /0.000	118 / 2.504	- / -	- / -	- / -	- / -	118 / 2.50
Subtotal: Procurement, All Modification Items	779 / 2,007.875	385 / 63.138	548 / 64.230	445 / 26.482	- / -	445 / 26.482	535 / 31.056	- / -	- / -	- / -	- / -	2,692 2,192.78
nstallation												
Modification Item 2 of 16: Paladin Fire Control System	40 / 0.000	164 / 0.000	- 1 -	35 / 0.000	- 1 -	35 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	239 / 0.000
Modification Item 3 of 16: Chrome Tubes	- 1 -	113 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	113 / 0.000
Modification Item 4 of 16: Lightweight Bore Evacuator	- 1 -	219 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	219 / 0.000
Subtotal: Installation	40 / 0.000	496 / 0.000	0/0.000	35 / 0.000	0/0.000	35 / 0.000	- / -	- / -	- / -	- / -	- / -	571 / 0.00
Total .												
		63.138	64.230	26.482								

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			0.1102	, (0011 12B				
Exhibit P-3a, Indivi	idual Modification: P	B 2019 Army				Date: February 2018		
Appropriation / Bu 2033A / 01 / 20	dget Activity / Budg	et Sub Activity:	P-1 Line Item Nu 2072GA0400 / M1	mber / Title: 109 FOV Modifications		Modification Number / Title: GA0400 / M109 Family of Vehicles Modification Program		
ID Code (A=Service Ready,	B=Not Service Ready) : B			MDAP/MAIS	Code:			
	16: M109 FOV Program Off	ice						
Manufacturer Informati	on							
Manufacturer Name: x				Manufacturer Location:	x			
Administrative Leadtime	(in Months):			Production Leadtime (in	Months):			
Dates FY 2017 FY 2018 FY				FY 2020	FY 2021	FY 2022	FY 2023	
Contract Dates	Oct 2016	Oct 2017	Oct 2018					
Delivery Dates	Oct 2016	Oct 2017	Oct 2018					
Installation Information								
Method of Implementat	ion (Organic): N/A				Installation	Quantity: 0		

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Exhibit P-3a, Individ	dual Modification: Pl	3 2019 Army				Date: February 2018	3
Appropriation / Bud 2033A / 01 / 20	dget Activity / Budge	t Sub Activity:	P-1 Line Item Nu 2072GA0400 / M	mber / Title: 109 FOV Modifications		Modification Numb GA0400 / M109 Fan Modification Prograr	nily of Vehicles
ID Code (A=Service Ready, E	B=Not Service Ready) : B			MDAP/MAIS C	Code:		
Modification Item 2 of 10	6: Paladin Fire Control Syst	em					
Manufacturer Information	on						
Manufacturer Name: TBD				Manufacturer Location: 1	ГВD		
Administrative Leadtime (in Months): 2			Production Leadtime (in	Months): 24		
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: x

motrica of impromontation x												
	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	40 / 0.000	164 / 0.000	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	204 / 0.000
FY 2017	- 1 -	- 1 -	- 1 -	35 / 0.000	- 1 -	35 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	35 / 0.000
FY 2018	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2021	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2022	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2023	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	40 / 0.000	164 / 0.000	0 / 0.000	35 / 0.000	0 / 0.000	35 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	239 / 0.000

Installation Schedule

			FY 2	2017			FY 2	2018			FY 2	2019			FY 2	2020			FY 2	2021			FY 2	2022			FY 2	2023			
	PYS	Q1	Q2	Q3	Q4	тс	Tot																								
In	40	46	46	46	26	-	-	-	-	9	9	8	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	239
Out	40	46	46	46	26	-	-	-	-	9	9	8	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	239

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Exhibit P-3a, Indivi	dual Modification: P	B 2019 Army				Date: February 201	8
Appropriation / But 2033A / 01 / 20	dget Activity / Budg	et Sub Activity:	P-1 Line Item Nu 2072GA0400 / M1	mber / Title: 109 FOV Modifications		Modification Numb GA0400 / M109 Far Modification Progra	nily of Vehicles
ID Code (A=Service Ready,	B=Not Service Ready) : B			MDAP/MAIS (Code:		
Modification Item 3 of 1	6: Chrome Tubes			•			
Manufacturer Information	on						
Manufacturer Name: TBD)			Manufacturer Location: 1	ГВD		
Administrative Leadtime	(in Months): 3			Production Leadtime (in	Months): 12		
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates							
Delivery Dates							
l .							

Installation Information

Method of Implementation:

	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	- 1 -	113 / 0.000	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	113 / 0.000
FY 2017	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2021	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2022	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2023	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	0 / 0.000	113 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	113 / 0.000

Installation Schedule

			FY 2	017			FY 2	2018			FY 2	2019			FY 2	2020	-		FY 2	2021			FY 2	2022			FY 2	2023			
	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	113	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	113
Out	-	28	29	28	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	113

Exhibit P-3a, Individ	dual Modification: Pl	3 2019 Army				Date: February 2018	3
Appropriation / Bud 2033A / 01 / 20	lget Activity / Budge	t Sub Activity:	P-1 Line Item Num 2072GA0400 / M109			Modification Numb GA0400 / M109 Fan Modification Prograr	nily of Vehicles
ID Code (A=Service Ready, E	B=Not Service Ready) : B			MDAP/MAIS C	Code:		
Modification Item 4 of 16	6: Lightweight Bore Evacua	tor					
Manufacturer Information	on						
Manufacturer Name: TBD				Manufacturer Location: 1	ГВD		
Administrative Leadtime (in Months): 3			Production Leadtime (in	Months): 12		
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: .

	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	- 1 -	219 / 0.000	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	219 / 0.000
FY 2017	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2021	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2022	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2023	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	0 / 0.000	219 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	219 / 0.000

Installation Schedule

			FY 2	2017			FY 2	2018			FY 2	2019			FY 2	2020	_		FY 2	2021			FY 2	2022			FY 2	2023	_		
	PYS	Q1	Q2	Q3	Q4	тс	Tot																								
In	-	54	55	55	55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	219
Out	-	54	55	55	55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	219

			UNCL	ASSIFIED			
Exhibit P-3a, Indivi	dual Modification: Pl	B 2019 Army				Date: February 2018	}
Appropriation / Buo 2033A / 01 / 20	dget Activity / Budge	et Sub Activity:	P-1 Line Item Nur 2072GA0400 / M1	nber / Title: 09 FOV Modifications		Modification Number GA0400 / M109 Fam Modification Program	nily of Vehicles
ID Code (A=Service Ready, I	B=Not Service Ready) : B		•	MDAP/MAIS C	ode:		
Modification Item 5 of 1	6: M109 FOV System Tech	nical Support - Contr					
Manufacturer Information	on						
Manufacturer Name: x				Manufacturer Location: x			
Administrative Leadtime (in Months): 1			Production Leadtime (in I	Months):		
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates	Oct 2016	Oct 2017	Oct 2018	Oct 2019			
Delivery Dates	Oct 2016	Oct 2017	Oct 2018	Oct 2019			
Installation Information							
Method of Implementati					Installation Q	uantity: 0	
l							

LI 2072GA0400 - M109 FOV Modifications Army

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			0.102	, toon ieb			
Exhibit P-3a, Indivi	idual Modification: P	B 2019 Army				Date: February 2018	,
Appropriation / Bu 2033A / 01 / 20	dget Activity / Budg	et Sub Activity:	P-1 Line Item Nu 2072GA0400 / M1	mber / Title: 09 FOV Modifications		Modification Number GA0400 / M109 Fam Modification Program	ily of Vehicles
ID Code (A=Service Ready,	B=Not Service Ready) : B			MDAP/MAIS C	Code:		
Modification Item 6 of 1							
Manufacturer Informati	on						
Manufacturer Name: TBI	D			Manufacturer Location: T	TBD		
Administrative Leadtime	(in Months): 3			Production Leadtime (in	Months): 12		
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates	Dec 2016	Dec 2017	Dec 2018				
Delivery Dates	Dec 2017	Dec 2018	Dec 2019				
Installation Information							
					1		
Method of Implementat	ion (Organic):				Installation	Quantity: 0	

			ONOL	Addii IED			
Exhibit P-3a, Indiv	idual Modification: F	PB 2019 Army				Date: February 2018	
Appropriation / Bu 2033A / 01 / 20	idget Activity / Budg	et Sub Activity:	P-1 Line Item Nu 2072GA0400 / M	mber / Title: 109 FOV Modifications		Modification Number GA0400 / M109 Fam Modification Program	ily of Vehicles
ID Code (A=Service Ready,	, B=Not Service Ready) : B			MDAP/MAIS C	Code:		
	16: Paladin Stowage Impro	vements (M109A6)					
Manufacturer Informati	ion						
Manufacturer Name: TB	D			Manufacturer Location: T	TBD		
Administrative Leadtime	(in Months): 10			Production Leadtime (in I	Months): 12		
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates	Jul 2017		Jul 2019				
Delivery Dates	Jul 2018		Jul 2020				
Installation Information	•						
		C.			1	• " •	
Method of implemental	tion (Organic): Field Retro	ill			Installation	Quantity. 0	

Exhibit P-3a, Indivi	dual Modification: F	PB 2019 Army				Date: February 2018		
Appropriation / Bud 2033A / 01 / 20	dget Activity / Budg	et Sub Activity:	P-1 Line Item Nu 2072GA0400 / M1	mber / Title: 109 FOV Modifications	GA0400 / M109 Fam	Modification Number / Title: GA0400 / M109 Family of Vehicles Modification Program		
ID Code (A=Service Ready, E	B=Not Service Ready) : B			MDAP/MAIS C	ode:			
Modification Item 8 of 1	6: FSCATT Phase III Upgi	rade (M109A6)						
Manufacturer Information	on							
Manufacturer Name: X				Manufacturer Location: X				
Administrative Leadtime (in Months):			Production Leadtime (in N	Months):			
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	
Contract Dates								
Delivery Dates								
Installation Information								
Method of Implementation	on (Organic): N/A				Installation (Quantity: 0		

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Exhibit P-3a, Indivi	idual Modification: F	PB 2019 Army				Date: February 2018	3						
Appropriation / Bu 2033A / 01 / 20	dget Activity / Budg	et Sub Activity:		P-1 Line Item Number / Title: 2072GA0400 / M109 FOV Modifications Modification Number / Title GA0400 / M109 Family of Vol Modification Program									
ID Code (A=Service Ready,	B=Not Service Ready) : B			MDAP/MAIS (Code:								
Modification Item 9 of 1	16: CREW II A-Kit HW and	Fielding (M109A6)											
Manufacturer Informati	on												
Manufacturer Name: TBI)			Manufacturer Location:	TBD		ation Program						
Administrative Leadtime	(in Months): 3			Production Leadtime (in	Months): 12								
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023						
Contract Dates		Dec 2017	Dec 2018										
Delivery Dates		Dec 2018	Dec 2019										
Installation Information													
Method of Implementat					Installation	Overeth v O							
method of implementat	ion (Organio).				motunation	quantity. 0							

			01101	AOOII ILD				
Exhibit P-3a, Indiv	ridual Modification: F	PB 2019 Army				Date: February 2018		
Appropriation / Bu 2033A / 01 / 20	udget Activity / Budg	et Sub Activity:	P-1 Line Item Nu 2072GA0400 / M	mber / Title: 109 FOV Modifications		Modification Number / Title: GA0400 / M109 Family of Vehicles Modification Program		
ID Code (A=Service Ready	, B=Not Service Ready) : B			MDAP/MAIS C	ode:			
Modification Item 10 of								
Manufacturer Informat	ion							
Manufacturer Name: x				Manufacturer Location: x				
Administrative Leadtime	(in Months): 1			Production Leadtime (in I	Months): 12			
Dates	FY 2017	FY 2018	FY 2019	Production Leadtime (in Months): 12 FY 2020 FY 2021		FY 2022	FY 2023	
Contract Dates		Oct 2017						
Delivery Dates		Oct 2018						
Installation Information	n							
Method of Implementa					Installation	Quantity: 0		
	(o.g,							

Exhibit P-3a, Individ	dual Modification: Pl	B 2019 Army				Date: February 2018		
Appropriation / Bud 2033A / 01 / 20	lget Activity / Budge	et Sub Activity:		2-1 Line Item Number / Title: 072GA0400 / M109 FOV Modifications Modification I GA0400 / M10 Modification P				
ID Code (A=Service Ready, B:	B=Not Service Ready) : B		·	MDAP/MAIS C	ode:			
Modification Item 11 of 1	16: Prior Years Closed Mod	ds		-				
Manufacturer Information	n							
Manufacturer Name: x				Manufacturer Location: x				
Administrative Leadtime (ii	in Months):			Production Leadtime (in N	Months):			
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	
Contract Dates								
Delivery Dates								
Installation Information								
Method of Implementation	on (Organic): x				Installation C	Quantity: 0		

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Exhibit P-3a, Individ	ual Modification: Pl	B 2019 Army				Date: February 2018			
Appropriation / Bud 2033A / 01 / 20	get Activity / Budge	et Sub Activity:	P-1 Line Item Num 2072GA0400 / M10	ber / Title: 9 FOV Modifications		GA0400 / M109 Fam	Modification Number / Title: GA0400 / M109 Family of Vehicles Modification Program		
ID Code (A=Service Ready, B=	-Not Service Ready) ∶ B		·	MDAP/MAIS Co	de:	•			
Modification Item 12 of 1	6: Gun Tubes								
Manufacturer Information	1								
Manufacturer Name: .				Manufacturer Location: .					
Administrative Leadtime (ir	n Months):			Production Leadtime (in Mo	onths):				
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023		
Contract Dates									
Delivery Dates									
Installation Information									
Method of Implementatio	n (Organic):				Installation Q	uantity: 0			
	(3					-			

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Exhibit P-3a, Indivi	dual Modification: F	B 2019 Army				Date: February 2018	}		
Appropriation / Bu 2033A / 01 / 20	dget Activity / Budg	et Sub Activity:		P-1 Line Item Number / Title: 2072GA0400 / M109 FOV Modifications Modification Number / Title: GA0400 / M109 Family of Vehic Modification Program					
ID Code (A=Service Ready,	B=Not Service Ready) : B			MDAP/MAIS Co	ode:	•			
Modification Item 13 of	16: Breech (Phase II) HW	and Fielding							
Manufacturer Information	on								
Manufacturer Name: TBD)			Manufacturer Location: TB	BD				
Administrative Leadtime	(in Months): 3			Production Leadtime (in M	lonths): 12				
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023		
Contract Dates			Dec 2018	Dec 2019					
Delivery Dates			Dec 2019	Dec 2020					
Installation Information									
						• 44 •			
Method of Implementati	ion (Organic): .				Installation	Quantity: 0			

Exhibit P-3a, Indivi	idual Modification: P	B 2019 Army				Date: February 2018	3				
Appropriation / Bu 2033A / 01 / 20	dget Activity / Budge	et Sub Activity:		P-1 Line Item Number / Title: 2072GA0400 / M109 FOV Modifications Modification Number / Title: GA0400 / M109 Family of Vehi Modification Program							
ID Code (A=Service Ready,	B=Not Service Ready) : B		•	MDAP/MAIS Co	ode:						
	16: Gun Mount Ballistic Sh	ield (GMBS) and Rotor	Shield								
Manufacturer Information	on										
Manufacturer Name: TBD)			Manufacturer Location: TE	3D						
Administrative Leadtime	(in Months): 3			Production Leadtime (in N	Months): 12		Number / Title: 09 Family of Vehicles Program				
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023				
Contract Dates			Dec 2018	Dec 2019							
Delivery Dates			Dec 2019	Dec 2020							
Installation Information											
Method of Implementati					Installation	Out and ideas 0					
metriod of implementati	ion (organic).				motanation	Quantity: 0					

Exhibit P-3a, Indivi	dual Modification: F	PB 2019 Army				Date: February 2018	<u> </u>			
Appropriation / Bud 2033A / 01 / 20	dget Activity / Budg	et Sub Activity:	P-1 Line Item Nu 2072GA0400 / M	mber / Title: 109 FOV Modifications	Modification Number / Title: GA0400 / M109 Family of Vehicles Modification Program					
ID Code (A=Service Ready,	B=Not Service Ready) : B		•	MDAP/MAIS Co	ode:					
Modification Item 15 of	16: Int. Blast Mitigation Re	etrofit HW/Fielding(M109	A7)	<u>. </u>						
Manufacturer Information	on									
Manufacturer Name: TBD)			Manufacturer Location: TBD						
Administrative Leadtime	(in Months): 3			Production Leadtime (in M	fonths): 12					
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023			
Contract Dates				Dec 2019						
Delivery Dates				Dec 2020						
Installation Information										
Installation Information					ļ					
Method of Implementati	ion (Organic): .				Installation	Quantity: 0				

Exhibit P-3a, Indivi	dual Modification: F	PB 2019 Army				Date: February 2018	<u> </u>	
Appropriation / Bu 2033A / 01 / 20	dget Activity / Budg	et Sub Activity:	P-1 Line Item Number / Title: 2072GA0400 / M109 FOV Modifications			Modification Number / Title: GA0400 / M109 Family of Vehicles Modification Program		
ID Code (A=Service Ready,	B=Not Service Ready) : B			MDAP/MAIS Co	ode:	·		
Modification Item 16 of	16: TARDEC Updated Gri	lle		<u>. </u>				
Manufacturer Information	on							
Manufacturer Name: TBD)			Manufacturer Location: TE	BD			
Administrative Leadtime	(in Months): 3			Production Leadtime (in M	fonths): 12			
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	
Contract Dates				Dec 2019				
Delivery Dates				Dec 2020				
Installation Information								
Installation Information					1			
Method of Implementati	ion (Organic): .				Installation	Quantity: 0		

Exhibit P-40, Budget Line Item Justification: PB 2019 Army

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: 2073GZ0410 / 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: N/A

Other Related Program Elements: 0210609A

Date: February 2018

Line Item MDAP/MAIS Code: 466

	Prior			FY 2019	FY 2019	FY 2019					То	
Resource Summary	Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total
Procurement Quantity (Units in Each)	65	48	71	30	6	36	60	60	60	55	119	574
Gross/Weapon System Cost (\$ in Millions)	867.860	584.089	772.149	351.802	67.000	418.802	639.744	660.833	645.151	659.172	1,736.303	6,984.103
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	867.860	584.089	772.149	351.802	67.000	418.802	639.744	660.833	645.151	659.172	1,736.303	6,984.103
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	867.860	584.089	772.149	351.802	67.000	418.802	639.744	660.833	645.151	659.172	1,736.303	6,984.103
(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)	13,351.692	12,168.521	10,875.338	11,726.733	11,166.667	11,633.389	10,662.400	11,013.883	10,752.517	11,984.945	14,590.782	12,167.427

Description:

Paladin Integrated Management (PIM) is an ACAT 1C 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.

				FY 2019	FY 2019	FY 2019				
Seconda	ry Distribution	FY 2017	FY 2018	Base	ОСО	Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	46	49	11	6	17	33	32	33	29
	Total Obligation Authority	558.450	574.930	92.312	67.000	159.312	381.165	416.872	392.942	380.335
ANG	Quantity	2	22	19	-	19	27	28	27	26
	Total Obligation Authority	25.639	197.219	259.490	-	259.490	258.579	243.961	252.209	278.837
Total:	Quantity	48	71	30	6	36	60	60	60	55
Secondary Distribution	Total Obligation Authority	584.089	772.149	351.802	67.000	418.802	639.744	660.833	645.151	659.172

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Exhibit P-40, Budget Line Item Justification: PB 2019 Army

P-1 Line Item Number / Title:

2033A: Procurement of W&TCV, Army / BA 01: Tracked Combat Vehicles / BSA 20: |2073GZ0410 / 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: N/A

Other Related Program Elements: 0210609A

Date: February 2018

Line Item MDAP/MAIS Code: 466

	Exhibits Schedule		Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total		
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	GZ0410 / Paladin Integrated Management (PIM)	P-5a, P-21	Α		65 / 867.860	48 / 584.089	71 / 772.149	30 / 351.802	6 / 67.000	36 / 418.802
P-40	Total Gross/Weapon System Cost		65 / 867.860	48 / 584.089	71 / 772.149	30 / 351.802	6 / 67.000	36 / 418.802		

^{*}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 sum exactly due to rounding.

Appropriation / Budget Activity / Budget Sub Activity:

Justification:

FY 2019 Base Procurement dollars in the amount of \$351.802 million supports all aspects of the PIM Full Rate Production (FRP) 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 SPHs and 30 CATs. The unit cost represents cost per set (1 SPH and 1 CAT).

FY 2019 Overseas Contingency Operations (OCO) procurement dollars in the amount of \$67.000 million to support COCOM requirement for unit equipment sets to deter potential adversaries and support the European Deterrence Initiative (EDI). The OCO funding will provide one Battery Set of M109A7/M992A3. No training is required for this equipment hand off. 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 end-items; the manufacturing and assembly of sub-systems; the integration, test and check-out operations that results in the production of 6 SPHs and 6 CATs. The unit cost represents cost per set (1 SPH and 1 CAT).

The 2019 funding request was reduced by \$150.000 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 2019 Army

Date: February 2018

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

P-1 Line Item Number / Title:
2073GZ0410 / Paladin Integrated Management (PIM)

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

ID Code (A=Service Ready, B=Not Service Ready): A		N	IDAP/MAIS Code:			
Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity (Units in Each)	65	4	8 71	30	6	36
Gross/Weapon System Cost (\$ in Millions)	867.860	584.08	9 772.149	351.802	67.000	418.802
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	867.860	584.08	9 772.149	351.802	67.000	418.802
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	867.860	584.08	9 772.149	351.802	67.000	418.802
(The following Resource Summary rows are for information	onal purposes only. The cor	responding budget reque	sts are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	13,351.692	12,168.52	1 10,875.338	11,726.733	11,166.667	11,633.389

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

	P	rior Years	S		FY 2017			FY 2018		FY	/ 2019 Bas	se	FY	′ 2019 OC	0	FY	²⁰¹⁹ Tot	tal
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																		
SYS ENG/ PROG MGMT (CONTRACTOR)	-	-	18.821	-	-	10.303	-	-	17.075	-	-	10.270	-	-	2.066	-	-	12.3
SYSTEM TECHNICAL SUPPORT	-	-	105.430	-	-	55.947	-	-	53.251	-	-	30.546	-	-	5.565	-	-	36.1
SYS TEST & EVALUATION (CONTRACTOR)	-	-	32.388	-	-	1.363	-	-	2.094	-	-	0.875	-	-	0.176	-	-	1.0
SYS ENG/ PROG MGMT (GOVERNMENT)	-	-	71.310	-	-	23.996	-	-	28.739	-	-	29.163	-	-	3.859	-	-	33.0
SYS TEST & EVALUATION (GOVERNMENT)	-	-	4.206	-	-	2.882	-	-	7.607	-	-	3.035	-	-	0.402	-	-	3.4
TRANSPORTATION	-	-	0.263	-	-	0.587	-	-	0.952	-	-	0.591	-	-	0.119	-	-	0.7
Subtotal: Recurring Cost	-	-	232.418	-	-	95.078	-	-	109.718	-	-	74.480	-	-	12.187	-	-	86.6
Non Recurring Cost										,								
PRODUCTION FACILITIZATION	-	-	28.131	-	-	14.538	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: Non Recurring Cost	-	-	28.131	-	-	14.538	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: Flyaway Cost	-	-	260.549	-	-	109.616	-	-	109.718	-		74.480	-	-	12.187	-		86.6

LI 2073GZ0410 - Paladin Integrated Management (PIM) Army

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Exhibit P-5, Cost Analysis: PB 2019 Army

P-1 Line Item Number / Title:

Date: February 2018

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

2073GZ0410 / Paladin Integrated Management (PIM)

Item Number / Title [DODIC]: GZ0410 / Paladin Integrated

Management (PIM)

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

MDAP/MAIS Code:

Note: Subtotals or	Totals in this Exhil	oit P-5 may not be exac	t or sum exactly due to rounding.

	P	rior Years	;		FY 2017			FY 2018		FY	2019 Bas	е	FY	2019 OC	0	FY	2019 Total	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)
Recurring Cost					,						•					,		
MANUFACTURING ^(†)	11,168.628	43	480.251	8,036.229	48	385.739	7,328.437	71	520.319	6,659.833	30	199.795	6,662.000	6	39.972	6,660.194	36	239.7
GOVERNMENT FURNISHED EQUIPMENT (GFE)	-	-	33.009	-	-	24.318	-	-	42.314	-	-	25.795	-	-	5.189	-	-	30.9
THEATRE PROVIDED EQUIPMENT	-	-	2.339	-	-	3.512	-	-	30.077	-	-	5.381	-	-	1.082	-	-	6.4
RECURRING PRODUCTION - OTHER	-	-	7.878	-	-	4.457	-	-	7.386	-	-	4.443	-	-	0.894	-	-	5.:
ENGINEERING CHANGE ORDERS	-	-	24.576	-	-	22.452	-	-	19.039	-	-	18.549	-	-	2.455	-	-	21.0
Subtotal: Recurring Cost	-	-	548.053	-	-	440.478	-	-	619.135	-	-	253.963	-	-	49.592	-	-	303.
Subtotal: Hardware Cost	-	-	548.053	-	-	440.478	-	-	619.135	-	-	253.963	-	-	49.592	-	-	303.
Support - Contractor Logistics	Support (CLS)	Cost			,					,			,	·		,	,	
Oversight	-	-	23.080	-	-	0.348	-	-	0.326	-	-	0.437	-	-	0.088	-	-	0
Subtotal: Support - Contractor Logistics Support CLS) Cost	-	-	23.080	-	-	0.348	-	-	0.326	-	-	0.437	-	-	0.088	-	-	0.
Support - Data Cost	,				'						<u>'</u>		· · · · · ·			·		
Technical Publications	-	-	20.288	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: Support - Data Cost	-	-	20.288	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Support - Initial Spares and Re	epair Parts Cos	st																
Initial Spares and Repair Parts	-	-	-	-	-	10.494	-	-	18.251	-	-	4.425	-	-	1.413	-	-	5
Subtotal: Support - Initial Spares and Repair Parts Cost	-	-	-	-	-	10.494	-	-	18.251	-	-	4.425	-	-	1.413	-	-	5
Support - Initial Support Equip	ment (ISE) Co	st			,					,			,	·		,	,	
Support and Handling Equipment	-	-	0.601	-	-	4.774	-	-	5.462	-	-	4.127	-	-	0.830	-	-	4
Subtotal: Support - Initial Support Equipment (ISE) Cost	-	-	0.601	-	-	4.774	-	-	5.462	-	-	4.127	-	-	0.830	-	-	4
Support - New Equipment Tra	ining (NET) Co	st																
Equipment	-	-	-	-	-	11.370	-	-	9.385	-	-	6.801	-	-	1.368	-	-	8

LI 2073GZ0410 - Paladin Integrated Management (PIM) Army

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Exhibit P-5, Cost Analysis: PB 2019 Army

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

P-1 Line Item Number / Title:
2073GZ0410 / Paladin Integrated Management (PIM)

Bate: February 2018

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

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 sum exactly due to rounding.

	1	Prior Years	3		FY 2017			FY 2018		F	Y 2019 Ba	se	F'	Y 2019 OC	0	F	Y 2019 Tot	: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)
Subtotal: Support - New Equipment Training (NET) Cost	-	-	-	-	-	11.370		-	9.385	-	-	6.801	-	-	1.368	-	-	8.169
Support - Operational/Site Ac	tivation Cost																	
Contractor Technical Support	-	-	0.320	-	-			-	-	-	-	-	-		-	-	-	-
Subtotal: Support - Operational/Site Activation Cost	-	-	0.320	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Support - Support Equipment	Cost																	
Maintenance Equipment	-	-	4.714	-	-	2.663	-	-	4.290	-	-	2.824	-	-	0.568	-	-	3.392
Subtotal: Support - Support Equipment Cost	-	-	4.714	-	-	2.663	-	-	4.290	-	-	2.824	-	-	0.568	-	-	3.392
Support - Training Cost																		
Equipment	-	-	10.255	-	-	4.346	-	-	5.582	-	-	4.745	-	-	0.954	-	-	5.699
Subtotal: Support - Training Cost	-	-	10.255	-	-	4.346		-	5.582	-	-	4.745	-	-	0.954	-	-	5.699
Gross/Weapon System Cost	13,351.692	65	867.860	12,168.521	48	584.089	10,875.338	71	772.149	11,726.733	30	351.802	11,166.667	6	67.000	11,633.389	36	418.802

				FY 2019	FY 2019	FY 2019
Sec	ondary Distribution	FY 2017	FY 2018	Base	oco	Total
Army	Quantity	46	49	11	6	17
	Total Obligation Authority	558.450	574.930	92.312	67.000	159.312
ANG	Quantity	2	22	19	-	19
	Total Obligation Authority	25.639	197.219	259.490	-	259.490
Total:	Quantity	48	71	30	6	36
Secondary Distribution	Total Obligation Authority	584.089	772.149	351.802	67.000	418.802

^(†) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2019	Army	Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity:		Item Number / Title [DODIC]:
2033A / 01 / 20	2073GZ0410 / 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	Qty (Each)	Unit Cost	Specs Avail Now?	Revision	RFP Issue Date
MANUFACTURING ^(†)		2016	BAE / York	SS / FPIF	TACOM, Warren, MI	Oct 2015	Mar 2017	30	7,348.267			
MANUFACTURING ^(†)		2017	BAE / York	SS / FPIF	TACOM, Warren, MI	Dec 2017	Dec 2018	48	8,036.230			
MANUFACTURING ^(†)		2018	BAE / York	SS / FPIF	TACOM, Warren, MI	Aug 2018	Dec 2019	71	7,328.440			
MANUFACTURING ^(†)		2019	BAE / York	SS / FPIF	TACOM, Warren, MI	Jan 2019	Nov 2020	36	6,660.190			

^(†) indicates the presence of a P-21

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	bit P	P-21, Pro	oduct	ion Sc	hedu	le: Pl	B 201	9 Arm	ny														Date	: Feb	ruary	2018	3			
			Budge	et Acti	vity /	Bud	get S	ub Ac	tivity	:	1						ted Ma	anage	emen	t (PIN	1)		GZ04	410 <i>l</i>	Palac	lin Int				
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r Ye	ears De	eliveries: 13																												
1	2016	ARMY	30	0	30	Α -	_	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	2	3	2	3	2	
1	2017	ARMY	48	0	48								_																	4
1	2018	ARMY	71	0	71																									7
1	2019	ARMY	36	0	36																									3
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3 MFR#	UF Ye	FY UFACTU Years De 2016 2017 2018	Cost El (Units I	Cost Elements (Units in Each) FY SERVICE QTY UFACTURING Years Deliveries: 13 2016 ARMY 30 2017 ARMY 48 2018 ARMY 71	Cost Elements (Units in Each) Cost Elements (Units in Each) ACCEPT PRIOR TO 1 OCT	Cost Elements (Units in Each) PROC OCT AS OF TO 1 OCT AS OF UFACTURING Years Deliveries: 13 2016 ARMY 30 0 30 2017 ARMY 48 0 48 2018 ARMY 71 0 71	Cost Elements (Units in Each) PROC OCT AS OF C TOTAL	Cost Elements (Units in Each) ACCEPT PRIOR TO 1 DUE O N N O N	Cost Elements (Units in Each) ACCEPT PRIOR TO 1 DUE O N D E C O E C	Cost Elements (Units in Each) ACCEPT PRIOR TO 1 DUE O N D J	Cost Elements (Units in Each) ACCEPT BAL DUE O N D J F	Cost Elements	Cost Elements (Units in Each) Fiscal Year 2016	Cost Elements (Units in Each) Fiscal Year 2016 Cost Elements (Units in Each) Cost Elements (Units in Each) Cost Elements (Units in Each) Cost Elements (Units in Each)	Cost Elements (Units in Each) Fiscal Year 2016 Calendar PRIOR PRIOR TO 1 DUE O N D J F M A M J DUE O N B R R Y N N D DUE O N B R R Y N N D DUE O N B R R Y N N D DUE O N B R R Y N N D DUE O N B R R Y N N D DUE O N B R R Y N N D DUE O N B R R Y N N D DUE O N B R R Y N N D DUE O N B R R Y N N D DUE O N B R R Y N N D DUE O N B R R Y N N D DUE O N B R R Y N N D DUE O N B R R Y N N D DUE O N B R R Y N N D DUE O N B R R Y N N D DUE O N B R R Y N N D DUE O N B R R Y N N D DUE O N DE O DUE O DE O DE O DE O DE O DE O DE	Cost Elements (Units in Each) Fiscal Year 2016 Calendar Year 2017 Calendar	Cost Elements (Units in Each) Fiscal Year 2016 Calendar Year 2016 Calenda	Cost Elements	Cost Elements	Cost Elements (Units in Each) Fiscal Year 2016 Calendar Year 2016 PROC OCT AS OF C O E A E A P A U U U E C O V C N B R R Y N L G P T V V C N B R R Y N L G P T V V C N B R R Y N L G P T V C N C N C N C C C C C C C C C C C C C C C C C C C C	3A / 01 / 20 Cost Elements (Units in Each) Fiscal Year 2016 ACCEPT PRIOR TO 1 DUE O N D J F M A M J J A S O N D E C O E A E A P A U U U E C O E A E A P A U U U E C O E A E A P A U U U E C O E A E A P A U U U E C O E A E A P A U U U U U U U U U	3A / 01 / 20 Cost Elements	3A / 01 / 20 Cost Elements (Units in Each) ACCEPT PRIOR TO 1 DUE FY SERVICE QTY 2015 1 OCT T V C N B R R R Y N L G P T V C N B UFACTURING Years Deliveries: 13 2016 ARMY 30 0 30 A	3A / 01 / 20 2073GZ0410 / Paladin Integrated Management (PIM) GZ0-Management (PIM) Cost Elements (Units in Each) Fiscal Year 2016 Calendar Year 2016 Fiscal Year 2016 F	3A / 01 / 20 2073GZ0410 / Paladin Integrated Management (PIM) GZ0410 / Managem Cost Elements (Units in Each) Fiscal Year 2016 Fiscal Year 2016 Fiscal Year 2016 Fiscal Year 2016 Calendar Year 2016 Calendar Year 2016 Calendar Year 2016 Calendar Year 2016 Fiscal Year 2017 Calendar Year 2016 Calendar Year 2016 Fiscal Year 2016 Calendar Year 2016 Calendar Year 2016 Calendar Year 2016 Fiscal Year 2016 Calendar Year 2016 Calendar Year 2016 Calendar Year 2016 Fiscal Year 2016 Calendar Year 2016 Fiscal Year 2016 Calendar Year 2016 Calendar Year 2016 Fiscal Year 2016 Fiscal Year 2016 Calendar Year 2016 Fiscal Year 2016	3A / 01 / 20 2073GZ0410 / Paladin Integrated Management (PIM) GZ0410 / Paladin Integrated Management (PIM) GZ0410 / Paladin Integrated Management (PIM) Fiscal Year 2016 Fiscal Year 2016 Fiscal Year 2016 Calendar Year 2016 Calendar Year 2016 Calendar Year 2016 Fiscal Year 2017 DUE O N D J F M A M J J J A S O N D J F M A M A M A M A M A M A M A M A M A M	3A / 01 / 20 Cost Elements (Units in Each) Fiscal Year 2016 Fiscal Year 2017	3A / 01 / 20 Cost Elements	3A / 01 / 20 2073GZ0410 / Paladin Integrated Management (PIM) Cost Elements (Units in Each) Resource ACCEPT PRIOR TO1 AS OF C O E A E A P A U U U E C O E A E A P A U U U U E C O E A E A P A U U U U U U U U U	3A / 01 / 20 2073GZ0410 / Paladin Integrated Management (PIM) Cost Elements (Units in Each) Fiscal Year 2016 Fiscal Year 2016 Fiscal Year 2016 Calendar Year 2016 Calendar Year 2016 Calendar Year 2016 Fiscal Year 2017 Calendar Year 2016 Calendar Year 2017 Calendar Year 2016 Calendar Year 2016 Calendar Year 2017 Calendar Year 2016 Calendar Year 2017 Calendar Year 2016 Calendar Year 2017 Calendar Year 201

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1	201	9 ARMY		36	0	36			_					1							1	Α -	-	-	-	-	-	-	-	-	3
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	_	ARMY	48			ļ																								
		ARMY	71																											
L.	2019	ARMY	36	33	3	- 1				T _					1 .	Ι.	T -		1	T _				1 .		Ι.				-
						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 J	U L	U G	S E P	O C T	N O V	E C	J A N	F E B	M A R	A P R	M A Y	N U J	U L	A U G	S E P	
																														_

Exhibit P-21, Production Schedule: PB 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 01 / 20	P-1 Line Item Number / Title: 2073GZ0410 / Paladin Integrated Management (PIM)	Item Number / Title [DODIC]: GZ0410 / Paladin Integrated
	, , , , , , , , , , , , , , , , , , , ,	Management (PIM)

		Produc	tion Rates (Each /	Month)				Procurement Le	adtime (Months)			
MFF						lni	tial			Red	order	
Ref	Manufacturer Name - Location	MSR For 2019	1-8-5 For 2019	MAX For 2019	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
<u>"</u>	BAE - York	2	6	10		2	16	18	0	4	22	26

Remarks:

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 999,999,999 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).

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

Exhibit P-40, Budget Line Item Justification: PB 2019 Army Date: February 2018

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: 3700GA0570 / Improved Recovery Vehicle (M88A2 HERCULES)

Modification of Tracked Combat Vehicles

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

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

	Dulan			EV 0040	EV 0040	EV 0040					Т.	
	Prior			FY 2019	FY 2019	FY 2019					То	
Resource Summary	Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total
Procurement Quantity (Units in Each)	817	18	16	26	12	38	-	-	-	-	44	933
Gross/Weapon System Cost (\$ in Millions)	2,399.861	91.963	72.402	110.500	42.354	152.854	-	-	10.500	-	215.454	2,943.034
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	2,399.861	91.963	72.402	110.500	42.354	152.854	-	-	10.500	-	215.454	2,943.034
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	2,399.861	91.963	72.402	110.500	42.354	152.854	-	-	10.500	-	215.454	2,943.034
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	e corresponding	budget requests	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	_
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	2,937.406	5,109.056	4,525.125	4,250.000	3,529.500	4,022.474	-	-	-	-	4,896.682	3,154.377

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 and 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. The M88A2 is an improvement over the M88A1 Medium Recovery Vehicle (MRV) as it is the only vehicle with the capability of providing Single Vehicle Recovery (SVR) of the 70 ton Abrams tank.

				FY 2019	FY 2019	FY 2019				
Total O ANG Quantity Total O Total O Quantity Quantity	/ Distribution	FY 2017	FY 2018	Base	ОСО	Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	18	10	26	12	38	-	-	-	-
	Total Obligation Authority	91.963	54.419	110.500	42.354	152.854	-	-	10.500	-
ANG	Quantity	-	6	-	-	-	-	-	-	-
	Total Obligation Authority	-	17.983	-	-	-	-	-	-	-
Total:	Quantity	18	16	26	12	38	-	-	-	-
Army Qu To: ANG Qu To: Total: Qu	Total Obligation Authority	91.963	72.402	110.500	42.354	152.854	-	-	10.500	-

Exhibit P-40, Budget Line Item Justification: PB 2019 Army Date: February 2018

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: 3700GA0570 / Improved Recovery Vehicle (M88A2 HERCULES)

Modification of Tracked Combat Vehicles

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

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

	Exhibits Schedule	Subexhibits CD			Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	GA0570 / Improved Recovery Vehicle (M88A2 HERCULES)	P-5a, P-21	Α		817 / 2,399.861	18 / 91.963	16 / 72.402	26 / 110.500	12 / 42.354	38 / 152.854
P-40	Total Gross/Weapon System Cost				817 / 2,399.861	18 / 91.963	16 / 72.402	26 / 110.500	12 / 42.354	38 / 152.854

^{*}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 sum exactly due to rounding.

Justification:

FY 2019 Base procurement dollars in the amount of \$110.500 million supports the vehicle production and the procurement of 26 vehicles with M88 Family of Vehicles Operational Modifications cut-in during production. The fielded M88A1 Medium Recovery Vehicles lack the necessary power, weight, and braking ability to safely support the recovery of the Abrams fleet. The M88A2 HERCULES vehicles will address 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.

FY 2019 Overseas Contingency Operations (OCO) procurement dollars in the amount of \$42.354 million supports COCOM requirement for unit equipment sets to deter potential adversaries and support the European Deterrence Initiative (EDI). Funding will support the vehicle production and the procurement of 12 M88A2 vehicles with M88 Family of Vehicles Operational Modifications cut-in during production.

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): 933

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							UN	NCLAS	SIFIED)								
Exhibit P-5, Cost	Analysis	: PB 20	19 Army										1	Date: Fe	bruary 2	2018		
Appropriation / B 2033A / 01 / 20	udget Ac	tivity /	Budget	Sub Acti	ivity:	3700		Numbe / Improve			nicle (M88	BA2	(/ Improv		DIC]: overy Veh	nicle
ID Code (A=Service Read	ly, B=Not Service	e Ready):	A			,			М	DAP/MAIS	Code:		,					
F	Resource	Summ	ary		F	Prior Yea	ars	FY 20	17	FY	2018	FY 2	2019 Bas	e FY	/ 2019 C	ОСО	FY 2019	Total
Procurement Quantity (Uni	ts in Each)						817		18		16	3		26		12		3
Gross/Weapon System Co	ost (\$ in Millions	s)				2,	399.861		91.963		72.402	2	110	.500		42.354		152.85
Less PY Advance Procure	ment (\$ in Milli	ions)					-		-		-			-		-		
Net Procurement (P-1) (\$ i	n Millions)					2,	399.861		91.963		72.402	2	110	.500		42.354		152.85
Plus CY Advance Procure	ment (\$ in Milli	ons)					-		-		-			-		-		-
Total Obligation Authorit	y (\$ in Millions)					2,	399.861		91.963		72.402	2	110	.500		42.354		152.85
(TI	ne following R	esource Su	ummary rows	s are for info	rmational p	urposes only	. The corres	ponding bud	get request	s are docum	ented elsewh	ere.)						
Initial Spares (\$ in Millions)							-		-		-			-		-		-
Gross/Weapon System Ur	nit Cost (\$ in Ti	housands)				2,	937.406		5,109.056		4,525.12	5	4,250	.000	3	,529.500		4,022.47
Note: Subtotals or Totals in	n this Exhibit	P-5 may no	ot be exact o	r sum exactly	y due to rou	 inding.												
	Р	rior Years	3		FY 2017			FY 2018		FY	/ 2019 Base	•	FY	2019 OC	0	F	Y 2019 Tot	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	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost	(Ψ1)	(Lacii)	(Ψ W)	(Ψ10)	(Lacii)	(Φ 101)	(\$19	(Lacii)	(ψ 1/1)	(\$70)	(Lacii)	(Ψ W)	(ψ10)	(Lacii)	(Ψ 101)	(\$70)	(Lacii)	(\$ 101)
Recurring Cost																		
Vehicle Manufacturing - Contractor ^(†)	2,144.996	817	1,752.462	3,379.056	18	60.823	2,967.313	16	47.477	3,227.154	26	83.906	3,289.917	12	39.479	3,246.974	38	123.38
Vehicle Manufacturing - GFE	-	-	95.255	-	-	1.169	-	-	1.058	-	-	1.756	-	-	0.811	-	-	2.56
System Technical Support	-	-	285.806	-	-	10.360	-	-	9.473	-	-	7.926	-	-	-	-	-	7.92
Program Management	-	-	76.105	-	-	9.838	-	-	9.574	-	-	7.433	-	-	-	-	-	7.43
Transportation	-	-	13.202	-	-	0.523	-	-	0.536	-	-	0.835	-	-	-	-	-	0.83
Fielding (TPF & NET)	-	-	90.030	-	-	1.111	-	-	1.389	-	-	4.169	-	-	-	-	-	4.16
Test (Production Verification Testing)	-	-	19.050	-	-	4.746	-	-	0.200	-	-	-	-	-	-	-	-	-
M88A1 Hull Reclamation	-	-	67.951	-	-	3.393	-	-	2.695	-	-	4.475	-	-	2.064	-	-	6.53
Subtotal: Recurring Cost	-	-	2,399.861	-	-	91.963	-	-	72.402	-	-	110.500	-	-	42.354	-	-	152.85
Subtotal: Flyaway Cost	-	-	2,399.861	-	-	91.963	-	-	72.402	-	-	110.500	-	-	42.354	-	-	152.85
Gross/Weapon System Cost	2,937.406	817	2,399.861	5,109.056	18	91.963	4,525.125	16	72.402	4,250.000	26	110.500	3,529.500	12	42.354	4,022.474	38	152.85
												FY 2	019	F	Y 2019		FY 201	19
	Seco	ndary Di	stribution				FY 2	2017		FY 2018		Bas	se		ОСО		Total	1

LI 3700GA0570 - Improved Recovery Vehicle (M88A2 HERCULE... Army

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Exhibit P-5, Cost Analysis: PB 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 01 / 20	P-1 Line Item Number / Title: 3700GA0570 / Improved Recovery Vehicle (M88A2 HERCULES)	Item Number / Title [DODIC]: GA0570 / Improved Recovery Vehicle (M88A2 HERCULES)

ID Code (A=Service Ready, B=Not Service Rea	ndy): A		MDAP/MAIS Code):		
Seconda	ry Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
	Total Obligation Authority	91.963	54.419	110.500	42.354	152.854
ANG	Quantity	-	6	-	-	-
	Total Obligation Authority	-	17.983	-	-	-
Total:	Quantity	18	16	26	12	38
Secondary Distribution	Total Obligation Authority	91.963	72.402	110.500	42.354	152.854

^(†) indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: PB 2019 A	Army	Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 01 / 20	P-1 Line Item Number / Title: 3700GA0570 / Improved Recovery Vehicle (M88A2 HERCULES)	Item Number / Title [DODIC]: GA0570 / Improved Recovery Vehicle (M88A2 HERCULES)

Cost Elements	000	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?	Revision	RFP Issue Date
Vehicle Manufacturing - Contractor ^(†)		2017	BAE Systems / York PA	SS / FFP	TACOM	Sep 2017	Jan 2019	18	3,379.060	Y		
Vehicle Manufacturing - Contractor ^(†)		2018	BAE Systems / York PA	SS / FFP	TACOM	Apr 2018	Oct 2019	16	2,967.310	Y		
Vehicle Manufacturing - Contractor ^(†)		2019	BAE Systems / York PA	SS / FFP	TACOM	Mar 2019	Jun 2020	38	3,246.970	Y		

^(†) indicates the presence of a P-21

Remarks:

FY 2018 WTCV Base: Contract will procure 16 vehicles, plan for April 2018 award.

FY 2019 WTCV Base: Contract will procure 26 vehicles, plan for April 2019 award. FY 2019 WTCV OCO: Contract will procure 12 vehicles, plan for April 2019 award.

													U	NCI	LAS	SIF	IEC)													
Exh	ibit F	P-21, Pr	oducti	on Sc	hedu	le: Pl	B 201	9 Arn	ny															Dat	e: Fel	oruary	/ 2018	3			
		iation / 01 / 20	Budge	et Acti	vity /	Bud	get S	ub Ad	ctivity	:	37	1 Line 00GA RCU	0570) / Im				: overy \	/ehic	le (M	88A2			GA		Impr	oved		DIC]: very \	ehicle	е
			lements in Each)								Fiscal	Year 201	7											Fiscal \	ear 2018						ВА
М				ACCEPT PRIOR	BAL									Calen	dar Yea	r 2017									Cale	ndar Yea	r 2018				Ĺ
O F C R O #	FY	SERVICE	PROC QTY	TO 1 OCT 2016	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	ן נ	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	J U N	J U L	A U G	S E P	N C E
Vehicl	e Manuf	facturing - Co	ntractor																												
Prior \		eliveries: 817	,																					,							
1	2017	ARMY	18	0	18													A -	-	-	-	-	-	-	-	-	-	-	-	-	18
1	2017	FMS (‡)	2	0	2		_											A -	-	-	-	-	-	-	-	-	-	-	-	2	(
1	2017		20	0														-	-	-	-	-	-	-	-	-	-	-		2	18
1		ARMY	16	0																				_	Α -	-	-	-	-		10
1	2019	ARMY	38	0	38			1	1			1								1	1	ı	1	1	1	1					3
						O C T	N O V	D E C	J A N	F E B	M A R	P R	M A Y	J U N	ן	U L	A U G	S E P	O C T	N O V	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	

Date: February 2018 Substitution Schedule: PB 2019 Army Appropriation / Budget Activity / Budget Sub Activity: 3700GA0570 / Improved Recovery Vehicle (M88A2 HERCULES) HERCULES HERCULE														UN	ICL/	ASSI	FIEC)													
3700GA0570 / Improved Recovery Vehicle (M88A2 HERCULES) Secondar Year 2019 Secondar Year	Exh	ibit	P-21, Pr	oducti	on Sc	hedul	e: PE	3 201	9 Arm	y														Date	: Feb	ruary	2018	3			
C				Budge	t Acti	vity /	Budç	get Su	ıb Ac	tivity:		370	0GA	570					Vehic	cle (M8	38A2			GA0	570 <i>I</i>	Impro	oved	Reco		/ehicl	е
PRIOR TOTAL DUB PROC OTAL PROC												Fiscal Ye	ear 2019											Fiscal Ye	ar 2020						В
0 F V SERVICE PROC OCT AS OF C O D D D D D D D D D	П.,													(Calendar	Year 20	19								Calen	dar Year	2020				Ĺ
Prior Years Deliveries: 817 1 2017 ARMY 18	O F C R	:	SERVICE		TO 1 OCT	DUE AS OF	С	0	E		E	A	Р			J U L	U	E	С	0	E		E	Α	P	Α		J U L	U	E	N C E
1 2017 ARMY 18 0 18 2 2 2 2 2 2 2 2 2 2 2 2 2 1 2 2 2 1 2	Vehic	le Manu	ufacturing - Co	ntractor																		<u> </u>		l l							
1 2017 FMS (‡) 2 2 0	Prior '																														
1 2017 Total 20 2 18 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1	+	+	18		_	-	-	-	2	2	2	2	2	2	2	2	2													
1 2018 ARMY 16 0 16 2 2 2 2 2 2 2 2	1		-	2		-	-	-	-	-	-	-	-	-	-	-	-	-													
1 2019 ARMY 38 0 38	1	+				_	-	-	-	2	2	2	2	2	2	2	2	2		-	-	\vdash	-			-	-	-	-		_
O N D J F M A M J J A S O N D J F M A M J J A S C O E A E A P A U U U E C O E A E A P A U U U E	1						-	-	-	-	-							-	2	2	2		2	2	2	2					-
C O E A E A P A U U U E C O E A E A P A U U U E	1	2019	ARMY	38	0	38			_						-	-	-	-	-	-	-	-		-	-	-	. 3	3	<u> </u>	4	:
							C	0	E		E	A	Р	Α			U	E	С	0	E		E	Α	P	Α			U	E	

				on Sc	hedul	e: PE	2019	9 Arm	ıy														Date	: Feb	ruary	2018	3		
	A / (r iation / 01 / 20	Budge	t Acti	vity /	Budg	et Su	ub Ac	tivity	:	370	Line 00GA RCUL	0570				very '	√ehic	le (M	38A2			GA0	570 <i>I</i>	iber / Impro IERCI	oved I	Reco		'ehicl
			lements in Each)								Fiscal Y	ear 2021											Fiscal Ye	ear 2022					
				ACCEPT									(Calenda	Year 20	21								Calen	dar Year	2022			
M O F C R O #	FY	SERVICE	PROC QTY	PRIOR TO 1 OCT 2020	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 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
		facturing - Co	ntractor		'																								
		eliveries: 817	10																										
		ARMY FMS ^(‡)	18	18	0																								
		Total	20	20	0	_ [_	_	_	_	_	_	_	_	_	T -	_	-	_	_	_	_	_			_	_	-	
-		ARMY	16	16	0			_	_		_			_	_	_	_	_		_	_	_	_		-		_	_	
		ARMY	38	14	24	4	4	4	4	4	4]																	
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J 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

Exhibit P-21, Production Schedule: PB 2019 Army	Date: February 2018	
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 01 / 20	P-1 Line Item Number / Title: 3700GA0570 / Improved Recovery Vehicle (M88A2 HERCULES)	Item Number / Title [DODIC]: GA0570 / Improved Recovery Vehicle (M88A2 HERCULES)

t			Produc	tion Rates (Each /	Month)	Procurement Leadtime (Months)								
	MFR						Initial					rder		
	Ref #	Manufacturer Name - Location	MSR For 2019	1-8-5 For 2019	MAX For 2019	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	
	1	BAE Systems - York PA	1	8	12	0	12	16	28	0	6	15	21	

^(‡) 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).

Exhibit P-40, Budget Line Item Justification: PB 2019 Army Date: February 2018

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: 4520GZ3250 / Assault Bridge (Mod)

Modification of Tracked Combat Vehicles

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

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2019	FY 2019	FY 2019					То		
Resource Summary	Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total	
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-	
Gross/Weapon System Cost (\$ in Millions)	341.560	9.415	5.855	2.120	-	2.120	2.823	5.082	36.821	87.232	Continuing	Continuing	
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-	
Net Procurement (P-1) (\$ in Millions)	341.560	9.415	5.855	2.120	-	2.120	2.823	5.082	36.821	87.232	Continuing	Continuing	
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-	
Total Obligation Authority (\$ in Millions)	341.560	9.415	5.855	2.120	-	2.120	2.823	5.082	36.821	87.232	Continuing	Continuing	
(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)	1,581.296	90.529	54.213	-	-	-	-	564.667	526.014	535.166	Continuing	Continuing	

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 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	9.415	5.855	2.120	-	2.120	2.823	5.082	36.821	87.232
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	9.415	5.855	2.120	-	2.120	2.823	5.082	36.821	87.232

Justification:

FY 2019 Base procurement dollars in the amount of \$2.120 million supports:

The Assault Breacher Vehicle Full Width Mine Plow Tine Tip Modification consists of replacing the existing tines on each blade section with a tine adaptor and replaceable tip. The new tip will be held in place by a roll pin. The modification provides increased capability by strengthening the tine to resist bending in harder soils and the replaceable tip significantly reduces mean time to repair when tips become worn out. The upgrade will extend the service life of the plow, reduce down time and increase overall availability of the ABV.

The Abrams A2 Heavy Duty Suspension upgrade to the ABV. The upgrade will replace the obsolete A1 suspension and keep the ABV's suspension common to the current Abrams configuration. The change will keep the logistics footprint minimized, provide for growth for additional future force protection initiatives and should increase the suspension mean time between failures, increasing system availability.

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Exhibit P-40, Budget Line Item Justification	: PB 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget Su 2033A: Procurement of W&TCV, Army / BA 01 Modification of Tracked Combat Vehicles		P-1 Line Item N 4520GZ3250 / A	
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B I	tems: N/A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A			
In accordance with Section 1815 of the FY 2008 National defense missions, domestic emergency responses, and p	Defense Authorization Act (P.L. 110-181), this roviding military support to civil authorities.	item is necessary for u	use by the active and reserve components of the Armed Forces for homeland

LI 4520GZ3250 - Assault Bridge (Mod) Army UNCLASSIFIED Page 2 of 2

Exhibit P-40, Budget Line Item Justification: PB 2019 Army

Date: February 2018

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: 4872G82925 / Assault Breacher Vehicle

Modification of Tracked Combat Vehicles

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

P-1 Line #11

Line Item MDAP/MAIS Code: N/A

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

Line item WDAF/WAIS Code. N/A												
	Prior			FY 2019	FY 2019	FY 2019					То	
Resource Summary	Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total
Procurement Quantity (Units in Each)	113	0	7	12	-	12	5	4	5	8	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	434.824	2.928	34.221	62.407	-	62.407	31.699	23.065	29.198	46.848	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	434.824	2.928	34.221	62.407	-	62.407	31.699	23.065	29.198	46.848	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	434.824	2.928	34.221	62.407	-	62.407	31.699	23.065	29.198	46.848	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	e corresponding	g budget request:	s are documente	d elsewhere.)			ĺ	
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	3,848.000	-	4,888.714	5,200.583	-	5,200.583	6,339.800	5,766.250	5,839.600	5,856.000	Continuing	Continuing

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. The ABV is fabricated at Anniston Army Depot.

Army Acquisition Objective (AAO) ABV: 141

Seconda	ry Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	-	7	-	7	5	4	5	8
	Total Obligation Authority	2.928	-	36.404	-	36.404	31.699	23.065	29.198	46.848
ANG	Quantity	-	7	5	-	5	-	-	-	-
	Total Obligation Authority	-	34.221	26.003	-	26.003	-	-	-	-
Total:	Quantity	-	7	12	-	12	5	4	5	8
Secondary Distribution	Total Obligation Authority	2.928	34.221	62.407	-	62.407	31.699	23.065	29.198	46.848

Exhibit P-40, Budget Line Item Justification: PB 2019 Army

Date: February 2018

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: 4872G82925 / Assault Breacher Vehicle

Modification of Tracked Combat Vehicles

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

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

	Exhibits Schedule				Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	G82925 / Assault Breacher Vehicle	P-5a, P-21	Α		113 / 434.824	0 / 2.928	7 / 34.221	12 / 62.407	- / -	12 / 62.407
P-40	Total Gross/Weapon System Cost				113 / 434.824	0 / 2.928	7 / 34.221	12 / 62.407	- 1 -	12 / 62.407

^{*}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 sum exactly due to rounding.

Justification:

FY 2019 Base procurement dollars in the amount of \$62.407 million supports the procurement of 12 Assault Breacher Vehicles (ABVs) that give the Army 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.

> **UNCLASSIFIED** Page 2 of 8

Exhibit P-5, Cost Analysis: PB 2019 Army

Appropriation / Budget Activity / Budget Sub Activity:

2033A / 01 / 20

Date: February 2018

Item Number / Title [DODIC]:

4872G82925 / Assault Breacher Vehicle

G82925 / Assault Breacher Vehicle

ID Code (A=Service Ready, B=Not Service Ready): A		М	DAP/MAIS Code:			
Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity (Units in Each)	113	C	7	12	-	12
Gross/Weapon System Cost (\$ in Millions)	434.824	2.928	34.221	62.407	-	62.407
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	434.824	2.928	34.221	62.407	-	62.407
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	434.824	2.928	34.221	62.407	-	62.407
(The following Resource Summary rows are for informati	onal purposes only. The cor	responding budget reques	ts are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	3,848.000	-	4,888.714	5,200.583	-	5,200.583

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

	P	rior Years	i		FY 2017			FY 2018		FY	2019 Bas	е	FY	2019 OC	:0	FY	2019 Tota	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)															
Iyaway Cost																		
Recurring Cost																		
ABV Hardware ^(†)	2,175.098	112	243.611	-	-	-	2,500.000	7	17.500	3,058.833	12	36.706	-	-	-	3,058.833	12	36.7
Full Width Mine Plow	316.895	76	24.084	-	-	-	385.000	4	1.540	423.125	8	3.385	-	-	-	423.125	8	3.3
2. Combat Dozer Blade	187.737	38	7.134	-	-	-	190.000	2	0.380	204.250	4	0.817	-	-	-	204.250	4	0.8
3. High Lift Adapter	186.625	112	20.902	-	-	-	215.000	7	1.505	245.000	12	2.940	-	-	-	245.000	12	2.9
 Lane Marking System 	165.884	112	18.579	-	-	-	215.000	7	1.505	242.250	12	2.907	-	-	-	242.250	12	2.9
5. Linear Demolition Control System	124.589	112	13.954	-	-	-	185.000	7	1.295	173.333	12	2.080	-	-	-	173.333	12	2.0
6. Integrated Vision System	360.089	112	40.330	-	-	-	430.000	7	3.010	581.167	12	6.974	-	-	-	581.167	12	6.9
7. Hull Integration Kit	16.000	112	1.792	-	-	-	16.000	7	0.112	16.333	12	0.196	-	-	-	16.333	12	0.1
8. Embedded Diagnostic Kit	56.250	112	6.300	-	-	-	75.000	7	0.525	78.500	12	0.942	-	-	-	78.500	12	0.9
9. Spares	236.842	19	4.500	-	-	-	-	-	-	-	-	1.000	-	-	-	-	-	1.0
System Engineering/ Program Management	-	-	22.000	-	-	1.928	-	-	2.850	-	-	1.600	-	-	-	-	-	1.6
Fielding	-	-	18.113	-	-	1.000	-	-	2.200	-	-	1.000	-	-	-	-	-	1.0
Data	-	-	7.550	-	-	-	-	-	1.799	-	-	-	-	-	-	-	-	
Engineering Change Proposals	-	-	5.975	-	-	-	-	-	-	-	-	1.860	-	-	-	-	-	1.8

Exhibit P-5, Cost Analysis: PB 2019 Army

Appropriation / Budget Activity / Budget Sub Activity:

2033A / 01 / 20

Date: February 2018

P-1 Line Item Number / Title:

4872G82925 / Assault Breacher Vehicle

G82925 / Assault Breacher Vehicle

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 sum exactly due to rounding.

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	F	Prior Years	S		FY 2017			FY 2018		FY	′ 2019 Ba	se	F	Y 2019 OC	0	F	Y 2019 Tot	tal
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)
Subtotal: Recurring Cost	-	-	434.824	-	-	2.928	-	-	34.221	-	-	62.407	-	-	-	-	-	62.407
Subtotal: Flyaway Cost	-	-	434.824	-	-	2.928	-	-	34.221	-	-	62.407	-	-	-	-	-	62.407
Gross/Weapon System Cost	3,848.000	113	434.824	-	0	2.928	4,888.714	7	34.221	5,200.583	12	62.407	-	-	-	5,200.583	12	62.407

Seconda	ry Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Army	Quantity	-	-	7	-	7
	Total Obligation Authority	2.928	-	36.404	-	36.404
ANG	Quantity	-	7	5	-	5
	Total Obligation Authority	-	34.221	26.003	-	26.003
Total:	Quantity	0	7	12	=	12
Secondary Distribution	Total Obligation Authority	2.928	34.221	62.407	-	62.407

^(†) indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: PB 2019 A	urmy	Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
2033A / 01 / 20	4872G82925 / Assault Breacher Vehicle	G82925 / Assault Breacher Vehicle

Cost Elements	0 C 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
ABV Hardware ^(†)		2018	Anniston Army Depot- (ANAD) / Anniston, Al	WR	TACOM, Warren	Feb 2018	Feb 2019	7	2,500.000	Y		
ABV Hardware ^(†)		2019	Anniston Army Depot- (ANAD) / Anniston, Al	WR	TACOM, Warren	Feb 2019	Feb 2020	12	3,058.830	Y		

^(†) indicates the presence of a P-21

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Exhibi	it P	-21, Pro	oducti	on Sc	hedul	le: PE	3 201	9 Arm	าง														Date	: Feb	oruary	/ 2018	3			
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ABV Hardy	lware																													_
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1 20	019	ARMY	12	0	12																	Α -	-	-	-	-	-	-	-	12
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Exhibit P-21, Production Schedule: PB 2019 Army	Date: February 2018	
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
2033A / 01 / 20	4872G82925 / Assault Breacher Vehicle	G82925 / Assault Breacher Vehicle

		Product	tion Rates (Each /	Month)				Procurement Le				
MFR						In	itial			Reo	rder	
Ref #	Manufacturer Name - Location	MSR For 2019	1-8-5 For 2019	MAX For 2019	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
	Anniston Army Depot- (ANAD) - Anniston, Al	1	1	3	0	5	12	17	0	5	12	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 10,000 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 2019 Army Date: February 2018

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: |5129G80571 / M88 FOV MODS

Modification of Tracked Combat Vehicles

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

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2019	FY 2019	FY 2019					То	
Resource Summary	Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	112.767	8.685	4.826	4.517	-	4.517	-	-	-	-	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	112.767	8.685	4.826	4.517	-	4.517	-	-	-	-	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	112.767	8.685	4.826	4.517	-	4.517	-	-	-	-	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	e corresponding	g budget request	s are documente	ed elsewhere.)	1			1
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	5,638.350	-	-	-	-	-	-	-	-	-	Continuing	Continuing

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, and an improved metal cutting tool to reduce recovery time in combat situations.

Secondary	/ Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	8.685	4.826	4.517	-	4.517	-	-	-	-
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	8.685	4.826	4.517	-	4.517	-	-	-	-

Justification:

FY 2019 base procurement dollars in the amount of \$4.517 Million supports enhancements in operational safety, reliability, maintainability, MANPRINT, and network capability for the M88 fleet of vehicles. Modifications include automatic fire extinguishing system enhancements, Commander/Crew seat improvements, C4ISR (command, control, communications, computers, intelligence, surveillance and reconnaissance) integration efforts, hydraulic system safety enhancements, engine maintainability and reliability improvements, recovery equipment enhancements, upgraded electrical circuit panel, improved operational and task lighting, a driver's vision enhancer for optimal night operation, and an improved metal cutting tool to reduce recovery time in combat situations. MANPRINT and Force Protection concerns will be addressed thru seat improvements.

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 Page 1 of 1

Exhibit P-40, Budget Line Item Justification: PB 2019 Army

Date: February 2018

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: 5225GZ3001 / Joint Assault Bridge

Modification of Tracked Combat Vehicles

Program Elements for Code B Items: 0604804A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: X33

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

	Prior			FY 2019	FY 2019	FY 2019					То	
Resource Summary	Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total
Procurement Quantity (Units in Each)	8	14	27	30	-	30	44	48	61	51	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	93.277	64.752	128.350	142.255	-	142.255	205.772	226.964	290.954	248.729	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	=	-	-	-	-	-	-	=	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	93.277	64.752	128.350	142.255	-	142.255	205.772	226.964	290.954	248.729	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	93.277	64.752	128.350	142.255	-	142.255	205.772	226.964	290.954	248.729	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	e 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)	11,659.625	4,625.143	4,753.704	4,741.833	-	4,741.833	4,676.636	4,728.417	4,769.738	4,877.039	Continuing	Continuing

Description:

The Joint Assault Bridge (JAB) replaces the existing Wolverine and M48A5/M60 series 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 Military Load Class (MLC) 85 Bridge. 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 Milestone C - Low Rate Initial Production (LRIP) phase. The production acquisition strategy includes a public/private partnership with Anniston Army Depot (ANAD) for the production of the Abrams chassis. Test completion is planned for September 2018, and Initial Operational Test completion is planned for early second guarter FY 2019 to support a Full Rate Production Decision third guarter FY 2019.

JAB Army Acquisition Objective: 337

Seconda	ary Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	14	27	15	-	15	8	8	18	-
	Total Obligation Authority	64.752	128.350	71.127	-	71.127	37.413	37.827	85.855	-
ANG	Quantity	-	-	15	-	15	31	15	15	30
	Total Obligation Authority	-	-	71.128	-	71.128	144.976	70.926	71.546	146.311
AR	Quantity	-	-	-	-	-	5	25	28	21
	Total Obligation Authority	-	-	-	-	-	23.383	118.211	133.553	102.418
Total:	Quantity	14	27	30	-	30	44	48	61	51
Secondary Distribution	Total Obligation Authority	64.752	128.350	142.255	-	142.255	205.772	226.964	290.954	248.729

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Exhibit P-40, Budget Line Item Justification: PB 2019 Army Date: February 2018

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: 5225GZ3001 / Joint Assault Bridge

Modification of Tracked Combat Vehicles

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

Program Elements for Code B Items: 0604804A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: X33

	Exhibits Schedule					FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	GZ3001 / Joint Assault Bridge	P-5a, P-21	В		8 / 93.277	14 / 64.752	27 / 128.350	30 / 142.255	- / -	30 / 142.255
P-40	Total Gross/Weapon System Cost				8 / 93.277	14 / 64.752	27 / 128.350	30 / 142.255	- 1 -	30 / 142.255

^{*}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 sum exactly due to rounding.

Justification:

FY 2019 Base Procurement dollars in the amount of \$142.255 million supports 30 Full Rate Production (FRP) Joint Assault Bridges (JAB) for Active Army and Army National Guard requirements. The JAB fills a critical shortage in recently established Brigade Engineer Battalion (BEB) formations. The JAB chassis provides a system that offers the Combatant Commander enhanced survivability and mobility compared to the legacy M60 Armored Vehicle Launch Bridge, and is capable of supporting the Abrams Legacy Fleet while also providing improved sustainability.

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 5225GZ3001 - Joint Assault Bridge Army

Exhibit P-5, Cost Analysis: PB 2019 Army

Appropriation / Budget Activity / Budget Sub Activity:

2033A / 01 / 20

Date: February 2018

Item Number / Title [DODIC]:
5225GZ3001 / Joint Assault Bridge

GZ3001 / Joint Assault Bridge

ID Code (A=Service Ready, B=Not Service Ready): B		M	MDAP/MAIS Code:							
Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total				
Procurement Quantity (Units in Each)	8	14	. 27	30	-	30				
Gross/Weapon System Cost (\$ in Millions)	93.277	64.752	128.350	142.255	-	142.255				
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-				
Net Procurement (P-1) (\$ in Millions)	93.277	64.752	128.350	142.255	-	142.255				
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-				
Total Obligation Authority (\$ in Millions)	93.277	64.752	128.350	142.255	-	142.255				
(The following Resource Summary rows are for informat	ional purposes only. The cori	responding budget reques	ts are documented elsewhe	re.)		3				
Initial Spares (\$ in Millions)	-	-	-	-	-	-				
Gross/Weapon System Unit Cost (\$ in Thousands)	11,659.625	4,625.143	4,753.704	4,741.833	-	4,741.833				

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

	P	rior Years	;		FY 2017			FY 2018		FY	2019 Bas	e	FY	2019 OC	0	FY	2019 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																		
Hardware ^(†)	2,056.800	10	20.568	1,296.000	14	18.144	1,250.000	27	33.750	1,347.567	30	40.427	-	-	-	1,347.567	30	40.4
GFM ANAD Rolling Chassis	2,748.800	10	27.488	2,429.429	14	34.012	2,478.000	27	66.906	2,526.100	30	75.783	-	-	-	2,526.100	30	75.7
Bridge Upgrades	400.000	10	4.000	458.571	14	6.420	469.000	27	12.663	476.833	30	14.305	-	-	-	476.833	30	14.3
Engineering Changes	-	-	13.387	-	-	-	-	-	2.832	-	-	-	-	-	-	-	-	
System Engineering/ Program Management	-	-	15.000	-	-	4.500	-	-	3.652	-	-	4.259	-	-	-	-	-	4.2
Support Equipment/ ASIOE	-	-	6.584	-	-	0.676	-	-	0.107	-	-	-	-	-	-	-	-	
Fielding	-	-	1.300	-	-	1.000	-	-	8.440	-	-	0.500	-	-	-	-	-	0.5
Subtotal: Recurring Cost	-	-	88.327	-	-	64.752	-	-	128.350	-	-	135.274	-	-	-	-	-	135.2
Non Recurring Cost																		
Logistics Products	-	-	4.950	-	-	-	-	-	-	-	-		-	-	-	-	-	
Simulator - Common Driver Trainer (CDT) Update	-	-	-	-	-	-	-	-	-	-	-	6.981	-	-	-	-	-	6.9
Subtotal: Non Recurring Cost	-	-	4.950	-	-	-	-	-	-	-	-	6.981	-	-	-	-	-	6.9
Subtotal: Flyaway Cost	-	-	93.277	-	-	64.752	-	-	128.350	-	-	142.255	-	-	-	-	-	142.2
Gross/Weapon System Cost	11,659.625	8	93.277	4,625.143	14	64.752	4,753.704	27	128.350	4,741.833	30	142.255	-	-	-	4,741.833	30	142.2

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Exhibit P-5, Cost Analysis: PB 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity:		Item Number / Title [DODIC]:
2033A / 01 / 20	5225GZ3001 / Joint Assault Bridge	GZ3001 / Joint Assault Bridge

ID Code (A=Service Ready, B=Not Service Read	ly) : B		MDAP/MAIS Code):		
Secondar	y Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Army	Quantity	14	27	15	-	15
	Total Obligation Authority	64.752	128.350	71.127	-	71.127
ANG	Quantity	-	-	15	-	15
	Total Obligation Authority	-	-	71.128	-	71.128
Total:	Quantity	14	27	30	=	30
Secondary Distribution	Total Obligation Authority	64.752	128.350	142.255	-	142.255

^(†) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2019 A	Date: February 2018	
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
2033A / 01 / 20	5225GZ3001 / 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	Qty (Each)	Unit Cost	Specs Avail Now?	Revision	RFP Issue Date
Hardware ^(†)		2017	DRS Sustainment Systems, INC / Saint Louis, MO	C / FFP	TACOM, Warren, MI	Dec 2016	Apr 2018	14	1,296.000	Υ		
Hardware ^(†)		2018	DRS Sustainment Systems, INC / Saint Louis, MO	C / FFP	TACOM, Warren, MI	Dec 2017	Apr 2019	27	1,250.000	Y		
Hardware ^(†)		2019	DRS Sustainment Systems, INC / Saint Louis, MO	C / FFP	TACOM, Warren, MI	Dec 2018	Apr 2020	30	1,347.570	Y		

^(†) indicates the presence of a P-21

Full Rate Production (FRP) is scheduled for a third quarter FY 2019 award.

DRS Sustainment Systems Inc. established a public private partnership with Anniston Army Depot (ANAD) to provide overhauled M1A1 Abrams Chassis.

Ex	hib	it P	-21, Pro	oducti	on Sc	hedu	le: Pl	B 201	9 Arm	าy														Date	: Feb	ruary	2018	}			
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LI 5225GZ3001 - Joint Assault Bridge Army UNCLASSIFIED Page 8 of 9

Exhibit P-21, Production Schedule: PB 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 01 / 20	P-1 Line Item Number / Title: 5225GZ3001 / Joint Assault Bridge	Item Number / Title [DODIC]: GZ3001 / Joint Assault Bridge

		Produc	tion Rates (Each /	Month)				Procurement Le	adtime (Months)			
MFF	8					lni	tial			Reo	rder	
Ref	Manufacturer Name - Location	MSR For 2019	1-8-5 For 2019	MAX For 2019	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
•	DRS Sustainment Systems, INC - Saint Louis, MO	1	2	4	0	3	16	19	0	3	16	19

[&]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 10,000 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 2019 Army Date: February 2018

Program Elements for Code B Items: N/A

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: 6406GA0700 / M1 Abrams Tank (MOD)

Other Related Program Elements: N/A

Modification of Tracked Combat Vehicles

Line Item MDAP/MAIS Code: N/A

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

	Prior			FY 2019	FY 2019	FY 2019					То	
Resource Summary	Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	5,867.628	492.044	387.526	927.600	34.000	961.600	284.209	289.323	269.175	286.432	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	5,867.628	492.044	387.526	927.600	34.000	961.600	284.209	289.323	269.175	286.432	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	5,867.628	492.044	387.526	927.600	34.000	961.600	284.209	289.323	269.175	286.432	Continuing	Continuing
(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)	-	8,200.733	6,458.767	-	-	-		-	-	-	Continuing	Continuing

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 Active Protection Systems (APS), 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 Modifications) 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. Rear View Sensing System. (RVSS), light weighting, and any other modification identified in existing requirements documents or validated by the Army.

The Abrams program executes a series of Engineering Change Proposals (ECPs) to address capability gaps in 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 (Power) addresses network interoperability and system shortfalls in electrical power to enable integration of approved requirements, increased survivability and an electronics refresh to address obsolescence and improve sustainability. Specifically, the upgrades include an updated Handheld Manpack Small (HMS) communication system, a new 1000 amp generator, an updated power management distribution system (new slip ring, battery monitoring system, and Auxiliary Power Unit (APU)), the integration of the Counter Radio-Controlled IED Electronic Warfare (CREW/Duke3), Next Generation Armor, Ammunition Data Link (ADL) to optimize smart round effects, and the upgrade of line replaceable units (LRUs) to line replaceable modules (LRMs).

This program also supports the Army's Abrams tank industrial base (IB) strategy, which focuses on mitigating impacts to the Abrams tank industrial base by preserving critical suppliers, essential engineering skills, as well as maintaining, optimizing, and modernizing the manufacturing facilities that support the Abrams tank IB.

Secondary	y Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	492.044	387.526	927.600	34.000	961.600	284.209	289.323	269.175	286.432
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	492.044	387.526	927.600	34.000	961.600	284.209	289.323	269.175	286.432

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LI 6406GA0700 - M1 Abrams Tank (MOD) Army

Exhibit P-40, Budget Line Item Justification: PB 2019 Army Date: February 2018

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: 6406GA0700 / M1 Abrams Tank (MOD)

Modification of Tracked Combat Vehicles

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

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

	Exhibits Schedule				Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-3a	GA0700 / Mods (Increase Performance)		Α		- / 5,867.628	- / 492.044	- / 387.526	- / 927.600	- / 34.000	- / 961.600
P-40	Total Gross/Weapon System Cost				- / 5,867.628	- / 492.044	- / 387.526	- / 927.600	- / 34.000	- / 961.600
	Exhibits Schedule				FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-3a	GA0700 / Mods (Increase Performance)		Α		- / 284.209	- / 289.323	- / 269.175	- / 286.432	Continuing	Continuing
P-40	Total Gross/Weapon System Cost				- / 284.209	- / 289.323	- / 269.175	- / 286.432	Continuing	Continuing

^{*}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 sum exactly due to rounding.

Justification:

FY 2019 base procurement dollars in the amount of \$927.600 million support the procurement and field application of the following efforts: procurement and field application of the Ammunition Data Link (ADL) and Common Remote Operated Weapon Station Low Profile (CROWS-LP), and continued 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 the maintenance, optimization, and modernization of the production facility and equipment at the Joint Systems Manufacturing Center (JSMC), Lima, OH, and equipment at Allison Transmission Indianapolis, IN facility, General Dynamics Tallahassee, FL and Scranton, PA facilities, and Raytheon and DRS facilities to support the start of production, produce efficiently at low volumes, and maintain the Abrams tank manufacturing capability. The funding strategy includes analysis and direct targeted investment of the Abrams Industrial Base (IB) including procurement of critical tank components and critical technical engineering efforts, to include qualification of an alternate source of supply for tank components. Addressing these efforts ensures the preservation of the Abrams IB and minimizes the manufacturing and technical engineering capability risks. The increase in base funding will support the procurement of 282 Active Protection Systems (APS) and countermeasures for the Abrams Tank, which is critical to counter anti-armor capabilities in near-peer adversaries.

FY 2019 OCO procurement dollars in the amount of \$34.000 million supports COCOM requirement for unit equipment sets to deter potential adversaries and support the European Deterrence Initiative (EDI). Funding will support the installation of 87 Active Protection Systems (APS) and countermeasures for the Abrams Tank, which is critical to counter anti-armor capabilities in near-peer adversaries.

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.

Support the Active Army.

Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Modificati	ruary 2018
2033A / 01 / 20 6406GA0700 / M1 Abrams Tank (MOD) GA0700 /	ion Number / Title: Mods

ID Code (A=Service Ready, B=Not Service Ready)	: A					MDAP/MAI	S Code:					
Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	5,867.628	492.044	387.526	927.600	34.000	961.600	284.209	289.323	269.175	286.432	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	5,867.628	492.044	387.526	927.600	34.000	961.600	284.209	289.323	269.175	286.432	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	5,867.628	492.044	387.526	927.600	34.000	961.600	284.209	289.323	269.175	286.432	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	ne corresponding	p budget requests	s are documente	ed elsewhere.)				i
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	8,200.733	6,458.767	-	-	-	-	-	-	-	Continuing	Continuing

Description:

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 combat. Field modifications include Blue Force Tracking (BFT) 2 and Mounted Family of Computer System (MFoCS), Ammunition Data Link (ADL), Common Remote Operated Weapon Station Low Profile (CROWS-LP), lightweighting, or any other gap identified by the Combat or Material Developer. Installation of hardware is either cascaded into the production line in an ECP or applied on a unit-by-unit basis by several field modification teams and is determined by funding availability. Installation costs are included in the contractor costs and cannot be broken out. Contractor dates will vary by individual component. Additionally, this modification line funds testing as well as 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 Program support line but were moved to this MOD 2 because STS and testing validation efforts are used to modify the tank in support of field upgrades and fielding. Vehicle Health Management System and Embedded Training (VEM) will be funded under MOD 3 since it will no longer be a field mod upgrade.

Engineering Change Proposal (ECP) 1A (MOD3): Funding for Engineering Change Proposal (ECP) 1A includes the procurement and application of Army Directed requirements for 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). Provides funding for the targeted investment in the Abrams tank IB including procurement of critical components and critical technical engineering efforts that, if not addressed, would place the Abrams tank IB manufacturing and critical engineering capability at risk. Critical components and parts include, but are not limited to, the Abrams Transmission, 2nd Generation Forward-Looking-Infrared (FLIR) sensor, and Vehicle Health Management System and Embedded Training (VEM).

Armor (MOD 4): The Department of Energy (DOE) provides Abrams Armor. PM Abrams kept the armor facility at a sustainable level to maintain the industrial base and minimize the loss of skilled labor. In that regard, FY16 and beyond procures full Next Evolution Armor (NEA) packages which are applied during ECP 1A vehicle recapitalization.

Program/Engineering Support (MOD 5): This modification line funds 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 (MFT) at Ft. Hood, Texas, and other government sites.

Exhibit P-3a, Individual Modification: PB 2019 Army		Date: February 2018
		Modification Number / Title:
2033A / 01 / 20	6406GA0700 / M1 Abrams Tank (MOD)	GA0700 / Mods

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

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 a more reliable, durable, and fuel-efficient power pack. It also establishes 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. The qualification of an alternate source of supply for powertrain components will be analyzed. Contractor dates will vary by item.

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, embedded training, procurement cost of the hardware associated with modifications to existing training devices, and field installation at the unit.

Facilities Optimization and Maintenance (MOD 8): This funding supports the maintenance, optimization, and modernization of the production facility and equipment at the Joint Systems Manufacturing Center, Lima, OH, Watervliet Arsenal, Albany, NY, Anniston Army Depot, Anniston, AL, Allison Transmission, Indianapolis, IN, General Dynamics Tallahassee, FL and Scranton, PA facilities, Raytheon and DRS facilities, and any other facility that is involved in the support or production of Abrams tanks. Funding will be used to address facilities maintenance, deferred facilities maintenance projects, internal restructuring of manufacturing facilities and equipment, as well as operational energy improvements necessary to optimize facilities and production lines in an effort to increase efficiency at future forecasted manufacturing rates. These efforts will include, but are not limited to facilities maintenance projects and deferred maintenance projects, Occupational Safety and Health Administration (OSHA) compliance, quality of life, capital investment, equipment disposition, upgrade and replacement, operational energy improvements, and the establishment of new/optimized manufacturing lines and layouts.

Survivability Enhancements (MOD 9): This funding supports the procurement and field application of Active and Passive Protection Systems, countermeasures, components and labor to optimize the safety and survivability of the Abrams main battle tank. These modifications correct or alleviate operational deficiencies, improve reliability and maintainability, correct faulty performance or quality, reduce logistic 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. Production of the Active Protection systems began in FY 2018, installation and additional procurement will occur in FY 2019. Application both as a field modification and on new variants on the production line will be continuous.

				FY 2019	FY 2019	FY 2019				
Seconda	ry Distribution	FY 2017	FY 2018	Base	осо	Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	492.044	387.526	927.600	34.000	961.600	284.209	289.323	269.175	286.432
Total:	Quantity	-	-	-	•	-	-			-
Secondary Distribution	Total Obligation Authority	492.044	387.526	927.600	34.000	961.600	284.209	289.323	269.175	286.432

Exhibit P-3a, Individual Modification: PB 2019 Army

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

P-1 Line Item Number / Title:
6406GA0700 / M1 Abrams Tank (MOD)

GA0700 / Mods

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

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

Vehicles

Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
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)	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)
- / 2,842.034	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	Continuing	Continuing
- /2,842.034	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	Continuing	Continuing
- /2,842.034	- / -	- / -	- /0.000	- / -	- /0.000	- / -	- / -	- / -	- / -	Continuing	Continuing
			'								
											-
- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / -	87 / 0.831	180 / 1.753	180 / 1.788	180 / 1.824	- /0.000	627 / 6.196
315 / 49.803	150 / 13.403	287 / 53.954	213 / 57.065	- 1 -	213 / 57.065	251 / 46.962	143 / 28.867	147 / 40.140	131 / 39.908	- /0.000	1,637 / 330.102
45 / 2.686	60 / 7.828	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	105 / 10.514
405 / 59.281	60 / 2.153	90 / 8.699	90 / 28.061	- 1 -	90 / 28.061	90 / 11.412	180 / 23.242	180 / 24.745	180 / 25.209	- /0.000	1,275 / 182.802
- 1 -	- / 0.510	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	Continuing	Continuing
- / 122.156	- / 17.063	- / 16.246	- / 18.000	- 1 -	- / 18.000	- /20.982	- / 20.064	- / 20.466	- / 20.875	Continuing	Continuing
- / 269.831	- / 56.284	- 173.767	- /76.370	- 1 -	- /76.370	- 177.723	- / 79.312	- 177.590	- /78.403	Continuing	Continuing
- 1 -	- 1 -	- 17.226	- /10.090	- 1 -	- / 10.090	- / 10.291	- / 17.864	- /8.024	- /8.184	Continuing	Continuing
- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	180 / 21.151	180 / 21.574	180 / 22.006	180 / 22.446	- /0.000	720 / 87.177
- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	90 / 4.936	180 / 10.070	180 / 10.272	180 / 10.477	- /0.000	630 / 35.755
765 / 503.757	270 / 97.241	377 / 159.892	303 / 189.586	- / -	303 / 189.586	698 / 194.288	863 / 202.746	867 / 205.031	851 / 207.326	Continuing	Continuing
- /283.400	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	- / 283.400
- /6.283	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	- /6.283
- /289.683	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- /289.683
765 / 793.440	270 / 97.241	377 / 159.892	303 / 189.586	- / -	303 / 189.586	698 / 194.288	863 / 202.746	867 / 205.031	851 / 207.326	Continuing	Continuing
			· · · · · · · · · · · · · · · · · · ·								
45 / 92.478	60 / 175.637	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	Continuing	Continuing
	Qty (Each) I Total Cost (\$ M) - 12,842.034 - /2,842.034 - /2,842.034 - /2,842.034 - /2,842.034 - /2,842.034 - /2,842.034 - /1- 315 49.803 45 2.686 405 59.281 - - -	Qty (Each) Total Cost (\$ M) Total Cost	Qty (Each) I Total Cost (\$ M) - 1 2,842.034 - 1 -	Prior Years FY 2017 FY 2018 Base Qty (Each) Oty (Each) Total Cost (\$ M) - /2,842.034 - /	Prior Years FY 2017 FY 2018 Base OCO Qty (Each) I Total Cost (\$ M) Total Cost (\$ M)	Prior Years FY 2017 FY 2018 Base OCO Total Qty (Each) I Total Cost (\$ M)	Prior Years FY 2017 FY 2018 Base OCO Total FY 2020 Qty (Each) I Total Cost (S M) Total Cost (S M)	Prior Years FY 2017 FY 2018 Base OCO Total FY 2020 FY 2021	Prior Years FY 2017 FY 2018 Base OCO Total FY 2020 FY 2021 FY 2022 Gy (Each) Oty (Each)	Prior Years FY 2017 FY 2018 Base OCO Total FY 2020 FY 2021 FY 2022 FY 2023 Gly (Each) Cly (Ea	Prior Years FY 2017 FY 2018 Base OCO Total FY 2020 FY 2021 FY 2022 Complete Oty (Each) Oty (Each)

LI 6406GA0700 - M1 Abrams Tank (MOD) Army

Exhibit P-3a, Individual Modification: PB 2019 Army

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

2033A / 01 / 20 | 6406GA0700 / M1 Abrams Tank (MOD) | GA0700 / Mods

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

Models of Systems Affected: Abrams Family of Vehicles

Modification Type: Increase Performance Related RDT&E PEs:

FY 2019 FY 2019 FY 2019 To **Prior Years** FY 2017 FY 2018 Base oco Total FY 2020 FY 2021 FY 2022 FY 2023 Complete Total Qtv (Each) I Qty (Each) I Qtv (Each) I **Financial Plan** Total Cost (\$ M) 45 / 92.478 60 / 175.637 - / -- / -Subtotal: Recurring Continuing Continuing Subtotal: Engineering Change Proposal 1A 45 / 92.478 60 / 175.637 - / -- /0.000 - / -- /0.000 - / -- / -- / -- / -Continuina Continuing Modification Item 4 of 9: Armor A Kits Recurring 114 / 160.480 - 1 -- 1 -- 1 -- 1 -Armor Sets - 1 -- 1 -- / -- 1 -- 1 -- /0.000 114 / 160.480 60 / 73.134 - 1 -- 1 -- 1 -Next Generation Armor 45 / 68.000 - 1 -- 1 -- 1 -- 1 -- 1 -- /0.000 105 / 141.134 219 / 301.614 159 / 228.480 - / -- / -- / -- / -- / -- / -Subtotal: Recurring 60 / 73.134 - / -- / -Non-Recurring Installation Kits 821 / 526.800 - 1 -- 1 -- 1 -- 1 -821 / 526.800 - / -- 1 -- 1 -- / -- 1 -- /0.000 821 / 526.800 - / -- / -- / -- / -- / -- / -- / -- / -821 / 526.800 - / -- / -Subtotal: Non-Recurring 980 / 755 280 60 / 73.134 - / -- /0.000 - / -- /0.000 - / -- / -- / -- / -1 040 / 828 414 Subtotal: Armor - / -Modification Item 5 of 9: Program/Engineering Support A Kits Recurring Government Program Support - / 131.106 - /31.944 - /9.956 - / 13.785 - 1 -- / 13.785 - / 14.060 - I 14.342 - / 14.629 - / 14.921 Continuing Continuing - / 13.963 - /2.260 - 1 -- 1 -- 1 -Continuing Contractor Program Support - / -- / -- / -- 1 -- / -Continuing - 1 -- 1 -Government Test Support - /8.454 - *I* 17.858 - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -Continuing Continuina - /52.062 - /9.956 - /13.785 - / -- /13.785 - /14.060 - /14.342 - /14.629 Subtotal: Recurring - /153.523 - /14.921 Continuing Continuing Subtotal: Program/Engineering Support - /153.523 - /52.062 - /9.956 - /13.785 - / -- /13.785 - /14.060 - /14.342 - /14.629 - /14.921 Continuing Continuing Modification Item 6 of 9: Power Pack Improvement and Integration A Kits Recurring System Technical Support - / 123.242 - / 14.303 - / 11.627 - /11.700 - 1 -- /11.700 - / 12.200 - / 12.160 - /13.000 - / 12.653 Continuing Continuing - /123.242 - /14.303 - /11.627 - /11.700 - / -- /11.700 - /12.200 - /12.160 - /13.000 - /12.653 Subtotal: Recurring Continuing Continuing Non-Recurring 2.691 / 930.300 Installation Kits - / -- / -- 1 -- 1 -- / -- / -- / -- / -- 1 -Continuina Continuina 2.691 / 930.300 - / -- / -- / -- / -- / -- / -- / -- / -- / -Continuing Subtotal: Non-Recurring Continuing - /14.303 Subtotal: Power Pack Improvement and Integration 2.691/ - /11.627 - /11.700 - / -- /11.700 - /12.200 - /12.160 - /13.000 - /12.653 Continuina Continuina 1,053.542

LI 6406GA0700 - M1 Abrams Tank (MOD) Army UNCLASSIFIED
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Exhibit P-3a, Individual Modification: PB 2019 Army

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

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

Models of Systems Affected: Abrams Family of Vehicles

Modification Type: Increase Performance Related RDT&E PEs:

FY 2019 FY 2019 FY 2019 To **Prior Years** FY 2017 FY 2018 Base oco Total FY 2020 FY 2021 **FY 2022** FY 2023 Complete Total Qtv (Each) I **Financial Plan** Total Cost (\$ M) | Total Cost (\$ Modification Item 7 of 9: Training Devices A Kits Recurring - / 124.983 - / 19.613 - *I* 13.089 - / 19.656 - 1 -- / 20.647 - / 11.423 Training Equipment Modifications - / 19.656 - /20.897 - /9.365 Continuing Continuing - /124.983 - /19.613 - /13.089 - /19.656 - / -- /19.656 - /20.897 - /20.647 - /11.423 - /9.365 Subtotal: Recurring Continuina Continuina - /124.983 Subtotal: Training Devices - /19.613 - /13.089 - /19.656 - / -- /19.656 - /20.897 - /20.647 - /11.423 - /9.365 Continuina Continuina Modification Item 8 of 9: Facilities Optimization and Maintenance A Kits Recurring Production Line Optimization - /52.348 - I 16.278 - / 10.658 - / 108.197 - 1 -- / 108.197 - /39.665 - / 39.428 - /25.092 - 142.167 Continuing Continuing - / 52.348 - /16.278 - /10.658 - /108.197 - / -- /108.197 - /39.665 - /39.428 - /25.092 - /42.167 Subtotal: Recurring Continuing Continuing Subtotal: Facilities Optimization and Maintenance - /52.348 - /16.278 - /10.658 - /108.197 - / -- /108.197 - /39.665 - /39.428 - /25.092 - /42.167 Continuing Continuing Modification Item 9 of 9: Survivability Enhancements A Kits Recurring Active Protection System (APS) - / -- 1 -- / 10.469 - /55.228 - / -- /55.228 - 1 -- 1 -- 1 -- 1 -- /0.000 - / 65.697 Subtotal: Recurring - / -- / -- /10.469 - /55.228 - / -- /55.228 - / -- / -- / -- / -- /65.697 Non-Recurring **Turret Mitigation** - 1 -- 1 -- / 138,600 - 1 -- / 138,600 - 1 -- 1 -- 1 -- 1 -- /0.000 - / 138,600 - 1 -- / -- / -- / -- /138.600 - / -- /138.600 - / -- / -- / -- / -- / -- /138.600 Subtotal: Non-Recurring B Kits Recurring APS 87 / 111.214 282 / 339.855 282 / 339.855 - / -- / -- / -- / -- / -- / -- 1 -- /0.000 369 / 451.069 - / -282 / 339.855 - / -- / -87 / 111.214 - / -282 / 339.855 - / -- / -- / -- / -369 / 451.069 Subtotal: Recurring Non-Recurring Countermeasures - APS - / 17.017 - /50.993 - /32.839 - /83.832 - 1 -- 1 -- /0.000 - / 100.849 - 1 -- 1 -- 1 -- 1 -- / -- / -- /17.017 - /50.993 - /32.839 - /83.832 - / -- / -- / -- / -- / -- /100.849 Subtotal: Non-Recurring - / -- / -87 / 138.700 282 / 584.676 - /32.839 282 / 617.515 - / -- / -- / -- / -369 / 756.215 Subtotal: Survivability Enhancements Subtotal: Procurement. All Modification Items 4.481/ 390 / 448.268 464 / 343.922 585 / 927.600 - /32.839 585 / 960.439 698 / 281.110 863 / 289.323 867 / 269.175 851 / 286.432 Continuina Continuing 5.867.628

UNCLASSIFIED

Exhibit P-3a, Individual Modification: PB 2019 Army	Date: February 2018	
	P-1 Line Item Number / Title: 6406GA0700 / M1 Abrams Tank (MOD)	Modification Number / Title: GA0700 / Mods

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

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

Vehicles

	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)											
Installation												
Modification Item 3 of 9: Engineering Change Proposal 1A	- 1 -	45 / 43.776	60 / 43.604	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- / -	- 1 -	105 / 87.380
Modification Item 9 of 9: Survivability Enhancements	- 1 -	- 1 -	- 1 -	- 1 -	87 / 1.161	87 / 1.161	282 / 3.099	- 1 -	- 1 -	- 1 -	- 1 -	369 / 4.260
Subtotal: Installation	0 / 0.000	45 / 43.776	60 / 43.604	0 / 0.000	87 / 1.161	87 / 1.161	282 / 3.099	- / -	- / -	- / -	- / -	474 / 91.640
Total		·										
Total Cost (Procurement + Support + Installation)	5,867.628	492.044	387.526	927.600	34.000	961.600	284.209	289.323	269.175	286.432	Continuing	Continuing

Exhibit P-3a, Individ	lual Modification: PE	3 2019 Army				Date: February 2018	
Appropriation / Bud 2033A / 01 / 20	get Activity / Budge	t Sub Activity:	P-1 Line Item Nu 6406GA0700 / M1	mber / Title: I Abrams Tank (MOD)		Modification Number GA0700 / Mods	er / Title:
ID Code (A=Service Ready, B:	=Not Service Ready):A		•	MDAP/MAIS Co	ode:	•	
Modification Item 1 of 9:	Prior Year Closed Mods						
Manufacturer Information	n						
Manufacturer Name: Vario	us			Manufacturer Location: Va	rious		
Administrative Leadtime (iii	n Months):			Production Leadtime (in M	lonths):		
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates							
Delivery Dates							
Installation Information							
Method of Implementation	n (Organic): Various				Installation (Quantity: 0	
					•		

LI 6406GA0700 - M1 Abrams Tank (MOD) Army

Modification Item 2 of 9: Abrams Field Upgrades Manufacturer Information Manufacturer Name: Various Administrative Leadtime (in Months): Dates FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2023 FY 2023 Contract Dates Delivery Dates Delivery Dates MDAP/MAIS Code: MDAP/MAIS Code: Manufacturer Location: Various Manufacturer Location: Various Production Leadtime (in Months): FY 2020 FY 2021 FY 2022 FY 2023 FY 2023 FY 2023 FY 2024 FY 2023 FY 2025 FY 2025 FY 2026 FY 2027 FY 2027 FY 2028 FY 2028 FY 2029 FY 2029 FY 2029 FY 2029 FY 2020 FY 2021 FY 2020 FY 2020 FY 2021 FY 2023 FY 2023 FY 2023 FY 2023 FY 2023 FY 2024 FY 2025 FY 2025 FY 2025 FY 2026 FY 2027 FY 2027 FY 2028 FY 2028 FY 2029 FY 2029	Exhibit P-3a, Individ	ual Modification: P	B 2019 Army				Date: February 2018	
Manufacturer Information Manufacturer Name: Various Administrative Leadtime (in Months): Dates FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2023 Contract Dates Delivery Dates Installation Information	Appropriation / Bud 2033A / 01 / 20	get Activity / Budge	et Sub Activity:					er / Title:
Manufacturer Information Manufacturer Name: Various Administrative Leadtime (in Months): Dates FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 Contract Dates Delivery Dates Delivery Dates	ID Code (A=Service Ready, B=	Not Service Ready): A		1	MDAP/MAIS Co	de:	1	
Manufacturer Name: Various Administrative Leadtime (in Months): Production Leadtime (in Months): Dates FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 Contract Dates Delivery Dates Installation Information	Modification Item 2 of 9:	Abrams Field Upgrades						
Administrative Leadtime (in Months): Dates FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023	Manufacturer Information	n						
Dates FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 Contract Dates Delivery Dates Installation Information	Manufacturer Name: Vario	us			Manufacturer Location: Va	rious		
Contract Dates Delivery Dates Installation Information	Administrative Leadtime (iii	n Months):		onths):				
Delivery Dates Installation Information	Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
nstallation Information	Contract Dates							
	Delivery Dates							
Wethod of Implementation (Organic): Contractor Teams (Contractor dates will vary by item and cannot be predicted Installation Quantity: 0	Installation Information							
	Method of Implementatio	n (Organic): Contractor T	eams (Contractor dates	s will vary by item and cann	ot be predicted	Installation C	uantity: 0	

LI 6406GA0700 - M1 Abrams Tank (MOD) Army UNCLASSIFIED
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Exhibit P-3a, Individual Modification: PB 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 01 / 20	P-1 Line Item Number / Title: 6406GA0700 / M1 Abrams Tank (MOD)	Modification Number / Title: GA0700 / Mods
ID Code (A=Service Ready, B=Not Service Ready) : A	MDAP/MAIS Code:	

Modification Item 3 of 9: Engineering Change Proposal 1A

Manufacturer Information

Manufacturer Name: Gene	eral Dynamics and Annistor	n Army Depot		Manufacturer Location: Al	NAD Alabama and JSMC L	ima Ohio	
Administrative Leadtime (i	n Months): 6			Production Leadtime (in M	Nonths): 24		
Datas	EV 2047	EV 2049	EV 2040	EV 2020	EV 2024	EV 2022	EV 2022

Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates	Mar 2017						
Delivery Dates	Dec 2018						

Installation Information

Method of Implementation: Various

motifica of impromontation variou												
	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	- 1 -	45 / 43.776	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	45 / 43.776
FY 2017	- 1 -	- 1 -	60 / 43.604	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	60 / 43.604
FY 2018	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2021	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2022	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2023	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	0 / 0.000	45 / 43.776	60 / 43.604	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	105 / 87.380

Installation Schedule

			-																												
			FY 2	2017			FY 2	2018			FY 2	2019			FY 2	2020			FY 2	2021			FY 2	022			FY 2	023			
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	тс	Tot																
In	-	-	8	23	20	19	21	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 1	105
Out	-	-	-	-	-	-	-	8	23	20	19	21	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 1	105

Contract Dates Apr 2017 Delivery Dates Apr 2018 Installation Information	Exhibit P-3a, Indiv	ridual Modification: F	PB 2019 Army				Date: February 2018	
Manufacturer Information Manufacturer Name: Department of Energy Manufacturer Location: Various Administrative Leadtime (in Months): 7 Production Leadtime (in Months): 12 Dates FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 Contract Dates Apr 2017 Delivery Dates Apr 2018 Installation Information		udget Activity / Budg	et Sub Activity:					er / Title:
Manufacturer Information Manufacturer Name: Department of Energy Administrative Leadtime (in Months): 7 Production Leadtime (in Months): 12 Dates FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 Contract Dates Apr 2017	ID Code (A=Service Ready	, B=Not Service Ready): A			MDAP/MAIS Co	ode:		
Manufacturer Name: Department of Energy Administrative Leadtime (in Months): 7 Production Leadtime (in Months): 12 Dates FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 Contract Dates Apr 2017 Delivery Dates Apr 2018 Installation Information	Modification Item 4 of	9: Armor						
Administrative Leadtime (in Months): 7 Production Leadtime (in Months): 12 Dates FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 Contract Dates Apr 2017 Installation Information Installation Information Installation Information	Manufacturer Informat	ion						
Dates FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 FY 2023 Contract Dates Apr 2017 Installation Information Installation Information </td <td>Manufacturer Name: De</td> <td>partment of Energy</td> <td></td> <td></td> <td>Manufacturer Location: Va</td> <td>arious</td> <td></td> <td></td>	Manufacturer Name: De	partment of Energy			Manufacturer Location: Va	arious		
Contract Dates Apr 2017 Delivery Dates Apr 2018 Installation Information	Administrative Leadtime	(in Months): 7			Production Leadtime (in M	fonths): 12		
Delivery Dates Apr 2018 Installation Information	Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Installation Information	Contract Dates	Apr 2017						
Method of Implementation (Organic): Armor package will be applied during ECP 1A vehicle recapitalization Installation Quantity: 0	Delivery Dates	Apr 2018						
	Installation Information	n						
Installation (Organic). Annot package will be applied during ECP- 1A Venicle recapitalization.			rage will be applied durin	ng ECD 1A vohicle recepitali	zation	Installation (Nuantity: 0	
	metriou or implementa	tion (Organic). Annot pace	tage will be applied duffi	ig LOI TA Verilole recapitali	Zation	mstanation	tuanity. 0	

LI 6406GA0700 - M1 Abrams Tank (MOD) Army UNCLASSIFIED
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			UNCLA	ASSIFIED									
Exhibit P-3a, Individ	dual Modification: P	B 2019 Army				Date: February 201	8						
Appropriation / Buo 2033A / 01 / 20	dget Activity / Budge	et Sub Activity:	P-1 Line Item Num 6406GA0700 / M1 /	ber / Title: Abrams Tank (MOD)	Modification Number / Title: GA0700 / Mods								
ID Code (A=Service Ready, E	B=Not Service Ready) : A		1	MDAP/MAIS Code:									
Modification Item 5 of 9:	: Program/Engineering Sup	pport											
Manufacturer Information	on												
Manufacturer Name: Vario	ous			Manufacturer Location: Va	arious								
Administrative Leadtime (in Months): 1			Production Leadtime (in Months): 1									
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023						
Contract Dates	Oct 2016	Oct 2017	Oct 2018	Oct 2018	Oct 2019	Oct 2020	Oct 2021						
Delivery Dates	Nov 2016	Nov 2017	Nov 2018	Nov 2018	Nov 2019	Nov 2020	Nov 2021						
Installation Information													
Method of Implementation	on (Organic): Various				Installation (Quantity: 0							

147

Exhibit P-3a, Individ	dual Modification: P	B 2019 Army				Date: February 2018						
Appropriation / Buo 2033A / 01 / 20	Iget Activity / Budge	et Sub Activity:	P-1 Line Item Nu 6406GA0700 / M1	mber / Title: I Abrams Tank (MOD)	Modification Number / Title: GA0700 / Mods							
ID Code (A=Service Ready, B	B=Not Service Ready) : A		<u>'</u>	MDAP/MAIS Co	1							
Modification Item 6 of 9:	Power Pack Improvement	t and Integration										
Manufacturer Informatio	n											
Manufacturer Name: Hone	eywell and Allison Transmi	ssion		Manufacturer Location: Ph	Phoenix Arizona and Indianapolis Indiana							
Administrative Leadtime (in Months):			Production Leadtime (in M	Months):							
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023					
Contract Dates												
Delivery Dates												
Installation Information												
Method of Implementation	on (Organic): Contractor S	Support (Contractor date	es will vary by item and can	not be predicted	Installation C	uantity: 0						

LI 6406GA0700 - M1 Abrams Tank (MOD) Army

Exhibit P-3a, Indiv	idual Modification: P	B 2019 Army				Date: February 2018	<u> </u>					
Appropriation / Bu 2033A / 01 / 20	dget Activity / Budge	et Sub Activity:	P-1 Line Item Nu 6406GA0700 / M	imber / Title: 1 Abrams Tank (MOD)	Modification Number / Title: GA0700 / Mods							
ID Code (A=Service Ready,	B=Not Service Ready) : A			MDAP/MAIS Co	1							
Modification Item 7 of 9	: Training Devices			_								
Manufacturer Informati	on											
Manufacturer Name: PE	O Simulation Training and Ir	nstrumentation		Manufacturer Location: Or	lando Florida							
Administrative Leadtime	(in Months):			Production Leadtime (in M	fonths):							
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023					
Contract Dates												
Delivery Dates												
Installation Information				_		_						
	ion (Organic): Various (Co	ntrostor dotos will von	by item and connet be pre-	diata d\	Installation (Quantitus O						
method of implementat	ion (Organic): various (Co	ntractor dates will vary	by item and cannot be pred	dicted)	Installation (auantity: 0						

LI 6406GA0700 - M1 Abrams Tank (MOD) Army

Exhibit P-3a, Individ	lual Modification: P	B 2019 Army				Date: February 2018						
Appropriation / Bud 2033A / 01 / 20	get Activity / Budge	et Sub Activity:	P-1 Line Item Nui 6406GA0700 / M1	mber / Title: Abrams Tank (MOD)	Modification Number / Title: GA0700 / Mods							
ID Code (A=Service Ready, B	=Not Service Ready) : A		'	MDAP/MAIS Co	1							
Modification Item 8 of 9:	Facilities Optimization and	d Maintenance										
Manufacturer Informatio	n											
Manufacturer Name: Vario	pus			Manufacturer Location: Va	ious							
Administrative Leadtime (i	n Months):			Production Leadtime (in Mo	onths):							
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023					
Contract Dates												
Delivery Dates												
Installation Information												
Method of Implementation	on (Organic): Various (Co	ntractor dates will vary	by item and cannot be pred	icted)	Installation C	uantity: 0						

LI 6406GA0700 - M1 Abrams Tank (MOD) Army UNCLASSIFIED
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Exhibit P-3a, Indivi	dual Modification: PE		Date: February 2018								
Appropriation / Bu 2033A / 01 / 20	dget Activity / Budge	Sub Activity:	P-1 Line Item Numb 6406GA0700 / M1 A			Modification Number / Title: GA0700 / Mods					
ID Code (A=Service Ready,	B=Not Service Ready):A			MDAP/MAIS C	ode:						
Modification Item 9 of 9	: Survivability Enhancement	S									
Manufacturer Information	on										
Manufacturer Name: Ger	eral Dynamics Land System	IS		Manufacturer Location: Sterling Heights, MI							
Administrative Leadtime	'in Months): 3			Production Leadtime (in Months): 10							
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023				

Dec 2018

Oct 2019

Installation Information

Contract Dates

Delivery Dates

Method of Implementation: Contract FFP

mountain or impromonitation or in												
	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	- 1 -	- 1 -	- 1 -	0 / 0.000	87 / 1.161	87 / 1.161	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	87 / 1.161
FY 2019	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	282 / 3.099	- 1 -	- 1 -	- 1 -	- 1 -	282 / 3.099
FY 2020	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2021	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2022	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2023	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	87 / 1.161	87 / 1.161	282 / 3.099	- 1 -	- 1 -	- 1 -	- 1 -	369 / 4.260

Installation Schedule

			FY 2	2017			FY 2	2018			FY 2	019		FY 2020				FY 2021				FY 2022				FY 2023					
	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	30	27	66	110	106	-	-	-	-	-	-	-	-	-	-	-	-	-	-	369
Out	-	-	-	-	-	-	-	-	-	-	10	30	30	43	70	120	66	-	-	-	-	-	-	-	-	-	-	-	-	-	369

UNCLASSIFIED
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Mar 2018

Jan 2019

Exhibit P-40, Budget Line Item Justification: PB 2019 Army

Date: February 2018

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: | 6500GA0750 / Abrams Upgrade Program

Modification of Tracked Combat Vehicles

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

Program Elements for Code B Items: N/A

Other Related Program Elements: 0203735A

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2019	FY 2019	FY 2019					То	
Resource Summary	Years	FY 2017	FY 2018	Base	ОСО	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total
Procurement Quantity (Units in Each)	1,264	24	56	95	40	135	92	63	64	80	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	9,049.107	276.829	717.800	1,075.999	455.000	1,530.999	1,118.156	801.009	832.481	1,044.492	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	2,064.494	0.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Net Procurement (P-1) (\$ in Millions)	6,984.613	276.829	717.800	1,075.999	455.000	1,530.999	1,118.156	801.009	832.481	1,044.492	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	2,064.494	0.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Total Obligation Authority (\$ in Millions)	9,049.107	276.829	717.800	1,075.999	455.000	1,530.999	1,118.156	801.009	832.481	1,044.492	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	r 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)	7,159.104	11,534.542	12,817.857	11,326.305	11,375.000	11,340.733	12,153.870	12,714.429	13,007.516	13,056.150	Continuing	Continuing

Description:

The purpose of this program is to upgrade M1A1 variant tanks to the M1A2 System Enhancement Package Version 3 (SEPv3) (ECP 1A) tank configuration in order to enhance tank survivability, the automotive power pack, computer systems, and night vision capabilities. The M1A2 SEPv3 (ECP 1A) incorporates turret and hull armor upgrades for enhanced crew survivability; Total Integrated Engine Revitalization (TIGER) engine and upgraded transmission for improved power pack reliability and durability; improved computer systems to include microprocessors, color flat panel displays, memory capacity, Soldier-Machine Interface (SMI), a new operating system designed to run the Common Operating Environment (COE) software; and Block 1 Second Generation Forward Looking Infra-Red (FLIR) technology in the Gunner's Primary Sight (GPS) and the Commander's Independent Thermal Viewer (CITV) Sight Assembly for improved thermal ranging night vision capabilities. The Abrams Upgrade Program will modify and upgrade the Abrams tank while improving and maintaining production processes that involve or support the Abrams Industrial Base requirements for the current and future Abrams tank.

Secondar	ry Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	24	56	95	40	135	92	63	64	80
	Total Obligation Authority	276.829	717.800	1,075.999	455.000	1,530.999	1,118.156	801.009	832.481	1,044.492
Total:	Quantity	24	56	95	40	135	92	63	64	80
Secondary Distribution	Total Obligation Authority	276.829	717.800	1,075.999	455.000	1,530.999	1,118.156	801.009	832.481	1,044.492

Exhibit P-40, Budget Line Item Justification: PB 2019 Army Date: February 2018

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: | 6500GA0750 / Abrams Upgrade Program

Modification of Tracked Combat Vehicles

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

Program Elements for Code B Items: N/A

Other Related Program Elements: 0203735A

Line Item MDAP/MAIS Code: N/A

	Exhibits Schedule				Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	GA0750 / Abrams Upgrade Program	P-5a, P-21	Α		1,264 / 9,049.107	24 / 276.829	56 / 717.800	95 / 1,075.999	Quantity / Total Cost (Each) I (\$ M) Quantity / Total Cost (Each) I (\$ M) Quantity / Total (Each) I (\$ M) Quantity / Total (Each) I (\$ M) 95 / 1,075.999 40 / 455.000 135 / 1,530.9	135 / 1,530.999
P-40	Total Gross/Weapon System Cost				1,264 / 9,049.107	24 / 276.829	(Each) I (\$ M) (Each) I (\$ M) (Each) I (\$ M) (Each) I (\$ M) 56 / 717.800 95 / 1,075.999 40 / 455.000 135 / 1,530.999	135 / 1,530.999		

^{*}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 sum exactly due to rounding.

Justification:

FY 2019 Base Procurement dollars in the amount of \$1,075.999 million supports the upgrade of 95 M1A1 vehicle variants to the M1A2 System Enhancement Package (SEP) v3 variant to enhance tank survivability, the automotive power pack, computer systems and night vision capabilities. This upgrade is part of the Engineering Change Proposal that addresses capability gaps on the tank fleet. The program upgrades will be integrated at Anniston Army Depot (ANAD) and General Dynamics Land Systems (GDLS). Support the Active Army.

FY 2019 OCO Procurement dollars in the amount of \$455.000 million supports COCOM requirement for unit equipment sets to deter potential adversaries and support the European Deterrence Initiative (EDI). Funding will procure 40 M1A2 SEP v3 upgrade vehicles. Support the Active Army.

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-5, Cost Analysis: PB 2019 Army

Appropriation / Budget Activity / Budget Sub Activity:

2033A / 01 / 20

Date: February 2018

P-1 Line Item Number / Title:
6500GA0750 / Abrams Upgrade Program

GA0750 / Abrams Upgrade Program

ID Code (A=Service Ready, B=Not Service Ready) : A		N	DAP/MAIS Code:			
Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity (Units in Each)	1,264	24	56	95	40	135
Gross/Weapon System Cost (\$ in Millions)	9,049.107	276.829	717.800	1,075.999	455.000	1,530.999
Less PY Advance Procurement (\$ in Millions)	2,064.494	0.00	0.000	0.000	-	0.000
Net Procurement (P-1) (\$ in Millions)	6,984.613	276.82	717.800	1,075.999	455.000	1,530.999
Plus CY Advance Procurement (\$ in Millions)	2,064.494	0.00	0.000	0.000	-	0.000
Total Obligation Authority (\$ in Millions)	9,049.107	276.82	717.800	1,075.999	455.000	1,530.999

(The following Resource Summary rows are for Information	onai purposes oniy. The cor	responaing buaget request	s are documented eisewnei	e.)		
Initial Spares (\$ in Millions)	-	-	=	-	=	-
Gross/Weapon System Unit Cost (\$ in Thousands)	7,159.104	11,534.542	12,817.857	11,326.305	11,375.000	11,340.733

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

	F	Prior Years	3		FY 2017			FY 2018		F۱	' 2019 Bas	se e	F۱	/ 2019 OC	0	F۱	2019 Tot	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					·			1										
Recurring Cost																		
Basic Vehicle ^(†)	3,860.237	1,611	6,218.842	5,939.750	24	142.554	6,019.268	56	337.079	6,131.074	95	582.452	6,122.275	40	244.891	6,128.467	135	827.3
Government Furnished Equipment (GFE)	-	-	1,173.011	-	-	84.923	-	-	228.805	-	-	325.919	-	-	137.620	-	-	463.5
Pre-Modification Vehicle Teardown/ Refurb	-	-	1.900	-	-	14.582	-	-	34.355	-	-	58.605	-	-	24.676	-	-	83.2
TPF/New Equipment Training	-	-	197.117	-	-	4.699	-	-	25.282	-	-	10.247	-	-	8.997	-	-	19.2
Government Support	-	-	1,124.395	-	-	2.228	-	-	23.759	-	-	24.123	-	-	8.041	-	-	32.1
Transmissions	-	-	141.273	-	-	4.728	-	-	15.776	-	-	21.956	-	-	9.297	-	-	31.2
Forward Looking Infrared (FLIR)	-	-	97.808	-	-	23.115	-	-	52.744	-	-	51.014	-	-	21.478	-	-	72.4
Industrial Base Mitigation Support	-	-	94.761	-	-	-	-	-	-	-	-	1.683	-	-	-	-	-	1.6
Subtotal: Recurring Cost	-	-	9,049.107	-	-	276.829	-	-	717.800	-	-	1,075.999	-	-	455.000	-	-	1,530.9
Subtotal: Flyaway Cost	-	-	9,049.107	-	-	276.829	-	-	717.800	-	-	1,075.999	-	-	455.000	-	-	1,530.9
Gross/Weapon System Cost	7,159.104	1,264	9,049.107	11,534.542	24	276.829	12,817.857	56	717.800	11,326.305	95	1,075.999	11,375.000	40	455.000	11,340.733	135	1,530.99

Exhibit P-5, Cost Analysis: PB 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 01 / 20	P-1 Line Item Number / Title: 6500GA0750 / Abrams Upgrade Program	Item Number / Title [DODIC]: GA0750 / Abrams Upgrade Program
ID Code (1 a	MDAD/MAIC Code	•

ID Code (A=Service Ready, B=Not Service Read	y) : A		WIDAP/WAIS Code);		
Secondary	y Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Army	Quantity	24	56	95	40	135
	Total Obligation Authority	276.829	717.800	1,075.999	455.000	1,530.999
	Quantity	24	56	95	40	135
Secondary Distribution	Total Obligation Authority	276.829	717.800	1,075.999	455.000	1,530.999

^(†) indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: PB 2019 A	ırmy	Date: February 2018				
1						

Cost Elements	000	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
Basic Vehicle ^(†)		2015	GDLS / Sterling Heights, MI	SS / FFP	TACOM-Warren	Dec 2016	Sep 2017	6	12,867.167			
Basic Vehicle ^(†)		2017	GDLS / Sterling Heights, MI	SS / FPIF	TACOM-Warren	Dec 2017	Jun 2019	24	5,939.750			
Basic Vehicle ^(†)		2018	GDLS / Sterling Heights, MI	SS / FPIF	TACOM-Warren	Dec 2017	Sep 2019	56	6,019.270			
Basic Vehicle ^(†)		2019	GDLS / Sterling Heights, MI	SS / FPIF	TACOM- Warren	Mar 2019	Jul 2020	135	6,128.470			

^(†) indicates the presence of a P-21

Remarks:

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

Ex	hik	oit P	P-21, Pr	oduct	ion Sc	hedu	le: P	B 201	9 Arm	าy														Date	: Feb	ruary	2018	3			
-	•	•	iation / 01 / 20	Budg	et Acti	vity /	Bud	get S	ub Ac	tivity	' :		-		-		Title: Jpgrad		gram	1					Num 750 /					gram	1
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	Cost Elements (Units in Each)											Fiscal Y	ear 2021											Fiscal Y	ear 2022						ВА
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Exhibit P-21, Production Schedule: PB 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
2033A / 01 / 20	6500GA0750 / Abrams Upgrade Program	GA0750 / Abrams Upgrade Program

		Produc	tion Rates (Each /	Month)				Procurement Lea	adtime (Months)			
MF						Init	tial			Reo	rder	
Re #		MSR For 2019	1-8-5 For 2019	MAX For 2019	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
	1 GDLS - Sterling Heights, MI	1	10	28	0	14	17	31	0	6	16	22

[&]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 10,000 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 2019 Army Date: February 2018

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: 5960GA0050 / Production Base Support (TCV-WTCV)

Support Equipment & Facilities ID Code (A=Service Ready, B=Not Service Ready):

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2019	FY 2019	FY 2019					То	
Resource Summary	Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	385.567	37.500	-	-	-	-	-	-	-	-	-	423.067
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	385.567	37.500	-	-	-	-	-	-	-	-	-	423.067
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	385.567	37.500	-	-	-	-	-	-	-	-	-	423.067
(The following	Resource Sumi	mary rows are fo	r informational p	ourposes only. Tl	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.

Secondary	/ Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	37.500	-	-	-	-	-	-	-	-
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	37.500	-	-	-	-	-	-	-	-

Justification:

There is no FY 2019 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".

Exhibit P-40, Budget Line Item Justification: PB 2019 Army

Date: February 2018

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

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

1696G16101 / Integrated Air Burst Weapon System Family

Vehicles / BSA 10: Weapons & Other Combat Vehicles

Program Elements for Code B Items: 0604601A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

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

Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
•	10013	1 1 2017	1 1 2010	Dusc	000	Total	1 1 2020	1 1 2021	1 1 2022	1 1 2020	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	0.380	7.064	-	-	-	-	-	-	-	-	-	7.444
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	0.380	7.064	-	-	-	-	-	-	-	-	-	7.444
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	0.380	7.064	-	-	-	-	-	-	-	-	-	7.444
(The following	Resource Sumi	mary rows are fo	r informational p	ourposes only. Tl	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)	-	67.276	-	-	-	-	-	-	-	-	-	70.895

Description:

The Maneuver Center of Excellence (MCoE), Ft Benning, GA (User Representative) identifies the XM25 as their number one materiel solution to mitigate a critical capability gap Counter Defilade Target Engagement (CDTE) for our Soldiers in combat (defeating defilade targets from 35-500m). The XM25 fires 25mm high-explosive airburst (HEAB) munitions. The XM25 comes with a target acquisition/fire control that integrates thermal capability with direct-view optics, laser rangefinder, environmental sensors, fuze setter, ballistic computer, and internal display. The XM25 has a 500-meter point target range and a 800meter area target range capable of defeating exposed and defilade (hidden) targets.

Secondary	y Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	7.064	-	-	-	-	-	-	-	-
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	7.064	-	-	-	-	-	-	-	-

Justification:

There is no FY2019 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.

Exhibit P-40, Budget Line Item Justification: PB 2019 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

2472G13000 / M240 Medium Machine Gun (7.62mm)

Vehicles / BSA 10: Weapons & Other Combat Vehicles

Program Elements for Code B Items: 0604601A

Other Related Program Elements: N/A

Date: February 2018

Line Item MDAP/MAIS Code: N/A

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

Line term in DAT / male Gode: 14//													
	Prior			FY 2019	FY 2019	FY 2019					То		
Resource Summary	Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total	
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-	
Gross/Weapon System Cost (\$ in Millions)	780.189	-	1.992	1.955	0.126	2.081	-	-	103.072	159.912	Continuing	Continuing	
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-	
Net Procurement (P-1) (\$ in Millions)	780.189	-	1.992	1.955	0.126	2.081	-	-	103.072	159.912	Continuing	Continuing	
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-	
Total Obligation Authority (\$ in Millions)	780.189	-	1.992	1.955	0.126	2.081	-	-	103.072	159.912	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)	1,213.358	-	-	10.289	10.500	10.302	-	-	-	-	Continuing	Continuing	

Description:

The M240 series machine guns are available in different configurations for various applications. The M240B Machine Gun is a ground version of the original M240 Machine Gun, 7.62MM Medium Machine Gun class weapon, designed as a coaxial/pintle-mounted weapon for tanks and light armored vehicles. The M240B also includes: a flash suppressor, front sight, carrying handle, buttstock, pistol grip, bipod, heat shield and rear sight assembly. The M240B Machine Gun may also be tripod-mounted and used in conjunction with a traversing and elevating mechanism and mount pintle. The M240H is a variant of this same family of Machine Guns and is employed as the self defensive armament subsystem for the UH-60 BLACK HAWK and CH-47 Chinook Helicopters. The M240H uses the same receiver and barrel as the M240B but has a spade grip trigger assembly. It also has a unique mounting interface and pintle to properly interface with the helicopter platform. The lighter M240L replaces the M240B in Special Forces/Rangers, Light Infantry and Airborne units. The M240L significantly reduces the weight of the current M240B, by approximately 5 pounds, while maintaining the same level of reliability. The weight reduction is accomplished through the use of lightweight materials and innovative manufacturing techniques.

Secondary	/ Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	1.992	1.955	0.126	2.081	-	-	103.072	159.912
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	-	1.992	1.955	0.126	2.081	-	-	103.072	159.912

Justification:

FY 2019 Base procurement dollars in the amount of \$1.955 million supports the Active Army by purchasing 169 coaxial M240's and requisite ancillary equipment and fielding support for mounted operations. Additional M240s are required to address Grow the Army requirements for Stryker vehicles and M1A2 tanks and new platform vehicles (Mobile Protected Firepower).

FY 2019 Overseas Contingency Operations (OCO) in the amount of \$0.126 million supports COCOM requirement for unit equipment sets to deter potential adversaries and support the European Deterrence Initiative (EDI). Funding will support the procurement of 11 coaxial M240's and requisite ancillary equipment and fielding support for mounted operations.

Exhibit P-40, Budget Line Item Justification	n: PB 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget S			
2033A: Procurement of W&TCV, Army / BA 0		2472G13000 / M24	0 Medium Machine Gun (7.62mm)
Vehicles / BSA 10: Weapons & Other Comba			
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code	B Items: 0604601A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A		ctivity: eapons and Other Combat nicles P-1 Line Item Number / Title: 2472G13000 / M240 Medium Machine Gun (7.62mm) Other Related Program Elements: N/A ense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Force	
In accordance with Section 1815 of the FY 2008 National defense missions, domestic emergency responses, and	al Defense Authorization Act (P.L. 110-181), i providing military support to civil authorities.	his item is necessary for use t	by the active and reserve components of the Armed Forces for homeland
AAO: 55,416			

Exhibit P-40, Budget Line Item Justification: PB 2019 Army

Date: February 2018

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

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

3736G13101 / MULTI-ROLE ANTI-ARMOR ANTI-PERSONNEL WEAPON SYSTEM

Vehicles / BSA 10: Weapons & Other Combat Vehicles

OTOTEM

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

Program Elements for Code B Items: 0604601A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2019	FY 2019	FY 2019					То	
Resource Summary	Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	-	6.520	23.345	-	23.345	19.542	18.008	40.251	36.606	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	-	6.520	23.345	-	23.345	19.542	18.008	40.251	36.606	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	-	6.520	23.345	-	23.345	19.542	18.008	40.251	36.606	Continuing	Continuing
(The following	Resource Sum	mary rows are fo	or informational p	urposes only. Th	e corresponding	g budget request	s are documente	d elsewhere.)			ĺ	
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	70.108	76.291	-	76.291	77.241	78.296	75.236	77.555	Continuing	Continuing

Description:

The Multi-Role Anti-Armor/Anti-Personnel Weapon System (MAAWS) or, M3/M3A1 Carl Gustaf MAAWS is a shoulder-fired, 84mm reusable recoilless rifle/launcher weapon system with an effective firing range of up to 1300 meters based on ammunition used. It also supports full and sub caliber training systems. The M3/M3A1 MAAWS is capable of engaging, neutralizing and destroying lightly armored vehicles, soft skinned vehicles, personnel in the open or defilade, and field fortifications in both open urban and rural operational environments. The M3/M3A1 MAAWS is also capable of marking threat targets with smoke for supporting weapons, obscuring threat weapons and illuminating threat targets.

Seconda	ry Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	112011	1 1 2010	Duoo		Total	2020	202 .	1 1 2022	1 1 2020
Airily	· ·	-		-	-	-			-	-
	Total Obligation Authority	-	6.520	22.302	-	22.302	15.668	14.134	36.377	32.732
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	1.043	-	1.043	3.874	3.874	3.874	3.874
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	-	6.520	23.345	-	23.345	19.542	18.008	40.251	36.606

LI 3736G13101 - MULTI-ROLE ANTI-ARMOR ANTI-PERSONNEL

WEA... Army UNCLASSIFIED
Page 1 of 5

Exhibit P-40, Budget Line Item Justification: PB 2019 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

3736G13101 / MULTI-ROLE ANTI-ARMOR ANTI-PERSONNEL WEAPON

Vehicles / BSA 10: Weapons & Other Combat Vehicles

SYSTEM

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

Program Elements for Code B Items: 0604601A

Other Related Program Elements: N/A

Date: February 2018

Line Item MDAP/MAIS Code: N/A

	Exhibits Schedule				Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	G13101 / MULTI-ROLE ANTI-ARMOR ANTI-PERSONNEL WEAPON SYSTEM	P-5a	В		- / -	- / -	- /6.520	- / 23.345	- / -	- / 23.345
P-40	Total Gross/Weapon System Cost		- 1 -	- 1 -	- / 6.520	- / 23.345	- 1 -	- / 23.345		

^{*}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 sum exactly due to rounding.

Justification:

FY2019 base procurement dollars in the amount of \$23.345 million supports the Active Army and National Guard through the procurement of 300 M3A1 Lightweight recoilless rifle/launcher weapon systems, fire control, sub caliber adapters and initial spares. The M3/M3A1 MAAWS is capable of engaging, neutralizing and destroying lightly armored vehicles, soft skinned vehicles, personnel in the open or defilade, and field fortifications in both open urban and rural operational environments. The M3/M3A1 MAAWS is also capable of marking threat targets with smoke for supporting weapons, obscuring threat weapons and illuminating threat targets. Funds will also provide for all other program support.

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.

AAO: 2,460

LI 3736G13101 - MULTI-ROLE ANTI-ARMOR ANTI-PERSONNEL

WEA... Army UNCLASSIFIED
Page 2 of 5

Exhibit P-5, Cost Analysis: PB 2019 Army

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

P-1 Line Item Number / Title:
3736G13101 / MULTI-ROLE ANTI-ARMOR ANTI-PERSONNEL WEAPON SYSTEM

ANTI-PERSONNEL WEAPON SYSTEM

MDAP/MAIS Code:

ID Code (A=Service Ready, B=Not Service Ready) . D		IVI	DAP/IVIAIS Code.			
Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	-	6.520	23.345	-	23.345
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	-	6.520	23.345	-	23.345
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	-	6.520	23.345	-	23.345
(The following Resource Summary rows are for informat	ional purposes only. The co	responding budget reques	ts are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	70.108	76.291	-	76.291

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

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

	F	Prior Years	S		FY 2017			FY 2018		FY	' 2019 Bas	e	FY	/ 2019 OC	0	FY	' 2019 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)
Hardware Cost	'		'	'		·	<u>'</u>	<u>'</u>			'		<u> </u>			'	,	
Recurring Cost																		
M3A1 ^(†)	-	-	-	-	-	-	27.419	93	2.550	32.000	300	9.600	-	-	-	32.000	300	9.6
Fire Control ^(†)	-	-	-	-	-	-	25.161	93	2.340	32.000	300	9.600	-	-	-	32.000	300	9.6
Sub Caliber Apdapter ^(†)	-	-	-	-	-	-	5.914	93	0.550	6.593	300	1.978	-	-	-	6.593	300	1.9
Subtotal: Recurring Cost	-	-	-	-	-	-	-	-	5.440	-	-	21.178	-	-	-	-	-	21.1
Subtotal: Hardware Cost	-	-	-	-	-	-	-	-	5.440	-	-	21.178	-	-	-	-	-	21.1
Support - Contractor Logistics	s Support (CLS) Cost		'		'		'		'	·		'			'	'	
Oversight	-	-	-	-	-	-	-	-	-	-	-	0.188	-	-	-	-	-	0.1
Subtotal: Support - Contractor Logistics Support (CLS) Cost	-	-	-	-	-	-	-	-	-	-	-	0.188	-	-	-	-	-	0.1
Support - Initial Spares and R	Repair Parts Co	st								,								
Initial Spares and Repair Parts	-	-	-	-	-	-	-	-	0.530	-	-	0.626	-	-	-	-	-	0.6
Subtotal: Support - Initial Spares and Repair Parts Cost	-	-	-	-	-	-	-	-	0.530	-	-	0.626	-	-	-	-	-	0.6
Support - New Equipment Tra	aining (NET) Co	ost		<u>'</u>			·	,					,			,	,	
Equipment	-	-	-	-	-	-	-	-	-	-	-	0.691	-	-	_	_	-	0.6

LI 3736G13101 - MULTI-ROLE ANTI-ARMOR ANTI-PERSONNEL

WEA... Army UNCLASSIFIED

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Exhibit P-5, Cost Analysis: PB 2019 Army

P-1 Line Item Number / Title:

Date: February 2018

Item Number / Title [DODIC]:

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

3736G13101 / MULTI-ROLE ANTI-ARMOR ANTI-PERSONNEL WEAPON SYSTEM G13101 / MULTI-ROLE ANTI-ARMOR ANTI-PERSONNEL WEAPON SYSTEM

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 sum exactly due to rounding.

	F	Prior Year	s		FY 2017			FY 2018		FY	′ 2019 Ba	se	F'	′ 2019 OC	0	F'	Y 2019 To	tal
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)												
Subtotal: Support - New Equipment Training (NET) Cost	-	-	-	-	-	-	-	-	-	-	-	0.691	-	-	-	-	-	0.691
Support - Program Managem	ent Cost								•									
Government Management	-	-	-	-	-	-	-	-	0.550	-	-	0.662	-	-	-	-	-	0.662
Subtotal: Support - Program Management Cost	-	-	-	-	-	-	-	-	0.550	-	-	0.662	-	-	-	-	-	0.662
Gross/Weapon System Cost	-	-	-	-	-	-	70.108	-	6.520	76.291	-	23.345	-	-	-	76.291	-	23.34

Secondar	ry Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Army	Quantity	-	-	-	-	-
	Total Obligation Authority	-	6.520	22.302	-	22.302
ANG	Quantity	-	-	-	-	-
	Total Obligation Authority	-	-	1.043	-	1.043
Total:	Quantity	-	-	=	=	-
Secondary Distribution	Total Obligation Authority	-	6.520	23.345	-	23.345

^(†) indicates the presence of a P-5a

LI 3736G13101 - MULTI-ROLE ANTI-ARMOR ANTI-PERSONNEL

WEA... Army UNCLASSIFIED
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Exhibit P-5a, Procurement History and Planning: PB 2019 Army Date: February 2018 Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Item Number / Title [DODIC]: 2033A / 02 / 10 3736G13101 / MULTI-ROLE ANTI-ARMOR ANTI-G13101 / MULTI-ROLE ANTI-ARMOR

PERSONNEL WEAPON SYSTEM

ANTI-PERSONNEL WEAPON SYSTEM

	00			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
M3A1		2018	Saab Dynamics AB / Sweden	SS / IDIQ	ACC-NJ, Picatinny Arsenal, NJ	Apr 2018	Jul 2018	93	27.420	Y		
M3A1		2019	Saab Dynamics AB / Sweden	SS / IDIQ	ACC-NJ, Picatinny Arsenal, NJ	Dec 2018	Feb 2019	300	32.000	Y		
Fire Control		2018	Aimpoint / Sweden	SS / IDIQ	ACC-NJ, Picatinny Arsenal. NJ	Apr 2018	Jul 2018	93	25.160	Y		
Fire Control		2019	Aimpoint / Sweden	SS / IDIQ	ACC-NJ, Picatinny Arsenal. NJ	Dec 2018	Feb 2019	300	32.000	Y		
Sub Caliber Apdapter		2018	Saab Dynamics AB / Sweden	SS / IDDQ	ACC-NJ, Picatinny Arsenal. NJ	Apr 2018	Jul 2018	93	5.910	Y		
Sub Caliber Apdapter		2019	Saab Dynamics AB / Sweden	SS / IDIQ	ACC-NJ, Picatinny Arsenal. NJ	Dec 2018	Feb 2019	300	6.590	Y		

Remarks:

P-21 is not required, as all hardware items procured are COTS or COTS/NDI.

LI 3736G13101 - MULTI-ROLE ANTI-ARMOR ANTI-PERSONNEL

WEA... Army

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Exhibit P-40, Budget Line Item Justification: PB 2019 Army

Date: February 2018

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

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

4368G13800 / GUN AUTOMATIC 30MM M230

Vehicles / BSA 10: Weapons & Other Combat Vehicles

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

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2019	FY 2019	FY 2019					То	
Resource Summary	Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	-	-	7.434	-	7.434	19.825	9.913	-	-	-	37.172
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	-	-	7.434	-	7.434	19.825	9.913	-	-	-	37.172
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	-	-	7.434	-	7.434	19.825	9.913	-	-	-	37.172
(The following	Resource Sum	mary rows are fo	or informational p	ourposes only. Th	ne corresponding	budget request	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	413.000	-	413.000	508.333	762.538	-	-	-	531.029

Description:

The XM914 autocannon is an upgraded and modified version of the M230 cannon currently equipped on the AH-64 Apache advanced attack helicopter. The XM914 modifies the aviation-based weapon for ground application and integration into a remote weapon station for vehicle platforms. The XM914 is a link-fed, externally-powered and electrically-primed 30mm chain gun, capable of firing two hundred rounds per minute. The weapon incorporates an anti-hangfire system and an extended barrel for enhanced muzzle velocity. The XM914 provides significant lethality improvements over legacy heavy machine guns, such as the M2 .50 caliber machine gun and the MK19 grenade machine gun, and provides the capability required for Soldiers in a combat environment to engage enemy personnel and lightly armored targets.

Secondar	ry Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	7.434	-	7.434	19.825	9.913	-	-
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	-	-	7.434	-	7.434	19.825	9.913	-	-

Exhibit P-40, Budget Line Item Justification: PB 2019 Army

Date: February 2018

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

4368G13800 / GUN AUTOMATIC 30MM M230

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

Vehicles / BSA 10: Weapons & Other Combat Vehicles

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

Line Item MDAP/MAIS Code: N/A

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

	Exhibits Schedule				Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	G13800 / GUN AUTOMATIC 30MM M230	P-5a	Α		- / -	- / -	- / -	- /7.434	- / -	- / 7.434
P-40	Total Gross/Weapon System Cost				- 1 -	- 1 -	- 1 -	- /7.434	- 1 -	- / 7.434

^{*}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 sum exactly due to rounding.

Justification:

FY2019 Base procurement dollars in the amount of \$7.434 million supports the Active component of the Army by procuring eighteen XM914 30mm autocannons. The XM914 provides significant lethality improvements over legacy heavy machine guns, such as the M2 .50 caliber machine gun and the MK19 grenade machine gun, and provides the capability required for Soldiers in a combat environment to engage enemy personnel and lightly armored targets.

Funds in this line are a new start in FY2019

Exhibit P-5, Cost Analysis: PB 2019 Army Date: February 2018 Appropriation / Budget Activity / Budget Sub Activity: Item Number / Title [DODIC]: P-1 Line Item Number / Title: 2033A / 02 / 10 4368G13800 / GUN AUTOMATIC 30MM M230 G13800 / GUN AUTOMATIC 30MM M230 MDAP/MAIS Code: ID Code (A=Service Ready, B=Not Service Ready): A FY 2017 **FY 2019 Base** FY 2019 Total **Resource Summary Prior Years** FY 2018 **FY 2019 OCO** Procurement Quantity (Units in Each) Gross/Weapon System Cost (\$ in Millions) _ -7.434 -7.434 Less PY Advance Procurement (\$ in Millions) _ _ Net Procurement (P-1) (\$ in Millions) 7.434 7.434 _ _ _ _ Plus CY Advance Procurement (\$ in Millions) _ _ Total Obligation Authority (\$ in Millions) 7.434 7.434 (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) 413.000 413.000 Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding. FY 2017 **FY 2018 FY 2019 Base FY 2019 OCO** FY 2019 Total **Prior Years** Total Total Total Total Total Total **Unit Cost Unit Cost Unit Cost Unit Cost Unit Cost** Qty Cost Qty Cost **Unit Cost** Qty Cost Qty Cost Qty Cost Qty Cost **Cost Elements** (\$ M) (\$ M) (Each) (\$ K) (Each) (\$ M) (\$ K) (Each) (\$ K) (Each) (\$ M) (Each) (\$ M) (\$ K) (Each) (\$ K) (\$ M) (\$ K) Hardware Cost Recurring Cost XM914 30mm 250.000 18 4.500 250.000 18 4.500 Autocannon(†) 0.500 0.500 Engineering Support _ First Destination 0.012 0.012 Transportation Program Management 0.233 0.233 ---Subtotal: Recurring Cost _ _ 5.245 _ 5.245 Subtotal: Hardware Cost _ 5.245 5.245 Package Fielding Cost Recurring Cost Pre-fielding coordination and 0.015 0.015 storage Subtotal: Recurring Cost 0.015 0.015 -Subtotal: Package Fielding 0.015 0.015 Cost

UNCLASSIFIED
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LI 4368G13800 - GUN AUTOMATIC 30MM M230 Army

Logistics Cost

Non Recurring Cost

Contractor Logistics

Support

P-1 Line #20

2.174

2.174

Exhibit P-5, Cost Analysis: PB 2019 Army

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

P-1 Line Item Number / Title:
4368G13800 / GUN AUTOMATIC 30MM M230

Date: February 2018

Item Number / Title [DODIC]:
G13800 / GUN AUTOMATIC 30MM M230

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 sum exactly due to rounding.

																		_
	F	Prior Years	S		FY 2017			FY 2018		FY	′ 2019 Ba	se	F	Y 2019 OC	0	F	Y 2019 To	tal
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)															
Subtotal: Non Recurring Cost	-	-	-	-	-	-	-	-	-	-	-	2.174	-	-	-	-	-	2.174
Subtotal: Logistics Cost	-	-	-	-	-	-	-	-	-	-	-	2.174	-	-	-	-	-	2.174
Gross/Weapon System Cost	-	-	-	-	-	-	-	-	-	413.000	-	7.434	-	-	-	413.000	-	7.434

Secondar	y Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Army	Quantity	-	-	-	-	-
	Total Obligation Authority	-	-	7.434	-	7.434
Total:	Quantity	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	-	-	7.434	-	7.434

^(†) indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: PB 2019	Army	Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 10	P-1 Line Item Number / Title: 4368G13800 / GUN AUTOMATIC 30MM M230	Item Number / Title [DODIC]: G13800 / GUN AUTOMATIC 30MM M230

Cost Elements	0 C 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?	Revision	RFP Issue Date
XM914 30mm Autocannon		2019	ATK / Phoenix, AZ	SS / FFP	ACC-NJ, Picatinny Arsenal, NJ	Mar 2019	Jan 2020	18	250.000			

Exhibit P-40, Budget Line Item Justification: PB 2019 Army

Date: February 2018

Appropriation / Budget Activity / Budget Sub Activity:

ctivity: P-1 Line Item Number / Title:

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

5000GB2000 / Machine Gun, Cal .50 M2 Roll

Vehicles / BSA 10: Weapons & Other Combat Vehicles

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

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

	Prior			FY 2019	FY 2019	FY 2019					То	
Resource Summary	Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	395.544	-	-	22.330	-	22.330	3.146	-	-	-	-	421.020
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	395.544	-	-	22.330	-	22.330	3.146	-	-	-	-	421.020
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	395.544	-	-	22.330	-	22.330	3.146	-	-	-	-	421.020
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	ne corresponding	budget request	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	11.005	-	11.005	11.000	-	-	-	-	181.866

Description:

M2A1 .50 Caliber Machine Gun is an automatic, belt-fed, recoil-operated, and air-cooled crew-served weapon. It mounts on the M205 tripod and on most vehicles, and serves as an anti-personnel and anti-aircraft weapon. It is highly effective against light armored vehicles, low-and slow-flying aircraft, and small boats. The M2A1 provides automatic weapon suppressive fire for offensive and defensive purposes. It is capable of single-shot and automatic fire. The M2A1 provides enhancements to allow the Soldier to quickly change barrels without the need to reset the headspace and timing while also reducing the visible muzzle flash.

				FY 2019	FY 2019	FY 2019				
Secondar	ry Distribution	FY 2017	FY 2018	Base	осо	Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	22.330	-	22.330	3.146	-	-	-
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	-	-	22.330	-	22.330	3.146	=	-	-

P-1 Line #21

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Exhibit P-40, Budget Line Item Justification: PB 2019 Army

Date: February 2018

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

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

5000GB2000 / Machine Gun, Cal .50 M2 Roll

Vehicles / BSA 10: Weapons & Other Combat Vehicles

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

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

	Exhibits Schedule		,		Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	G10900 / MACHINE GUN, CAL .50 M-2 FLEX	P-5a, P-21	Α		- / 395.544	- / -	- / -	- / 22.330	- / -	- / 22.330
P-40	Total Gross/Weapon System Cost				- / 395.544	- 1 -	- 1 -	- / 22.330	- 1 -	- / 22.330

^{*}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 sum exactly due to rounding.

Justification:

FY 2019 Base procurement dollars in the amount of \$22.330 million supports the Active Army by purchasing 2,029 M2A1 .50 Caliber Machine Guns. The M2A1 provides automatic weapon suppressive fire for offensive and defensive purposes. It is capable of single-shot and automatic fire. The M2A1 provides enhancements to allow the Soldier to quickly change barrels without the need to reset the headspace and timing while also reducing the visible muzzle flash.

The M2A1 50 Caliber Machine Gun is a New Start

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.

AAO: 49,781

Exhibit P-5, Cost Analysis: PB 2019 Army

Date: February 2018

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

2033A / 02 / 10 5000GB2000 / Machine Gun, Cal .50 M2 Roll G10900 / MACHINE GUN, CAL .50 M-2

FLEX

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

12 Code (1 Colvide reddy) 17 t		•				
Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	395.544	-	-	22.330	-	22.330
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	395.544	-	-	22.330	-	22.330
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	395.544	-	-	22.330	-	22.330
(The following Resource Summary rows are for informa	tional purposes only. The cor	responding budget reque	ests are documented elsewhe	ere.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	11.005	-	11.005

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

	P	rior Years	3		FY 2017			FY 2018		FY	' 2019 Bas	e	FY	2019 OC	0	FY	' 2019 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
Flyaway Cost		1		1		1										1	Į.	
Recurring Cost																		
M205 Lightweight Tripod	13.910	27,556	383.290	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
M2A1 .50 Caliber Machine Gun ^(†)	-	-	-	-	-	-	-	-	-	10.179	2,029	20.653	-	-	-	10.179	2,029	20.
Program Management Support (Non-Labor)	-	-	-	-	-	-	-	-	-	-	-	0.489	-	-	-	-	-	0
Production Engineering	-	-	3.613	-	-	-	-	-	-	-	-	0.300	-	-	-	-	-	0
Integrated Logistics Support	-	-	2.336	-	-	-	-	-	-	-	-	0.300	-	-	-	-	-	0
4. Fielding	-	-	1.964	-	-	-	-	-	-	-	-	0.250	-	-	-	-	-	0
First Destination Transportation	-	-	1.575	-	-	-	-	-	-	-	-	0.088	-	-	-	-	-	(
6. Engineering Studies	-	-	1.192	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
7. New Equipment Training	-	-	1.560	-	-	-	-	-	-	-	-	0.250	-	-	-	-	-	C
Subtotal: Recurring Cost	-	-	395.544	-	-	-	-	-	-	-	-	22.330	-	-	-	-	-	22
ubtotal: Flyaway Cost	-	-	395.544	-	-	-	-	-	-	-	-	22.330	-	-	-	-	-	22
ross/Weapon System ost	-	-	395.544	-	-	-	-	-	-	11.005	-	22.330	-	-	-	11.005	-	22

Exhibit P-5, Cost Analysis: PB 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 10	P-1 Line Item Number / Title: 5000GB2000 / Machine Gun, Cal .50 M2 Roll	Item Number / Title [DODIC]: G10900 / MACHINE GUN, CAL .50 M-2 FLEX

ID Code (A=Service Ready, B=Not Service Ready	iy) : A		MDAP/MAIS Code	e :		
Secondar	y Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Army	Quantity	-	-	-	-	-
	Total Obligation Authority	-	-	22.330	-	22.330
Total:	Quantity	-	=	-	=	-
Secondary Distribution	Total Obligation Authority	-	-	22.330	-	22.330

^(†) indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: PB 2019	Army	Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 10	P-1 Line Item Number / Title: 5000GB2000 / Machine Gun, Cal .50 M2 Roll	Item Number / Title [DODIC]: G10900 / MACHINE GUN, CAL .50 M-2 FLEX

	0			Method/Type		Aaud	Date			Specs	Date	DED Is a
Cost Elements	0	FY	Contractor and Location	Funding Vehicle	Location of PCO	Award Date	of First Delivery	Qty (Each)	Unit Cost	Avail Now?	Revision Available	RFP Issue Date
M2A1 .50 Caliber Machine Gun ^(†)		2019	TBD / TBD	C / IDIQ	ACC-NJ, Picatinny	May 2019	Feb 2020	2,029	10.180			

^(†) indicates the presence of a P-21

Exhi	ibit F	P-21, Pr	oduct	ion Sc	hedu	le: PE	3 201	9 Arm	ıy														Date	: Feb	ruary	2018				
	_	i ation / 02 / 10	Budg	et Acti	vity /	Budç	get Sı	ıb Ac	tivity	·:		Line 00GB) M2	Roll									DIC]: , CAL	.50 N	Л-2
			lements in Each)								Fiscal `	rear 2019)										Fiscal Y	ear 2020						B A
				ACCEPT									c	alendar	Year 201	9								Calend	dar Year	2020				L
O F C R O #	FY	SERVICE	PROC QTY	PRIOR TO 1 OCT 2018	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	A U G	O E P	100	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	A N C E
M2A1	.50 Cal	iber Machine	Gun	<u>'</u>			,		,			,																		
1	2019	ARMY	2,029	9 0	2,029								Α -	-	-	-	-	-	-	-	-	400	400	400	400	400	29			
						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	A U G	S E P]

Exhibit P-21, Production Schedule: PB 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 10	P-1 Line Item Number / Title: 5000GB2000 / Machine Gun, Cal .50 M2 Roll	Item Number / Title [DODIC]: G10900 / MACHINE GUN, CAL .50 M-2 FLEX

		Produc	tion Rates (Each /	Month)				Procurement Le	adtime (Months)						
MFR						Initial Reorder									
Ref	Manufacturer	MOD 5 2040	5 0040		ALT	ALT	Manufacturing	Total	ALT	ALT	Manufacturing	Total			
#	Name - Location	MSR For 2019	1-8-5 For 2019	MAX For 2019	Prior to Oct 1	After Oct 1	PLT	After Oct 1	Prior to Oct 1	After Oct 1	PLT	After Oct 1			
1	TBD - TBD	50	50	400	0	0	0	0	0	0	0	0			

Remarks:

Each Delivery Order is competed between two contractors (General Dynamics OTS, Williston, VT and US Ordnance, McCarran, NV).

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).

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

Exhibit P-40, Budget Line Item Justification: PB 2019 Army

Date: February 2018

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

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

6580G02200 / Mortar Systems

Vehicles / BSA 10: Weapons & Other Combat Vehicles

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

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

	Prior			FY 2019	FY 2019	FY 2019					То	
Resource Summary	Years	FY 2017	FY 2018	Base	осо	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	354.306	30.742	21.452	12.470	11.842	24.312	14.913	7.680	6.717	5.959	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	354.306	30.742	21.452	12.470	11.842	24.312	14.913	7.680	6.717	5.959	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	354.306	30.742	21.452	12.470	11.842	24.312	14.913	7.680	6.717	5.959	Continuing	Continuing
(The following	Resource Sumr	mary rows are fo	r informational p	urposes only. Th	ne corresponding	budget request	s are documente	d elsewhere.)				1
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	1,762.716	98.849	126.935	135.543	101.214	116.325	124.275	118.154	279.875	248.292	Continuing	Continuing

Description:

Mortar Systems includes the production of 60mm Light Weight M224/A1, 81mm Light Weight M252/A1, 120mm M120A1/M121 Mortar Weapon Systems, and associated equipment 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.

Exhibit P-40, Budget Line Item Justification: PB 2019 Army

Date: February 2018

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

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

6580G02200 / Mortar Systems

Vehicles / BSA 10: Weapons & Other Combat Vehicles

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

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

	Exhibits Schedule				Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	G02202 / Mtr Wpn Sys	P-5a, P-21	Α		201 / 354.306	311 / 30.742	169 / 21.452	92 / 12.470	117 / 11.842	209 / 24.312
P-40	Total Gross/Weapon System Cost				- / 354.306	- / 30.742	- / 21.452	- / 12.470	- / 11.842	- / 24.312

^{*}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 sum exactly due to rounding.

Justification:

FY 2019 Base procurement dollars in the amount of \$12.470 million supports the procurement of 75 each M252A1 (81mm) mortar systems, and 17 each M120 (120mm) mortar systems including production support costs for the acquisition, engineering, warehousing/storage/staging, logistics, transportation, fielding and new equipment training of the mortar weapon systems. The system support funds are essential to fill shortages of US Army 60mm mortar systems resulting from Army Reorganization of Infantry Brigade Combat Teams from two Battalions per Brigade to three Battalions per Brigade, and to procure 120mm mortars to support the Armored Multipurpose Vehicle (AMPV) Mortar Carrier Initial Operational Test and Evaluation (IOTE) and Low Rate Initial Production (LRIP) efforts.

FY2019 Overseas Contingency Operations (OCO) dollars in the amount of \$11.842 million supports the procurement of 22 each M224A1 (60mm) mortar systems, 26 each M252A1 (81mm) mortar systems, 28 each M120 (120mm) mortar systems, 18 each M121 (120mm) mortar systems, and 23 each M326 Mortar Stowage Kits critical Army items consumed in support of deployed units' ongoing military operations including testing, fielding, staging, and transportation. \$11.662 million OCO funding supports the procurement of critical Army items consumed in support of Operation Inherent Reserve for ISIL, and \$0.180M to support the COCOM requirement for unit equipment sets to deter potential adversaries and support the European Deterrence Initiative.

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.

AAO: 4,037

Exhibit P-5, Cost Analysis: PB 2019 Army

Appropriation / Budget Activity / Budget Sub Activity:

2033A / 02 / 10

Date: February 2018

Item Number / Title [DODIC]:
6580G02200 / Mortar Systems

G02202 / Mtr Wpn Sys

ID Code (A=Service Ready, B=Not Service Ready) : A	·	N	DAP/MAIS Code:			
Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity (Units in Each)	201	31	169	92	117	209
Gross/Weapon System Cost (\$ in Millions)	354.306	30.742	21.452	12.470	11.842	24.312
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	354.306	30.742	21.452	12.470	11.842	24.312
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	354.306	30.742	21.452	12.470	11.842	24.312
(The following Resource Summary rows are for information	onal purposes only. The cor	responding budget reques	ts are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	1,762.716	98.849	126.935	135.543	101.214	116.325

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

	P	rior Years	3		FY 2017			FY 2018		F۱	/ 2019 Bas	se	FY	/ 2019 OC	0	FY 2019 Total			
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)													
Hardware Cost				'	'		,	'		'			'						
Recurring Cost																			
60mm Cannon Tubes ^(†)	-	-	-	31.432	175	5.501	-	-	-	-	-	-	31.432	22	0.692	31.432	22	0.69	
60mm Mortar Component	-	-	-	31.614	175	5.532	-	-	-	-	-	-	31.614	22	0.696	31.614	22	0.69	
60mm Mortar System ^(†)	-	-	-	9.537	175	1.669	-	-	-	-	-	-	9.537	22	0.210	9.537	22	0.2	
81mm Cannon Tubes ^(†)	-	-	-	23.968	75	1.798	23.968	66	1.582	23.968	75	1.798	23.968	26	0.623	23.968	101	2.4:	
81mm Mortar Component	-	-	-	1.100	75	0.083	1.100	66	0.073	1.100	75	0.083	1.100	26	0.029	1.100	101	0.1	
81mm Mortar System ^(†)	-	-	-	63.402	75	4.755	63.402	66	4.185	63.402	75	4.755	63.402	26	1.648	63.402	101	6.4	
120mm Cannon Tubes ^(†)	-	-	-	26.645	58	1.545	26.645	100	2.665	26.645	17	0.453	26.645	46	1.226	26.645	63	1.6	
120mm Mortar Component	-	-	-	20.270	58	1.176	20.270	100	2.027	20.270	17	0.345	20.270	46	0.932	20.270	63	1.2	
120mm Mortar System ^(†)	-	-	-	49.156	58	2.851	49.156	100	4.916	49.156	17	0.836	49.156	46	2.261	49.156	63	3.0	
M326 Mortar Stowage Kit ^(†)	-	-	-	-	-	-	88.925	4	0.356	-	-	-	88.925	23	2.045	88.925	23	2.0	
M1101 Trailers ^(†)	-	-	-	-	-	-	7.500	4	0.030	-	-	-	-	-	-	-	-		
Subtotal: Recurring Cost	-	-	-	-	-	24.909	-	-	15.832	-	-	8.268	-	-	10.362	-	-	18.6	

LI 6580G02200 - Mortar Systems Army UNCLASSIFIED
Page 3 of 9

Exhibit P-5, Cost Analysis: PB 2019 Army

Date: February 2018

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

P-1 Line Item Number / Title:
6580G02200 / Mortar Systems

Item Number / Title [DODIC]:
G02202 / Mtr Wpn Sys

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

Note: Subtotals or Totals		Prior Years			FY 2017			FY 2018		E\	′ 2019 Ba		E'	Y 2019 OC	^	EV	/ 2019 Tota	ol.
		TIOI TEATS			F1 2017			F1 2010		г	1 2019 Da	1	Г	1 2019 00		Г	2019 100	-
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)
Subtotal: Hardware Cost	-	-	-	-	-	24.909	-	-	15.832	-	-	8.268	-	-	10.362	-	-	18.63
Logistics Cost																		
Recurring Cost																		
Government ILS	-	-	-	-	-	0.479	-	-	0.444	-	-	0.446	-	-	-	-	-	0.44
Subtotal: Recurring Cost	-	-	-	-	-	0.479	-	-	0.444	-	-	0.446	-	-	-	-	-	0.44
Subtotal: Logistics Cost	-	-	-	-	-	0.479	-	-	0.444	-	-	0.446	-	-	-	-	-	0.44
Support - Acceptance Testing	g Cost																	
Acceptance Test	-	-	-	-	-	0.650	-	-	0.660	-	-	0.696	-	-	0.330	-	-	1.026
First Article Test	-	-	-	-	-	0.695	-	-	0.643	-	-	0.330	-	-	0.415	-	-	0.745
Subtotal: Support - Acceptance Testing Cost	-		-	-	-	1.345	-	-	1.303		-	1.026	-	_	0.745	-	-	1.77
Support - Fielding Cost																		
Fielding	-	-	-	-	-	0.623	-	-	0.630	-	-	0.532	-	-	0.475	-	-	1.007
Subtotal: Support - Fielding Cost	-		-	-	-	0.623	-	-	0.630		-	0.532	-	_	0.475		-	1.00
Support - Production Engine	ering Cost																	
Production Engineering	-	-	354.306	-	-	2.475	-	-	2.120	-	-	1.267	-	-	-	-	-	1.26
Subtotal: Support - Production Engineering Cost		-	354.306	-	-	2.475	-	-	2.120	-	-	1.267	-	-	-	-	-	1.26
Support - Staging and Transp	portation Cost																	
Staging and Transportation	-	-	-	-	-	0.485	-	-	0.520		-	0.550	-	-	0.260	-	-	0.810
Subtotal: Support - Staging and Transportation Cost	-	-	-	-	-	0.485	-	-	0.520	-	-	0.550	-	-	0.260	-	-	0.81
Support - Training Cost				<u>'</u>	'								'				'	
Equipment	-	-	-	-	-	0.425	-	-	0.603	-	-	0.381	-	-	-	-	-	0.38
Subtotal: Support - Training Cost	-	-	-	-	-	0.425	-	-	0.603	-	-	0.381	-	-	-	-	-	0.38
Gross/Weapon System Cost	1,762.716	201	354.306	98.849	311	30.742	126.935	169	21.452	135.543	92	12.470	101.214	117	11.842	116.325	209	24.31

^(†) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2019 Army

Appropriation / Budget Activity / Budget Sub Activity:

2033A / 02 / 10

Date: February 2018

P-1 Line Item Number / Title:
6580G02200 / Mortar Systems

G02202 / Mtr Wpn Sys

					,					1 2		
Cost Elements	0 C 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
60mm Cannon Tubes		2017	Watervilet Arsenal / Watervliet, NY	MIPR	Picatinny Arsenal, NJ	Feb 2017	Oct 2017	175	31.432	Υ		
60mm Cannon Tubes	✓	2019	Watervilet Arsenal / Watervliet, NY	MIPR	Picatinny Arsenal, NJ	Feb 2019	Oct 2019	22	31.432	Υ		
60mm Mortar System		2017	EFW Inc / Fort Worth, TX	Option / FFP	Picatinny Arsenal, NJ	Mar 2017	Jul 2019	175	9.537	Υ		
60mm Mortar System	✓	2019	EFW Inc / Fort Worth, TX	Option / FFP	Picatinny Arsenal, NJ	Mar 2019	Jul 2021	22	9.537	Υ		
81mm Cannon Tubes		2017	Watervilet Arsenal / Watervliet, NY	MIPR	Picatinny Arsenal, NJ	Feb 2017	Oct 2017	75	23.968	Υ		
81mm Cannon Tubes		2018	Watervilet Arsenal / Watervliet, NY	MIPR	Picatinny Arsenal, NJ	Feb 2018	Oct 2018	66	23.968	Υ		
81mm Cannon Tubes		2019	Watervilet Arsenal / Watervliet, NY	MIPR	Picatinny Arsenal, NJ	Feb 2019	Oct 2019	101	23.968	Y		
81mm Mortar System ^(†)		2017	EFW Inc / Fort Worth, TX	Option / FFP	Picatinny Arsenal, NJ	Mar 2017	Jul 2019	75	63.402	Y		
81mm Mortar System ^(†)		2018	EFW Inc / Fort Worth, TX	Option / FFP	Picatinny Arsenal, NJ	Mar 2018	Jul 2020	66	63.402	Y		
81mm Mortar System ^(†)		2019	EFW Inc / Fort Worth, TX	Option / FFP	Picatinny Arsenal, NJ	Mar 2019	Jul 2021	101	63.402	Y		
120mm Cannon Tubes		2017	Watervilet Arsenal / Watervliet, NY	MIPR	Picatinny Arsenal, NJ	Feb 2017	Oct 2017	58	26.645	Υ		
120mm Cannon Tubes		2018	Watervilet Arsenal / Watervliet, NY	MIPR	Picatinny Arsenal, NJ	Feb 2018	Oct 2018	100	26.645	Y		
120mm Cannon Tubes		2019	Watervilet Arsenal / Watervliet, NY	MIPR	Picatinny Arsenal, NJ	Feb 2019	Oct 2019	63	26.645	Y		
120mm Mortar System		2017	EFW Inc / Fort Worth, TX	Option / FFP	Picatinny Arsenal, NJ	Mar 2017	Jul 2019	58	49.156	Y		
120mm Mortar System		2018	EFW Inc / Fort Worth, TX	Option / FFP	Picatinny Arsenal, NJ	Mar 2018	Jul 2020	100	49.156	Y		
120mm Mortar System		2019	EFW Inc / Fort Worth, TX	Option / FFP	Picatinny Arsenal, NJ	Mar 2019	Jul 2021	63	49.156	Y		
M326 Mortar Stowage Kit		2018	EFW Inc / Fort Worth, TX	Option / FFP	Picatinny Arsenal, NJ	Feb 2018	Mar 2019	4	88.925	Y		
M326 Mortar Stowage Kit	√	2019	EFW Inc / Fort Worth, TX	Option / FFP	Picatinny Arsenal, NJ	Feb 2019	Mar 2020	23	88.925	Y		
M1101 Trailers		2018	Sierra Army Depot / Sierra, NV	MIPR	Picatinny Arsenal, NJ	Feb 2018	Mar 2019	4	7.500	Υ		

^(†) indicates the presence of a P-21

LI 6580G02200 - Mortar Systems Army

P-1 Line #22

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					ACCEPT			Calendar Year 2017												Caler	ndar Yea	r 2018				L					
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81mi	m M	lortar \$	System		,																										,
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1	1 2	2018	ARMY	66	0	66																		Α -	-	-	-	-	-	-	66
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ARMY	101	0	101	-	-	-	-	-	-	-	-	-	11	11	11	11	11	11	11	11	11	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	J U 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	J U N	J U	A U G	S E P
A	RMY RMY	RMY 75 RMY 66	RMY 75 75 RMY 66 33	RMY 75 75 0 RMY 66 33 33	RMY 75 75 0 RMY 66 33 33 11 RMY 101 0 101 - 0	RMY 75 75 0 RMY 66 33 33 11 11 RMY 101 0 101 O N C 0	RMY 75 75 0 RMY 66 33 33 11 11 11 RMY 101 0 101 O N D C O E	RMY 75 75 0 RMY 66 33 33 11 11 11 RMY 101 0 101 O N D J C O E A	RMY 75 75 0 RMY 66 33 33 11 11 11 RMY 101 0 101 O N D J F C O E A E	RMY 75 75 0 RMY 66 33 33 11 11 11 RMY 101 0 101 O N D J F M C O E A E A	RMY 75 75 0 RMY 66 33 33 11 11 11 RMY 101 0 101	RMY 75 75 0 RMY 66 33 33 11 11 11 RMY 101 0 101	RMY 75 75 0 RMY 66 33 33 11 11 11 RMY 101 0 101	RMY 75 75 0 RMY 66 33 33 11 11 11 RMY 101 0 101 11 O N D J F M A M J J J C O E A E A P A U U	RMY 75 75 0 RMY 66 33 33 11 11 11 RMY 101 0 101 11 11 O N D J F M A M J J A C O E A E A P A U U U U	RMY 75 75 0 RMY 66 33 33 11 11 11 RMY 101 0 101 11 11 11 11	RMY 75 75 0 RMY 66 33 33 11 11 11 RMY 101 0 101 11 11 11 11 O N D J F M A M J J A S O C O E A E A P A U U U E C	RMY 75 75 0 RMY 66 33 33 11 11 11 RMY 101 0 101 11 11 11 11 11 O N D J F M A M J J A S O N C O E A E A P A U U U U E C O	RMY 75 75 0 RMY 66 33 33 11 11 11 RMY 101 0 101 11 11 11 11 11 11 11 O N D J F M A M J J A S O N D C O E A E A P A U U U U E C O E	RMY 75 75 0 RMY 66 33 33 11 11 11 RMY 101 0 101 11 11 11 11 11 11 11 1	RMY 75 75 0 RMY 66 33 33 11 11 11 RMY 101 0 101 11 11 11 11 11 11 11 1	RMY 75 75 0 RMY 66 33 33 11 11 11 RMY 101 0 101 11 11 11 11 11 11 11 1	RMY 75 75 0 RMY 66 33 33 11 11 11 RMY 101 0 101 11 11 11 11 11 11 11 1	RMY 75 75 0 RMY 66 33 33 11 11 11 RMY 101 0 101 11 11 11 11 11 11 11 11	RMY 75 75 0 RMY 66 33 33 11 11 11 RMY 101 0 101 11 11 11 11 11 11 11 1	RMY 75 75 0 RMY 66 33 33 11 11 11 11 RMY 101 0 101 11 11 11 11 11 11 11 1	RMY 75 75 0 RMY 66 33 33 11 11 11 11 RMY 101 0 101 11 11 11 11 11 11 11 1

LI 6580G02200 - Mortar Systems Army UNCLASSIFIED Page 8 of 9

Exhibit P-21, Production Schedule: PB 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
2033A / 02 / 10	6580G02200 / Mortar Systems	G02202 / Mtr Wpn Sys

		Produc	tion Rates (Each /	Month)				Procurement Lea	adtime (Months)			
MF	R					Init	tial			Reo	rder	
Re #		MSR For 2019	1-8-5 For 2019	MAX For 2019	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
	1 EFW Inc - Fort Worth, TX	60	100	165	15	6	28	34	3	6	28	34

[&]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 6580G02200 - Mortar Systems Army

Exhibit P-40, Budget Line Item Justification: PB 2019 Army

Date: February 2018

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

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

8181G01501 / XM320 Grenade Launcher Module (GLM)

Vehicles / BSA 10: Weapons & Other Combat Vehicles

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

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

	Prior			FY 2019	FY 2019	FY 2019					То	
Resource Summary	Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	224.992	3.062	4.524	0.697	-	0.697	0.382	7.945	15.859	19.824	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	=	-	-	-	-	-	-	=	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	224.992	3.062	4.524	0.697	-	0.697	0.382	7.945	15.859	19.824	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	224.992	3.062	4.524	0.697	-	0.697	0.382	7.945	15.859	19.824	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	ne corresponding	budget requests	are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	18.035	-	3.684	-	-	-	-	3.377	3.370	3.370	Continuing	Continuing

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. The M320 GLM is a modular system that mounts under the barrel of the rifle or carbine. This weapon can also be used in the stand-alone configuration. The M320 GLM has an integrated leaf sight and some improved safety features. This weapon also has a side-loading unrestricted breech that permits the firing of longer 40mm low-velocity projectiles (NATO standard and non-standard). The M320 GLM is more reliable and safer because of the use of 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 hand-held Laser Range Finder (LRF) and Grenadier Sighting System (GSS) are delivered as system components, one each per system. M320 GLMs will also be fitted with an additional system components, such as a 40mm fuze programmer, to properly enact the air burst capability present within the new 40mm Family of Ammunition (FOA).

Secondar	ry Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	3.062	4.524	0.697	-	0.697	0.382	7.945	15.859	19.824
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	3.062	4.524	0.697	-	0.697	0.382	7.945	15.859	19.824

Justification:

FY 2019 Base procurement dollars in the amount of \$.697 million supports the fielding efforts of the M320 Grenade Launcher Module (GLM) system.

The GLM 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 probability of hit. 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.

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Exhibit P-40, Budget Line Item Justification	ı: PB 2019 Army		Date: February 2018
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 Nu 8181G01501 / XI	umber / Title: M320 Grenade Launcher Module (GLM)
D Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code	B Items: N/A	Other Related Program Elements: N/A
ine Item MDAP/MAIS Code: N/A			
In accordance with Section 1815 of the FY 2008 National domestic emergency responses, and providing military su	Defense Act, (P.L.110-181), this item is ned upport to civil authorities.	cessary for use by the activ	ve and reserve components of the Armed Forces for homeland defense missions,
AAO: 68,860			

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P-1 Line #23

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Exhibit P-40, Budget Line Item Justification: PB 2019 Army

Date: February 2018

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

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

8194G01507 / COMPACT SEMI-AUTOMATIC SNIPER SYSTEM

Vehicles / BSA 10: Weapons & Other Combat Vehicles

Program Elements for Code B Items: 0604601A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

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

	Prior			FY 2019	FY 2019	FY 2019					То	
Resource Summary	Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	-	-	46.236	-	46.236	58.999	21.097	12.237	25.363	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	-	-	46.236	-	46.236	58.999	21.097	12.237	25.363	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	-	-	46.236	-	46.236	58.999	21.097	12.237	25.363	Continuing	Continuing
(The following	Resource Sum	mary rows are fo	r informational p	urposes 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)	-	-	-	8.926	-	8.926	8.857	8.517	8.691	8.859	Continuing	Continuing

Description:

Brigade Combat Teams (BCT) require the capability to engage threat personnel with aimed lethal and accurate fires at ranges exceeding the current squad riflemen provided today. The Army is addressing longer range threats by procuring the Squad Designated Marksman Rifle (SDMR). The SDMR is intended to provide increased accuracy at longer ranges, giving infantry squads greater firepower and flexibility by engaging targets with precision fire. The Squad Designated Marksman Rifle will be a 7.62x51mm semi-automatic rifle with suppressor, optic, and additional authorized equipment.

Seconda	ary Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	28.527	-	28.527	44.868	15.952	12.237	25.363
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	17.468	-	17.468	14.131	5.023	-	-
AR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	0.241	-	0.241	-	0.122	-	-
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	-	-	46.236	-	46.236	58.999	21.097	12.237	25.363

Exhibit P-40, Budget Line Item Justification: PB 2019 Army

Date: February 2018

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

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

8194G01507 / COMPACT SEMI-AUTOMATIC SNIPER SYSTEM

Vehicles / BSA 10: Weapons & Other Combat Vehicles

Program Elements for Code B Items: 0604601A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

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

	Exhibits Schedule				Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	G01507 / COMPACT SEMI-AUTOMATIC SNIPER SYSTEM	P-5a	В		- / -	- / -	- / -	- /46.236	- / -	- /46.236
P-40	Total Gross/Weapon System Cost				- 1 -	- 1 -	- 1 -	- / 46.236	- 1 -	- / 46.236

^{*}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 sum exactly due to rounding.

Justification:

FY 2019 Base procurement dollars in the amount of \$46.236 million supports the procurement and fielding of 5,180 Squad Designated Marksman Rifle (SDMR). The SDMR provides Infantry, Scout and Engineer squads the capability to engage enemy personnel with accurate rifle fire. SDMR is a Commercial-Off-The-Shelf (COTS)

SMDR is a New Start in FY 2019.

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.

AAO: 8,711

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Exhibit P-5, Cost	Analysis	PR 20	19 Arm	,									ı	Date: I	ebruary 2	2018		
						D 4	l !na 4an	. Nives la c	/ T:41a						•		DICI.	
Appropriation / B 2033A / 02 / 10	uaget Ad	ctivity /	Buaget	Sub Acti	ivity:	8194	Line Iten 4G01507 TEM			: MI-AUTO	MATIC S	SNIPER	. (G0150	umber / ⁻ 7 / COMF R SYSTE	ACT SE)MATI(
ID Code (A=Service Read	y, B=Not Servi	ce Ready):	В						М	DAP/MAIS	Code:							
F	Resource	Summ	arv			Prior Ye	ars	FY 20	017	FY	2018	FY	2019 Bas	е	FY 2019 (осо	FY 2019	Total
Procurement Quantity (Unit							-		_		-			-		-		
Gross/Weapon System Co		s)					-		_		-		46	5.236		-		46.23
Less PY Advance Procure	· ·	<u> </u>					-				-			-		-		
Net Procurement (P-1) (\$ ii		,					-		_		-		46	.236		-		46.2
Plus CY Advance Procure		ions)					-		_		-			-		-		
Total Obligation Authorit	•						-		-		-		46	.236		-		46.2
(Tř	ne following F	Resource Si	ummary row	s are for info	rmational p	urposes onl	y. The corres	ponding bud	lget reques	ts are docume	ented elsewl	nere.)				,		
Initial Spares (\$ in Millions)							-		-		-			-		-		-
Gross/Weapon System Ur	nit Cost (\$ in T	housands)					-		-		-		8	.926		-		8.92
Note: Subtotals or Totals in	n this Exhibit	P-5 may no	ot be exact of	or sum exactl	y due to rou	unding.												
	Р	rior Years	S		FY 2017			FY 2018		FY	2019 Bas	е	FY	' 2019 C	СО	F	Y 2019 Tot	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																		
Hardware ^(†)	-	-	-	-	-	-	-	-	-	7.763	5,180	40.214	-	-	-	7.763	5,180	40.2
Program Management	-	-	-	-	-	-	-	-	-	-	-	4.153	-	-	-	-	-	4.1
Engineering Support	-	-	-	-	-	-	-	-	-	-	-	0.855	-	-	-	-	-	0.8
Integrated Logistics Support (ILS)	-	-	-	-	-	-	-	-	-	-	-	0.265	-	-	-	-	-	0.2
Total Package Fielding (TPF)	-	-	-	-	-	-	-	-	-	-	-	0.628	-	-	-	-	-	0.6
New Equipment Training (NET)	-	-	-	-	-	-	-	-	-	-	-	0.123	-	-	-	-	-	0.1
Subtotal: Recurring Cost	-	-	-	-	-	-	-	-	-	-	-	46.236		-	-	-	-	46.2
Subtotal: Flyaway Cost	-	-	-	-	-	-	-	-	-	-	-	46.236	-	-	-	-	-	46.2
Gross/Weapon System Cost	-	-	-	-	-	-	-	-	-	8.926	-	46.236	-	-	-	8.926	-	46.2
	Seco	ondarv Di	stribution	1			FY	2017		FY 2018		FY 2			FY 2019 OCO		FY 20°	
Army		Qua							-		-		-			-		
			al Obligation A	uthority					-		-		28.527	'		-		28.5
ANG			intity						-		-		-			-		
		Tota	al Obligation A	uthority					-		-		17.468	5		-		17.4

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Exhibit P-5, Cost Analysis: PB 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 10	P-1 Line Item Number / Title: 8194G01507 / COMPACT SEMI-AUTOMATIC SNIPER SYSTEM	Item Number / Title [DODIC]: G01507 / COMPACT SEMI-AUTOMATIC SNIPER SYSTEM

ID Code (A=Service Ready, B=Not Service Rea	dy): B		MDAP/MAIS Code) :		
Secondar	y Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
AR	Quantity	-	-	-	-	-
	Total Obligation Authority	-	-	0.241	-	0.241
Total:	Quantity	-	-	-	=	-
Secondary Distribution	Total Obligation Authority	-	-	46.236	-	46.236

^(†) indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: PB 2019	Army	Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 10	P-1 Line Item Number / Title: 8194G01507 / COMPACT SEMI-AUTOMATIC SNIPER SYSTEM	Item Number / Title [DODIC]: G01507 / COMPACT SEMI-AUTOMATIC SNIPER SYSTEM

Cost Elements	0 C 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?	Revision	RFP Issue Date
Hardware		2019	Heckler & Koch Defense / Ashburn, VA	C / FFP	ACC-Picatinny, Picatinny, NJ	Jan 2019	Mar 2019	5,180	7.760	Υ		

Remarks:

The Squad Designated Marksman Rifle (SDMR) is a COTS/NDI solution, therefore, a P21 delivery schedule is not required.

Exhibit P-40, Budget Line Item Justification: PB 2019 Army

Date: February 2018

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

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

8201G13501 / Carbine

Vehicles / BSA 10: Weapons & Other Combat Vehicles

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

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

Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Resource Summary	Itais	1 1 2017	1 1 2010	Dase	000	IOtai	1 1 2020	1 1 2021	1 1 2022	1 1 2023	Complete	IOtai
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	92.431	40.493	43.150	69.306	1.800	71.106	30.394	17.037	11.010	2.425	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	92.431	40.493	43.150	69.306	1.800	71.106	30.394	17.037	11.010	2.425	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	92.431	40.493	43.150	69.306	1.800	71.106	30.394	17.037	11.010	2.425	Continuing	Continuing
(The following	Resource Sumr	nary rows are fo	r informational p	urposes only. Th	ne corresponding	budget request	s are documente	ed elsewhere.)				1
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	1.469	0.763	0.655	0.802	0.804	0.802	0.827	0.949	1.530	7.578	Continuing	Continuing

Description:

This funding is used to procure M4A1 Carbines for the Army. The M4A1 Carbines are 5.56mm, gas operated, air-cooled weapons designed for lightness, speed, mobility and firepower. The M4A1 Carbine is a more compact weapon than the M16 rifle series since it uses a shorter barrel and collapsible stock. The M4A1 Carbine has a (safe/semi-automatic/full automatic) trigger group, with a heavier barrel thickness to support increased sustained rates of fire, and an ambidextrous fire control selector. The M4A1 Carbine also includes a combat optic, back-up iron sight, and the adapter rail system to attach accessories and components.

Seconda	ary Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	2.429	7.499	38.375	1.800	40.175	0.589	17.037	11.010	2.425
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	22.272	19.115	10.847	-	10.847	14.112	-	-	-
AR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	15.792	16.536	20.084	-	20.084	15.693	-	-	-
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	40.493	43.150	69.306	1.800	71.106	30.394	17.037	11.010	2.425

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Exhibit P-40, Budget Line Item Justification: PB 2019 Army **Date:** February 2018

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

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

8201G13501 / Carbine

Vehicles / BSA 10: Weapons & Other Combat Vehicles

02010100017 0010111

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

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

	Exhibits Schedule				Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	G13503 / M4A1 CARBINE	P-5a, P-21	Α		- / 92.431	- /40.493	- / 43.150	- / 69.306	- / 1.800	- /71.106
P-40	Total Gross/Weapon System Cost				- / 92.431	- / 40.493	- / 43.150	- / 69.306	- / 1.800	- / 71.106

^{*}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 sum exactly due to rounding.

Justification:

FY 2019 Base procurement dollars in the amount of \$69.306 million supports the procurement of 91,165 M4A1 Carbines 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.

FY 2019 OCO procurement dollars in the amount of \$1.800 million supports COCOM requirement for unit equipment sets to deter potential adversaries and support the European Deterrence Initiative (EDI). Funding will support the procurement of 2,240 M4A1 Carbines with a backup iron sight, and adapter rail system.

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.

AAO: 850,000

Exhibit P-5, Cost Analysis: PB 2019 Army Date: February 2018 Appropriation / Budget Activity / Budget Sub Activity: Item Number / Title [DODIC]: P-1 Line Item Number / Title: 2033A / 02 / 10 8201G13501 / Carbine G13503 / M4A1 CARBINE MDAP/MAIS Code: ID Code (A=Service Ready, B=Not Service Ready): A **Prior Years** FY 2017 **FY 2018 FY 2019 Base FY 2019 OCO** FY 2019 Total Resource Summary Procurement Quantity (Units in Each) Gross/Weapon System Cost (\$ in Millions) 92.431 40.493 43.150 1.800 71.106 69.306 Less PY Advance Procurement (\$ in Millions) Net Procurement (P-1) (\$ in Millions) 92.431 40.493 43.150 69.306 1.800 71.106 Plus CY Advance Procurement (\$ in Millions) Total Obligation Authority (\$ in Millions) 92.431 40.493 43.150 69.306 1.800 71.106 (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) 1.469 0.763 0.655 0.802 0.804 0.802 Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding. **Prior Years** FY 2017 **FY 2018 FY 2019 Base FY 2019 OCO** FY 2019 Total Total Total Total Total Total Total **Unit Cost Unit Cost** Qty **Unit Cost** Qty **Unit Cost** Qty **Unit Cost** Qty **Unit Cost** Qty Qty Cost Cost Cost Cost Cost Cost Cost Elements (Each) (\$ M) (\$ K) (Each) (Each) (\$ M) (Each) (Each) (Each) (\$ M) (\$ K) (\$ M) (\$ K) (\$ K) (\$ M) (\$ K) (\$ M) (\$ K) Flyaway Cost Recurring Cost 1. M4A1 Carbine(†) 0.884 92,513 81.758 0.626 53,103 33.243 0.586 65,876 38.573 0.638 91,165 58.123 0.638 2,240 1.430 0.638 93,405 59.553 2. Colt's Royalty 1.060 0.289 0.370 0.753 0.737 0.016 payment 6. M4A1 Technical 0.030 0.007 0.201 0.146 0.146 Manuals Transportation Cost 0.177 -0.060 0.050 0.500 _ 0.500

33.598

33.598

0.356

0.356

0.260

0.260

0.616

Support - Program Management Cost

Subtotal: Recurring Cost

Subtotal: Flyaway Cost

Package Fielding Cost

Recurring Cost

7. Total Package

Fielding (TPF)

Subtotal: Recurring Cost

Non Recurring Cost
8. Integrated Logistics

Support (ILS)
Subtotal: Non Recurring

Subtotal: Package Fielding

Cost

Cost

83.048

83.048

1.600

1.600

0.568

0.568

2.168

Page 3 of 10

39.224

39.224

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MDAP/MAIS Code:

Date: February 2018 Exhibit P-5, Cost Analysis: PB 2019 Army Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Item Number / Title [DODIC]:

2033A / 02 / 10 8201G13501 / Carbine ID Code (A=Service Ready, B=Not Service Ready): A

G13503 / M4A1 CARBINE

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

	P	rior Years	6		FY 2017			FY 2018		FY	2019 Ba	se	F۱	/ 2019 OC	0	F۱	/ 2019 Tot	tal
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)
Government Management	-	-	4.850	-	-	4.166	-	-	1.769	-	-	5.855	-	-	0.101	-	-	5.956
Subtotal: Support - Program Management Cost	-	-	4.850	-	-	4.166	-	-	1.769	-	-	5.855	-	-	0.101	-	-	5.956
Support - System Engineering	Cost																	
System Engineering	-	-	2.365	-	-	2.113	-	-	1.437	-	-	2.669	-	-	0.070	-	-	2.739
Subtotal: Support - System Engineering Cost	-	-	2.365	-	-	2.113	-	-	1.437	-	-	2.669	-	-	0.070	-	-	2.739
Gross/Weapon System Cost	1.469	-	92.431	0.763	-	40.493	0.655	-	43.150	0.802	-	69.306	0.804	-	1.800	0.802	-	71.106

Secondar	y Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Army	Quantity	-	-	-	-	-
	Total Obligation Authority	2.429	7.499	38.375	1.800	40.175
ANG	Quantity	-	-	-	-	-
	Total Obligation Authority	22.272	19.115	10.847	-	10.847
AR	Quantity	-	-	-	-	-
	Total Obligation Authority	15.792	16.536	20.084	-	20.084
Total:	Quantity	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	40.493	43.150	69.306	1.800	71.106

^(†) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2019 Army

Appropriation / Budget Activity / Budget Sub Activity:

2033A / 02 / 10

P-1 Line Item Number / Title:
8201G13501 / Carbine

Date: February 2018

Item Number / Title [DODIC]:
G13503 / M4A1 CARBINE

			'									
Cost Elements	0 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
1. M4A1 Carbine ^(†)		2014	FN Manufacturing / Columbia	C / FFP	ACC-TACOM, Warren, MI	May 2014	Oct 2016	28,996	0.641	Y		
1. M4A1 Carbine ^(†)		2015	FN Manufacturing / Columbia	C / FFP	ACC-TACOM, Warren, MI	Nov 2014	Oct 2016	17,992	0.640	Y		
1. M4A1 Carbine ^(†)		2015	Colt / West Hartford	C / FFP	ACC-Picatinny, Picatinny, NJ	Sep 2015	May 2017	4,839	0.640	Y		
1. M4A1 Carbine ^(†)		2016	FN Manufacturing / Columbia	C / FFP	ACC Picatinny, Picatinny, NJ	Jun 2016	Nov 2016	30,510	0.620	Y		
1. M4A1 Carbine ^(†)		2016	Colt / West Hartford	C / FFP	ACC Picatinny, Picatinny, NJ	Jun 2016	Jul 2017	10,176	0.620	Y		
1. M4A1 Carbine ^(†)		2017	FN Manufacturing / Columbia	C / FFP	ACC Picatinny, Picatinny, NJ	Dec 2016	Jun 2017	37,869	0.630	Y		
1. M4A1 Carbine ^(†)		2017	Colt / West Hartford	C / FFP	ACC Picatinny, Picatinny, NJ	Aug 2017	Jan 2018	15,234	0.620	Y		
1. M4A1 Carbine ^(†)		2018	FN Manufacturing / Columbia	C / FFP	ACC Picatinny, Picatinny, NJ	Dec 2017	Sep 2018	32,938	0.630	Y		
1. M4A1 Carbine ^(†)		2018	Colt / West Hartford	C / FFP	ACC Picatinny, Picatinny, NJ	Dec 2017	May 2018	32,938	0.630	Y		
1. M4A1 Carbine ^(†)		2019	FN Manufacturing / Columbia	C / FFP	ACC Picatinny, Picatinny, NJ	Dec 2018	May 2019	46,702	0.640	Y		
1. M4A1 Carbine ^(†)		2019	Colt / West Hartford	C / FFP	ACC Picatinny, Picatinny, NJ	Dec 2018	Apr 2019	46,703	0.640	Y		

^(†) indicates the presence of a P-21

Remarks:

FY 2015 yet to be delivered quantities: 13,733 M4A1 carbines were procured under Delivery Order 0011 FN contract (W56HZV-13-D-0030). This delivery order was awarded in November 2014. The Army placed just two delivery orders on this contract (out of a total of 19) The Army was initially 5th and then 11th in the queue with Other Service's orders in between; DO 0011 will start delivery in July of 2018 as stated on the contract.

The FY 2017 quantity of 37,869 alludes to two separate delivery orders under FN Manufacturing. 12,989 Delivery order awarded Dec 2016 and 24,880 Delivery order awarded Aug 31, 2017.

The FY 2018 and 2019 projected quantities will be competed between vendors for each delivery order.

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-			4.839				_														l								Α -	4.83
1	2016	AF ^(‡)	36.200	.000	36.200																									36.20
\rightarrow			30.510																											30.51
\rightarrow			66.710																											66.71
2	2016	AF ^(‡)	2.707	.000	2.707		-																							2.70
2	2016	ARMY	10.176	.000	10.176																									10.17
\rightarrow		Total	12.883																											12.88
1	2017	ARMY	37.869	.000	37.869																									37.86
2	2017	ARMY	15.234	.000	15.234																									15.23
2	2017	NAVY (‡)	11.848	.000	11.848																									11.84
2	2017	Total	27.082	.000	27.082																									27.08
1	2018	AF ^(‡)	.025	.000	.025																									.02
1	2018	ARMY	32.938	.000	32.938																									32.93
1	2018	Total	32.963	.000	32.963																									32.96
2	2018	ARMY	32.938	.000	32.938																									32.93
2	2018	NAVY (‡)	1.800	.000	1.800																									1.80
2	2018	Total	34.738	.000	34.738																									34.73
1	2019	AF ^(‡)	.025	.000	.025																									.02
1	2019	ARMY	46.702	.000	46.702																									46.70
1	2019	NAVY (‡)	1.800	.000	1.800																									1.80
1			48.527	.000	48.527																									48.52
2	2019	ARMY	46.703	.000	46.703																									46.70
						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	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	J U L	A U G	S E P	
	M F R # # 14A 1 1 1 2 1 1 1 2 2 2 1 1 1 1 2 2 2 1	MF RR # FY M4A1 Carb 1 2014 1 2015 2 2015 1 2016 1 2016 2 2016 2 2016 2 2017 2 2017 2 2017 1 2018 1 2018 1 2018 1 2018 2 2018 2 2018 2 2018 2 2018 2 2018 2 2018 2 2018 1 2019 1 2019 1 2019 1 2019	M F FY SERVICE	Cost Elements (Units in Thousands) M F R FY SERVICE PROC # FY SERVICE QTY MAA1 Carbin= 1 2014 ARMY 28.996 1 2015 ARMY 17.992 2 2015 ARMY 4.839 1 2016 AF (‡) 36.200 1 2016 ARMY 30.510 1 2016 ARMY 10.176 2 2016 ARMY 10.176 2 2016 ARMY 10.176 2 2016 ARMY 15.234 1 2017 ARMY 15.234 2 2017 ARMY 15.234 2 2017 NAVY (‡) 11.848 2 2017 Total 27.082 1 2018 AF (‡) .025 1 2018 ARMY 32.938 1 2018 ARMY 32.938 1 2018 Total 32.963 2 2018 NAVY (‡) 1.800 2 2018 Total 34.738 1 2019 AF (‡) .025 1 2019 ARMY 46.702 1 2019 ARMY 46.702 1 2019 NAVY (‡) 1.800 1 2019 Total 48.527	Cost Elements	Cost Elements (Units in Thousands)	Cost Elements	Cost Elements (Units in Thousands)	Cost Elements	Cost Elements	Cost Elements	Cost Elements	Cost Elements	Cost Elements	Cost Elements	Cost Elements	Cost Elements	Cost Elements	Cost Elements	Cost Elements Curis in 770cccccccccc Curis in 770cccccccccc Curis in 770cccccccc Curis in 770cccccccc Curis in 770cccccccc Curis in 770ccccccc Curis in 770cccccc Curis in 770ccccccc Curis in 770cccccc Curis in 770ccccc Curis in 770ccccc Curis in 770ccccc Curis in 770cccc Curis in 770cccc Curis in 770ccc Curis in 770cccc Curis in 770cccc Curis in 770cccc Curis in 770cccc Curis in 770ccc C	Coale Elements Coale Coa	Cote Elements Cote Elements Cote Elements Cote Cote Elements Cote Elements Cote Elements Elem	Process Proc	Fiscal Year 2015 Fiscal Year 2016 Fiscal Year	Contemplate Contemplate	Cast Stamonto Cast Stamont	Part Part			

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Exhibit P-21, Production Schedule: PB 2019 Army Date: February 2018 Appropriation / Budget Activity / Budget Sub Activity: Item Number / Title [DODIC]: P-1 Line Item Number / Title: 2033A / 02 / 10 8201G13501 / Carbine G13503 / M4A1 CARBINE Cost Elements В Fiscal Year 2016 Fiscal Year 2017 (Units in Thousands) Α ACCEPT Calendar Year 2016 Calendar Year 2017 М PRIOR BAL 0 TO 1 DUE s 0 C PROC OCT AS OF С 0 Е Ε Α Р U Ü E С 0 Е Ε Ü U U E С R Α Α 0 FY SERVICE QTY 2015 1 OCT R R L G Р ν В R R Ν G Р 1. M4A1 Carbine 2014 ARMY 28.996 28.996 1.769 2.000 8.229 .000 1.328 2.270 2.500 2.000 2.500 1.900 1.000 1.000 1.500 1.000 -2015 ARMY 17.992 .000 17.992 4.220 .039 13.733 2015 4.839 .000 4.839 1.000 1.000 1.000 1.300 .539 .000 36.200 2.000 2.000 2.000 2.000 2016 36.200 .000 A -1.500 2.000 2.000 2.000 20.700 2016 ARMY 30.510 .000 30.510 A -2.500 2.800 2.800 2 800 3.000 4.000 4.000 3 3 1 0 2.000 1.900 1.400 000 66.710 5.000 20.700 2016 66.710 .000 2.500 2.800 2.800 4.300 6.000 6.000 5.310 4.000 3.900 3.400 2 2016 2.707 .000 2.707 2.707 Α -2 2016 ARMY 10.176 .000 10.176 1.429 2.000 4.747 _ 2.000 2 2016 12.883 .000 12.883 1.429 2.000 2.000 7.454 37.869 2.000 2017 ARMY 37.869 .000 Α -2.000 1.989 2.500 29.380 2 15.234 2017 ARMY 15.234 .000 Α -15.234 2 11.848 2017 11.848 .000 Α -11.848 2 2017 Total 27.082 27.082 27.082 .000 2018 .025 .000 .025 .000 2018 ARMY 32.938 .000 32.938 32.938 2018 Total 32.963 .000 32.963 32.938 2 32.938 2018 32.938 .000 32.938 2 NAVY (‡) 2018 1.800 .000 1.800 1.800 2 2018 Total 34.738 .000 34.738 34.738 2019 .025 .000 .025 .025 2019 46.702 .000 46.702 46.702 2019 1.800 .000 1.800 1.800 1 2019 Total 48.527 .000 48.527 48.527 2 2019 .000 46.703 46.703 46.703 Α s 0 D s С Ü Ü Ü Ŭ U 0 Ε Ε Α Ρ Α U Ε С О Ε Ε Α Ρ Α Ε Α Α

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M4/	1 Carbi	ne																												
1	2014	ARMY	28.996	20.767	8.229	1.500	1.000	1.000	1.029	1.000	1.600	1.100																		.0
1	2015	ARMY	17.992	4.259	13.733	-	-	-	-	-	-	-	-	-	.385	1.335	1.335	1.335	1.335	1.335	1.335	1.335	1.335	1.334	1.334					.0
2	2015	ARMY	4.839	4.839	.000				·									·												
1	2016	AF ^(‡)	36.200	15.500	20.700	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.700															.0
1	2016	ARMY	30.510	30.510	.000	-	-	-	-	-	-	-	-	-	-															.(
1	2016	Total	66.710	46.010	20.700	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.700	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2	2016	AF ^(‡)	2.707	.000	2.707	-	-	2.000	.707																					
2	2016	ARMY	10.176	5.429	4.747	2.000	1.000	1.747	-																					Ι.
2	2016	Total	12.883	5.429	7.454	2.000	1.000	3.747	.707	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1	2017	ARMY	37.869	8.489	29.380	2.500	2.000	1.000	2.880	3.000	3.000	3.000	3.000	3.000	3.000	3.000						ļ								Ι.
2	2017	ARMY	15.234	.000	15.234	-	-	-	2.000	2.000	2.000	2.000	2.000	2.000	2.000	1.234	-													
2	2017	NAVY (‡)	11.848	.000	11.848	-	-	-	1.000	1.750	1.200	1.000	1.000	2.000	1.000	1.050	1.848													
2	2017	Total	27.082	.000	27.082	_	-	-	3.000	3.750	3.200	3.000	3.000	4.000	3.000	2.284	1.848	-	- 1	-	-	-	-	-	-	-	-	-	_	
1	2018	AF ^(‡)	.025	.025	.000			Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_	-	-			
1		ARMY	32.938	.000	32.938			Α -	-			_	_		-	_	2.688	2.750	2.750	2.750	2.750	3.000	3.500	3.500	3.500	3.500	2.250			
1	2018	Total	32.963		32.938			-	-	-	_		-	-	-	-	2.688	2.750	2.750	2.750	2.750	3.000	3.500	3.500	3.500	3.500	2.250	-	-	Η.
2	2018	ARMY	32.938	.000	32.938			Α -	-	-	_	_	2.838	2.750	2.750	2.750	2.750	2.750	2.750	3.400	3.400	3.400	3.400							Τ.
2	2018	NAVY (‡)	1.800	.000	1.800			Α -	-	-	-	1.750	.050	-	-	-	-	-	-	-	-	-	-							Ι.
2		Total	34.738		34.738			_	-		_	1.750	2.888	2.750	2.750	2.750	2.750	2.750	2.750	3.400	3.400	3.400	3.400	_	_ [_ [-		_	١.
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1. M	14A	l Carbii	ne																												
	_		ARMY	28.996	28.996	.000																									.00
\top	1	2015	ARMY	17.992	17.992	.000																									.00
	2	2015	ARMY	4.839	4.839	.000																									.00
	1	2016	AF ^(‡)	36.200	36.200	.000																									.00
	1	2016	ARMY	30.510	30.510	.000																									.00
	1	2016	Total	66.710	66.710	.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.00
	2	2016	AF ^(‡)	2.707	2.707	.000																									.00
	2	2016	ARMY	10.176	10.176	.000																									.00
	2	2016	Total	12.883	12.883	.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.00
	1	2017	ARMY	37.869	37.869	.000																									.00
	2	2017	ARMY	15.234	15.234	.000																									.00
	2	2017	NAVY (‡)	11.848	11.848	.000																									.00
	2	2017	Total	27.082	27.082	.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.00
	1	2018	AF ^(‡)	.025	.025	.000																									.00
	1	2018	ARMY	32.938	32.938	.000																									.00
	1	2018	Total	32.963	32.963	.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.00
	2		ARMY	32.938	32.938	.000																									.00
	2	2018	NAVY (‡)	1.800	1.800	.000																									.00
	2	2018	Total	34.738	34.738	.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.00
	1	2019	AF ^(‡)	.025	.025	.000	-	-	-	-	-	-	-	-																	.00
	1	2019	ARMY	46.702	18.990	27.712	3.798	3.798	3.798	3.798	3.798	3.798	3.804	1.120																	.00
	1	2019	NAVY (‡)	1.800	1.800	.000	-	-	-	-	-	-	-	-																	.00
	1	2019	Total	48.527	20.815	27.712	3.798	3.798	3.798	3.798	3.798	3.798	3.804	1.120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.00
	2	2019	ARMY	46.703	22.788	23.915	3.798	3.798	3.798	3.798	3.798	3.805	1.120									·									.00
	-						0	О И	D E	J A N	F E	M A	A P	M A	Ŋ	Ŋ	A U	S E	0	N O	D E	J A N	FE	M	A P	M A	Ŋ	Ŋ	A U	S E	

LI 8201G13501 - Carbine Army UNCLASSIFIED
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Exhibit P-21, Production Schedule: PB 2019 Army		Date: February 2018
	P-1 Line Item Number / Title: 3201G13501 / Carbine	Item Number / Title [DODIC]: G13503 / M4A1 CARBINE

		Product	tion Rates (Each /	Month)				Procurement Le	adtime (Months)			
MFF						lni	tial			Reo	rder	
Ref					ALT			Manufacturing	Total			
#	Name - Location	MSR For 2019	1-8-5 For 2019	MAX For 2019	Prior to Oct 1	After Oct 1	PLT	After Oct 1	Prior to Oct 1	After Oct 1	PLT	After Oct 1
1	FN Manufacturing - Columbia	1,000	5,000	8,000	6	3	9	12	6	3	5	8
2	Colt - West Hartford	1,000	3,000	6,000	6	3	8	11	6	3	4	7

Remarks:

LI 8201G13501 - Carbine

Army

FY 2014 yet to be delivered quantities: 13,733 M4A1 carbines were procured under Delivery Order 0011 FN contract (W56HZV-13-D-0030). This delivery order was awarded in November 2014. The Army placed just two delivery orders on this contract (out of a total of 19) The Army was initially 5th and then 11th in the queue with Other Service's orders in between; DO 0011 will start delivery in August of 2018 as stated on the contract.

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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^(‡) 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.

Exhibit P-40, Budget Line Item Justification: PB 2019 Army

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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

8212G17200 / Small Arms - Fire Control

Vehicles / BSA 10: Weapons & Other Combat Vehicles

Program Elements for Code B Items: 0604601A

Other Related Program Elements: N/A

Date: February 2018

Line Item MDAP/MAIS Code: N/A

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

	Prior			FY 2019	FY 2019	FY 2019					То			
Resource Summary	Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total		
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-		
Gross/Weapon System Cost (\$ in Millions)	-	-	-	7.929	-	7.929	8.497	42.334	69.595	94.774	Continuing	Continuing		
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-		
Net Procurement (P-1) (\$ in Millions)	-	-	-	7.929	-	7.929	8.497	42.334	69.595	94.774	Continuing	Continuing		
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-		
Total Obligation Authority (\$ in Millions)	-	-	-	7.929	-	7.929	8.497	42.334	69.595	94.774	Continuing	Continuing		
(The following	Resource Sum	mary rows are fo	or informational p	ourposes only. Th	e 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)	-	-	-	53.215	-	53.215	104.901	11.432	11.458	11.573	Continuing	Continuing		

Description:

Small Arms Fire Control (SAFC) will optimize fire control devices to support Next Generation Squad (S), Next Generation Crew Served (CS) and Precision (P). SAFC will increase the probability of hit and decrease time to engage across a range of small arms weapon systems, with a direct-view optic that allows for quicker and more accurate target detection and recognition. The SAFC shall utilize an open system of systems architecture comprised of modular components, to deliver current ground forces the initial increased core capability followed by increasing increments of capability/enhancements over time. Small Arms Fire Control will culminate in multiple configurations: a Small Arms Fire Control - Squad (SAFC-S), Small Arms Fire Control - Crew Served (SAFC-CS), and Small Arms Fire Control - Precision (SAFC-P). They may include technology such as variable magnification direct view (day) optics, atmospheric sensors, an overlaid digital display, weapon orientation sensor, range determination, ballistic computer, disturbed reticle, and networked lethality.

SAFC-P will provide Snipers increased lethality at extended ranges while reducing time of engagement (ToE), increase ability to detect, recognize, and identify targets at extended ranges. P-FC will improve Size, Weight and Power and Cost (SWaP-C) of the current Sniper Fire Control Systems (SFCS).

SAFC-CS will provide magnified day optics with digital display overlay, range determination, ballistic computer and a disturbed reticle for the dismounted M240L, M249 and next generation weapon systems.

SAFC-S will provide variable power direct view optics with ballistic module, atmospheric sensors, range finder, and in-scope display overlay for Army carbine/rifle weapon platforms. It is an integrated fire control system that will increase operational effectiveness by increasing Probability of Hit (P(h)) and decreasing effective engagement time for next generation weapon systems.

;	Secondary Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	7.929	-	7.929	6.681	38.314	52.268	71.788
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	-	-	-	1.679	4.020	17.327	22.986
AR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	-	-	-	-	0.137	-	-	-

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LI 8212G17200 - Small Arms - Fire Control Army

P-1 Line #26

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Exhibit P-40, Budget Line Item Justification: PB 2019 Army

Date: February 2018

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

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

8212G17200 / Small Arms - Fire Control

Vehicles / BSA 10: Weapons & Other Combat Vehicles

Program Elements for Code B Items: 0604601A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

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

Secondary	Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	-	-	7.929	-	7.929	8.497	42.334	69.595	94.774

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LI 8212G17200 - Small Arms - Fire Control Army

Exhibit P-40, Budget Line Item Justification: PB 2019 Army

Date: February 2018

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

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

8212G17200 / Small Arms - Fire Control

Vehicles / BSA 10: Weapons & Other Combat Vehicles

1_ ___

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

Program Elements for Code B Items: 0604601A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

					Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Exhibit Type	Title*	Subexhibits		MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	G17203 / Precision SA-FC	P-5a	В		- / -	- / -	- / -	- /7.929	- / -	- / 7.929
P-40	Total Gross/Weapon System Cost				- 1 -	- 1 -	- 1 -	- /7.929	- 1 -	- / 7.929

^{*}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 sum exactly due to rounding.

Justification:

FY2019 Base procurement dollars in the amount of \$7.929 million supports the procurement and fielding of 191 ruggedized Technology Maturation & Risk Reduction (TMRR) versions of the long range Precision Fire Controls (P-FC). The P-FC provide Snipers with increased lethality at extended ranges while reducing time of engagement. SAFC-P is a new start in FY2019.

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.

AAO: 4,497

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Exhibit P-5, Cost	Analysi	s: PB 20	19 Army	/										Date: F	ebruary 2	2018		
Appropriation / B 2033A / 02 / 10	udget A	ctivity /	Budget	Sub Act	ivity:	I		n Numbe		: ire Contro	ol				imber / T			
ID Code (A=Service Read	dy, B=Not Serv	ice Ready):	В						М	DAP/MAIS	Code:							
F	Resource	Summ	arv			Prior Ye	ars	FY 2	017	FY	2018	FY	2019 Bas	e F	Y 2019 (ОСО	FY 2019	Total
Procurement Quantity (Uni			- ,				-							-		_		
Gross/Weapon System Co		15)					-		_				7	.929		_		7.929
Less PY Advance Procure	· ·						-							-		_		
Net Procurement (P-1) (\$							-						7	.929		_		7.929
Plus CY Advance Procure		llions)					_		_				•	-		_		-
Total Obligation Authorit	•						-						7	.929		_		7.929
	•		ummary row	s are for info	ormational	nurnoses onl	v The corre	snondina hu	daet reaues	ts are docum	ented elsewh	ere)		-				
Initial Spares (\$ in Millions)	io ronowing	10000100 01	uninary ron	10 410 101 11110		<i></i>	-	sportaling but	-		-			_		_		_
Gross/Weapon System Ur	nit Cost (\$ in	Thousands)					-		_				53	.215		_		53.215
										1								
Note: Subtotals or Totals i	n this Exhibit	t P-5 may no	ot be exact of	or sum exact	ly due to ro	unding.	1								1			
	F	Prior Years	 S		FY 2017			FY 2018	-	FY	2019 Bas	e	FY	2019 O	0	F	Y 2019 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost (\$ M)
Hardware Cost		. ,					, ,				. , ,		. , ,		. ,			
Recurring Cost																		
Precision Ruggedized Systems ^(†)	-	-	-	-	-	-	-	-	-	38.874	191	7.425	-	-	-	38.874	191	7.425
Subtotal: Recurring Cost	-	-	-	-	-	-	-	-	-	-	-	7.425	-	-	-	-	-	7.425
Subtotal: Hardware Cost	-	-	-	-	-	-	-	-	-	-	-	7.425	-	-	-	-	-	7.425
Logistics Cost																		
Recurring Cost Integrated Logistical							1									Ι		
Support (ILS)	-	-	-	-	-	-	-	-	-	-	-	0.115	-	-	-	-	-	0.115
Total Package Fielding (TPF)	-	-	-	-	-	-	-	-	-	-	-	0.049	-	-	-	-	-	0.049
Subtotal: Recurring Cost	-	-	-	-	-	-	-	-	-	-	-	0.164	-	-	-	-	-	0.164
Subtotal: Logistics Cost	-	•	-	-	-	-	-	-	-	-	-	0.164	-	-	-	-	-	0.164
Support - Data Cost																		
Technical Publications	-	-	-	-	-	-	-	-	-	-	-	0.112	-	-	-	-	-	0.112
Management Data	-	-	-	-	-	-	-	-	-	-	-	0.013	-	-	-	-	-	0.013
Subtotal: Support - Data Cost	-	-	-	-	-		-	-	-	-	-	0.125	-	-	-	-	-	0.125
Support - New Equipment Tra	aining (NET) Co	ost							ı	,							,	
Equipment	-	-	-	-	-	-	-	-	-	-	-	0.115	-	-	-	-	-	0.115
Subtotal: Support - New Equipment Training (NET) Cost	-	-	-	-	-	-	-	-	-	-	-	0.115	-	-	-	-	-	0.115

LI 8212G17200 - Small Arms - Fire Control Army

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Exhibit P-5, Cost Analysis: PB 2019 Army

Appropriation / Budget Activity / Budget Sub Activity:

2033A / 02 / 10

Date: February 2018

P-1 Line Item Number / Title:

8212G17200 / Small Arms - Fire Control

G17203 / Precision SA-FC

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

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

110to: Gabtotalo di Totalo i	II tillo Exilibi	cr o may no	ot bo oxaot c	outil oxuot	iy dao to loa	ilianig.												
	F	Prior Year	s	FY 2017			FY 2018			FY	′ 2019 Ba	se	F	1 2019 OC	0	F'	Y 2019 To	tal
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)
Support - Program Managem	ent Cost																	
Government Management	-	-	-	-	-	-	-	-	-	-	-	0.100	-	-	-	-	-	0.100
Subtotal: Support - Program Management Cost	-	-	-	-	-	-	-	-	-	-	-	0.100	-	-	-	-	-	0.100
Gross/Weapon System Cost	-	-	-	-	-	-	-	-	-	53.215	-	7.929	-	-	-	53.215	-	7.929

Secondar	y Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Army	Quantity	-	-	-	-	-
	Total Obligation Authority	-	-	7.929	-	7.929
Total:	Quantity	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	-	=	7.929	=	7.929

^(†) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2019 A	Army			Date	: February 2018	3	
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 10	P-1 Line Item Nur	mber / Title: all Arms - Fire Control			Number / Title 203 / Precision S		
0	Method/Type	un / unio	Date	Specs Date			
C	or	Award	of First	04.	Linit Coot Avail	Revision	RFP Issue

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 Ruggedized Systems		2019	TBD / TBD	MIPR	ACC-NJ, Picatinny Arsenal, NJ	Jan 2019	Mar 2019	191	38.870			

Exhibit P-40, Budget Line Item Justification: PB 2019 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

8310G04700 / Common Remotely Operated Weapons Station

Date: February 2018

Other Related Program Elements: N/A

Vehicles / BSA 10: Weapons & Other Combat Vehicles

Program Elements for Code B Items: N/A

Line Item MDAP/MAIS Code: N/A

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

	Prior			FY 2019	FY 2019	FY 2019					То	
Resource Summary	Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	2,240.551	25.164	0.750	35.968	3.378	39.346	19.825	24.560	-	-	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	2,240.551	25.164	0.750	35.968	3.378	39.346	19.825	24.560	-	-	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	2,240.551	25.164	0.750	35.968	3.378	39.346	19.825	24.560	-	-	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	e corresponding	budget requests	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	1,240.276	1,126.000	1,229.563	535.811	501.224	-	-	Continuing	Continuing

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) and increase lethality solutions (to include Javelin, Stinger and 30mm cannon) 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.

Secondar	y Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	25.164	0.750	35.968	3.378	39.346	19.825	24.560	-	-
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	25.164	0.750	35.968	3.378	39.346	19.825	24.560	-	-

Exhibit P-40, Budget Line Item Justification: PB 2019 Army

Date: February 2018

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

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

8310G04700 / Common Remotely Operated Weapons Station

Vehicles / BSA 10: Weapons & Other Combat Vehicles

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

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

	Exhibits Schedule		,		Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	G04700 / Common Remotely Operated Weapons Station	P-5a, P-21	Α		- / 2,240.551	- / 25.164	- / 0.750	- / 35.968	- / 3.378	- / 39.346
P-40	Total Gross/Weapon System Cost				- / 2,240.551	- / 25.164	- / 0.750	- / 35.968	- / 3.378	- / 39.346

^{*}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 sum exactly due to rounding.

Justification:

FY 2019 Base procurement dollars in the amount of \$35.968 million supports the Active Army by procuring initial production of 29 modified Remote Weapon Stations that integrates a medium-caliber (30mm) auto cannon for multiple applications, to include counter-Unmanned Aerial Systems (UAS) mission. Funds also procure initial production of 103 Stinger integration kits that integrates the Stinger surface-to-air missile into the CROWS system.

FY 2019 Overseas Contingency Operations (OCO) procurement dollars in the amount of \$3.378 million supports COCOM requirement for unit equipment sets to deter potential adversaries and support the European Deterrence Initiative (EDI). Funding will support the Active Army by procuring initial production of 3 modified Remote Weapon Stations that integrates a medium-caliber (30mm) auto cannon for multiple applications, to include counter-Unmanned Aerial Systems (UAS) mission. Funds also procure initial production of 9 Stinger integration kits that integrates the Stinger surface-to-air missile into the CROWS system, fixed site kits and standoff extension kits to support operational requirements.

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.

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.

AAO: 6,284

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Exhibit P-5, Cost Analysis: PB 2019 Army

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

P-1 Line Item Number / Title:
8310G04700 / Common Remotely Operated Weapons Station

Budget Activity / Budget Sub Activity:
8310G04700 / Common Remotely Operated Weapons Station

Weapons Station

ID Code (A=Service Ready, B=Not Service Ready): A		N	IDAP/MAIS Code:			
Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	2,240.551	25.16	4 0.750	35.968	3.378	39.346
Less PY Advance Procurement (\$ in Millions)	-	=	-	-	-	=
Net Procurement (P-1) (\$ in Millions)	2,240.551	25.16	4 0.750	35.968	3.378	39.346
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	2,240.551	25.16	4 0.750	35.968	3.378	39.346
(The following Resource Summary rows are for informati	onal purposes only. The corr	responding budget reque	sts are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	1,240.276	1,126.000	1,229.563

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

	P	Prior Years	3		FY 2017			FY 2018		FY	' 2019 Bas	e	FY	/ 2019 OC	0	F۱	/ 2019 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)												
lyaway Cost	'			'	'		'						'			·	'	
Recurring Cost																		
CROWS system ^(†)	-	-	1,732.137	-	-	-	-	-	-	750.000	29	21.750	750.000	3	2.250	750.000	32	24.
Stinger Integration Kit ^(†)	-	-	-	-	-	-	-	-	-	125.709	103	12.948	125.333	9	1.128	125.679	112	14.
CROWS Post- Production Conversions	33.349	545	18.175	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Platform Integration Kits ^(†)	85.184	630	53.666	2.679	140	0.375	-	-	-	-	-	-	-	-	-	-	-	
Appended Trainers ^(†)	72.475	80	5.798	10.006	640	6.404	-	-	-	-	-	-	-	-	-	-	-	
Diagnostic Kits	261.250	20	5.225	45.938	32	1.470	-	-	-	-	-	-	-	-	-	-	-	
Engineering Support	-	-	108.979	-	-	4.270	-	-	-	-	-	1.235	-	-	-	-	-	1
Program Management Support	-	-	24.519	-	-	3.955	-	-	0.250	-	-	0.025	-	-	-	-	-	C
Integrated Logistics Support	-	-	48.149	-	-	0.252	-	-	-	-	-	-	-	-	-	-		
Total Package Fielding	-	-	74.342	-	-	3.204	-	-	0.500	-	-	-	-	-	-	-	-	
Contractor Field Service Representatives	-	-	24.896	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
First Destination Transportation	-	-	4.004	-	-	0.075	-	-	-	-	-	0.010	-	-	-	-	-	

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Exhibit P-5, Cost Analysis: PB 2019 Army

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

P-1 Line Item Number / Title:
8310G04700 / Common Remotely Operated Weapons Station

Bate: February 2018

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

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 sum exactly due to rounding.

	F	Prior Years	S		FY 2017			FY 2018		FY	2019 Bas	se	FY	1 2019 OC	0	F١	/ 2019 To	tal
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)															
Spares/Repair Parts	-	-	101.014	-	-	2.703	-	-	-	-	-	-	-	-	-	-	-	-
New Equipment Training	-	-	39.647	-	-	2.456	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	2,240.551	-	-	25.164	-	-	0.750	-	-	35.968	-	-	3.378	-	-	39.346
Subtotal: Flyaway Cost	-	-	2,240.551	-	-	25.164	-	-	0.750	-	-	35.968	-	-	3.378	-	-	39.346
Gross/Weapon System Cost	-	-	2,240.551	-	-	25.164	-	-	0.750	1,240.276	-	35.968	1,126.000	-	3.378	1,229.563	-	39.346

Secondar	y Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Army	Quantity	-	-	-	-	-
	Total Obligation Authority	25.164	0.750	35.968	3.378	39.346
Total:	Quantity	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	25.164	0.750	35.968	3.378	39.346

^(†) indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: PB 2019 A	Army	Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 10	8310G04700 / Common Remotely Operated Weapons Station	Item Number / Title [DODIC]: G04700 / Common Remotely Operated Weapons Station

	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
CROWS system ^(†)		2019	TBD / TBD	C / FFP	ACC-NJ, Picatinny Arsenal, NJ	Dec 2018	Nov 2019	32	750.000	N		
Stinger Integration Kit ^(†)		2019	TBD / TBD	C / FFP	ACC-NJ, Picatinny Arsenal, NJ	Feb 2019	Aug 2019	112	125.680	N		
Platform Integration Kits		2017	Choctaw Manufacturing Defense / Antlers, OK	C / FFP	ACC-NJ, Picatinny Arsenal, NJ	Mar 2017	Sep 2017	140	2.680	Υ		
Appended Trainers		2017	Kongsberg Protech Systems USA / Johnstown, PA	C / FFP	ACC-NJ, Picatinny Arsenal, NJ	Mar 2017	Oct 2017	640	10.010	Υ		

^(†) indicates the presence of a P-21

Remarks:

N/A

Stinger Integration Kit								UN	ICLA	ASSI	FIED														
2033A / 02 / 10 Sal OG04700 / Common Remotely Operated Weapons Station G04700 / Common Remotely Operated Weapons Stat	Exhibit P-21, Production Schedu	le: PB	2019 /	Army														Dat	e: Feb	oruary	<mark>؛ 201</mark> ٤	}			
Calcular Fiscal Year 2017 Fiscal Year 2018		Budge	et Sub	Activ	vity:	-)pera	ted W	/eapo	ns St	ation	G04	700 <i>I</i>	Com	mon F			perat	ed
N	(Units in Each) Fiscal Year 2017 Fiscal Year 2018 M ACCEPT PRIOR BAL Calendar Year 2017 Calendar Year 2018																	В							
O F F V SERVICE OCT AS OF C O E A E A P A U U U U E C O E A E A P A U U U U E C O E A E A P A U U U U E C C O E A E A P A U U U U E C C O E A E A P A U U U U E C C O E A E A P A U U U U U E C C O E A E A P A U U U U U E C C O E A E A P A U U U U U E C C O E A E A P A U U U U U E C C O E A E A P A U U U U U U E C C O E A E A P A E A P A U U U U U U E C C O E	M ACCEPT Calendar Year 2017 PRIOR BAL														Caler	dar Yea	2018				L				
1 2019 ARMY 32 0 32 Stinger Integration Kit 2 2019 ARMY 112 0 112 O N D J F M A M J J A S O N D J F M A S	O F TO 1 DUE C R PROC OCT AS OF	Α	E A	P	Α		J L	U	E	O C T	0	E		E	Α	A P R	Α		J U L	U	E				
Stinger Integration Kit 2 2019 ARMY 112 0 112 1	CROWS system		<u>'</u>																						
2 2019 ARMY 112 0 112	1 2019 ARMY 32 0 32																								;
O N D J F M A M J J A S O N D J F M A M J J A S	Stinger Integration Kit																								
O N D J F M A M J J A S O N D J F M A S C O E A E A P A U U U U E C O E A E A P A U U U U E C O E A E A P A U U U U E A F N I	2 2019 ARMY 112 0 112																								11
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Exhi	ibit F	P-21, Pro	oduct	ion Sc	hedu	le: PE	3 201	9 Arm	ıy														Date	: Feb	oruary	2018	3			
		iation / 1 02 / 10	Budg	et Acti	vity /	Budç	get Sı	ub Ac	tivity	:	1	Line 10G04					tely O	perat	ed W	eapoi	ns Sta	tion	G04	700 <i>I</i>	nber / Comi Stati	mon I		DIC]: tely O	pera	ited
			lements in Each)								Fiscal Y	ear 2019											Fiscal Y	ear 2020						В
				ACCEPT									С	alendar	Year 201	9	,							Caler	ndar Yea	r 2020				Ĩ
O F C R O #	FY	SERVICE	PROC QTY	PRIOR TO 1 OCT 2018	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 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	A N C
CROW	VS syste	em							,												<u> </u>	,								
1	2019	ARMY	32	0	32			Α -	-	-	-	-	-	-	-	-	-	-	5	5	5	5	5	5	2		_			
Stinger	r Integra	ation Kit																												
2	2019	ARMY	112	0	112					A -	-	-	-	-	-	20	20	20	20	20	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 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	N U	J U L	A U G	S E P	

Exhibit P-21, Production Schedule: PB 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 10	P-1 Line Item Number / Title: 8310G04700 / Common Remotely Operated Weapons Station	Item Number / Title [DODIC]: G04700 / Common Remotely Operated Weapons Station

		Produc	tion Rates (Each /	Month)				Procurement Le	adtime (Months)			
MFF	R					Ini	tial			Reo	rder	
Ref					ALT	ALT	Manufacturing	Total	ALT	ALT	Manufacturing	Total
#	Name - Location	MSR For 2019	1-8-5 For 2019	MAX For 2019	Prior to Oct 1	After Oct 1	PLT	After Oct 1	Prior to Oct 1	After Oct 1	PLT	After Oct 1
	1 TBD - TBD	5	20	50	0	3	11	14	0	3	11	14
:	2 TBD - TBD	5	20	50	0	3	11	14	0	3	11	14

[&]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 2019 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

Vehicles / BSA 10: Weapons & Other Combat Vehicles

8635G15325 / Handgun

Date: February 2018

ID Code (A=Service Ready), B=Not Service Ready): B Program Elements for Code B Items: 0604601A Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2019	FY 2019	FY 2019					То	
Resource Summary	Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	0.240	2.000	8.326	48.251	-	48.251	22.216	-	-	-	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	0.240	2.000	8.326	48.251	-	48.251	22.216	-	-	-	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	0.240	2.000	8.326	48.251	-	48.251	22.216	-	-	-	Continuing	Continuing
(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)	=	0.339	0.661	0.260	-	0.260	0.247	-	-	-	Continuing	Continuing

Description:

Currently the M9 Pistol is utilized as the Department of Defense's personal defense weapon. The new M17 and M18 Full and Compact Modular Handgun Systems (MHS) will replace both the M9 and M11 handguns. The MHS is a Commercial Off the Shelf/ Non-Developmental Item (COTS/NDI) which delivers a more capable system (weapon, ammo and magazines) consistent with the planned force structure and emerging operational needs of the Army. The MHS addresses M9 shortcomings with improved lethality, target acquisition, ergonomics, reliability, durability, and maintainability. The MHS is ambidextrous capable and accommodates 5th-95th percentile users via modular grips and access to all controls with one hand.

Seconda	ary Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	2.000	4.330	39.087	-	39.087	11.811	-	-	-
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	3.330	6.048	-	6.048	7.068	-	-	-
AR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	0.666	3.116	-	3.116	3.337	-	-	-
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	2.000	8.326	48.251	-	48.251	22.216	-	-	-

LI 8635G15325 - Handgun
Army

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P-1 Line #28

Exhibit P-40, Budget Line Item Justification: PB 2019 Army

Date: February 2018

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

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

8635G15325 / Handgun

Vehicles / BSA 10: Weapons & Other Combat Vehicles

6033G 13323 / Hariugui

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

Program Elements for Code B Items: 0604601A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

	Exhibits Schedule		Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total		
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	G15325 / Handgun	P-5a	В		- / 0.240	- /2.000	- /8.326	- / 48.251	- / -	- / 48.251
P-40	Total Gross/Weapon System Cost				- / 0.240	- /2.000	- / 8.326	- / 48.251	- 1 -	- / 48.251

^{*}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 sum exactly due to rounding.

Justification:

FY2019 Base procurement dollars in the amount of \$48.251 million supports the procurement and fielding of 185,552 Modular Handgun Weapon Systems (MHS) consisting of the Full, Compact and General Officer (GO) variants, MHS floats, magazines, pouches, blank and marking round conversion kits, suppressor kits and other accessories to include, but are not limited to white lights and aiming lasers. The MHS addresses M9 shortcomings with improved lethality, target acquisition, ergonomics, reliability, and maintainability. The MHS is ambidextrous capable and accommodates 5th-95th percentile users via modular grips and access to all controls with one hand. The MHS is a Commercial Off the Shelf/Non-Developmental Item (COTS/NDI).

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.

AAO: 238,215

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Exhibit P-5, Cost Analysis: PB 2019 Army Date: February 2018 Appropriation / Budget Activity / Budget Sub Activity: Item Number / Title [DODIC]: P-1 Line Item Number / Title: 2033A / 02 / 10 8635G15325 / Handgun G15325 / Handgun MDAP/MAIS Code: ID Code (A=Service Ready, B=Not Service Ready): B **FY 2019 Base** FY 2019 Total **Prior Years** FY 2017 FY 2018 **FY 2019 OCO** Resource Summary Procurement Quantity (Units in Each) Gross/Weapon System Cost (\$ in Millions) 0.240 2.000 8.326 48.251 48.251 Less PY Advance Procurement (\$ in Millions) Net Procurement (P-1) (\$ in Millions) 0.240 2.000 8.326 48.251 48.251 Plus CY Advance Procurement (\$ in Millions) _ Total Obligation Authority (\$ in Millions) 0.240 2.000 8.326 48.251 48.251 (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) 0.339 0.661 0.260 0.260 _ Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding. **Prior Years** FY 2017 **FY 2018 FY 2019 Base FY 2019 OCO** FY 2019 Total Total Total Total Total Total Total **Unit Cost Unit Cost** Qty Cost **Unit Cost** Qty **Unit Cost** Qty **Unit Cost** Qty **Unit Cost** Qty Qty Cost Cost Cost Cost Cost Cost Elements (Each) (\$ M) (\$ K) (Each) (Each) (\$ M) (Each) (\$ M) (Each) (Each) (\$ M) (\$ K) (\$ M) (\$ K) (\$ K) (\$ K) (\$ M) (\$ K) Hardware Cost Recurring Cost M17 & M18 Modular 0.176 7,643 1.345 0.288 22,705 6.535 0.171 176,800 30.231 0.171 176,800 30.231 Handgun System(†) Float Procurement 0.174 8.552 1.488 0.174 8.552 1.488 -_ GO Pistol 0.275 451 0.124 0.275 200 0.055 0.275 200 0.055 4.412 4.412 Accessories _ ---Associated Items of 2.035 2.035 Equipment **Engineering Change** Proposals (ECPs) & 0.187 0.187 TDP Subtotal: Recurring Cost 1.469 6.539 38.410 38.410 1.469 6.539 38.410 38.410 Subtotal: Hardware Cost Package Fielding Cost Recurring Cost Total Package Fielding 0.150 0.324 1.700 1.700 Subtotal: Recurring Cost _ 0.150 _ 0.324 _ 1.700 _ 1.700 Subtotal: Package Fielding 0.150 0.324 1.700 1.700 Cost Logistics Cost Recurring Cost Integrated Logistics 0.242 0.281 0.281 Support (ILS)

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Exhibit P-5, Cost	Analysis	s: PB 20	19 Army	,										Date: Fe	ebruary 2	2018		
Appropriation / B 2033A / 02 / 10	udget A	ctivity /	Budget	Sub Act	ivity:	l l		n Numbe / Handg		:				Item Nu G15325		Title [DO un	DIC]:	
ID Code (A=Service Read	ly, B=Not Serv	rice Ready):	В						МІ	DAP/MAIS	Code:		,					
Note: Subtotals or Totals i	n this Exhibit	t P-5 may no	ot be exact of	r sum exactl	ly due to rou	ınding.												
	F	Prior Years	 S		FY 2017			FY 2018		F	/ 2019 B	ase	F۱	7 2019 OC	:0	F'	Y 2019 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost
Subtotal: Recurring Cost	- (\$70)	(Lacii)	(\$ W)	- (Ψ1)	(Lacii)	(\$ W)	- (Ψ1)	(Lacii)	0.242	- (47)	(<i>Lacii</i>)	+	- (Ψ10)	(Lacii)	(\$ W)	- (#79	(Lacii)	0.281
Subtotal: Logistics Cost	-	-	-	-	-	-	-	-	0.242	-	-	_	-	-	-	-	-	0.281
Support - Acceptance Testing	Cost																	
First Article Test	-	-	-	-	-	0.015	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Support - Acceptance Testing Cost	-	-	-	-	-	0.015	-	-	-	-	-	-	-	-	-	-	-	-
Support - Initial Spares and R	epair Parts Co	st																
Initial Spares and Repair Parts	-	-	-	-	-	0.075	-	-	0.047	-	-	0.113	-	-	-	-	-	0.113
Subtotal: Support - Initial Spares and Repair Parts Cost	-	-	-	-	-	0.075	-	-	0.047	-	-	0.113	-	-	-	-	-	0.113
Support - Program Manageme	ent Cost																	
Government Management	-	-	0.240	-	-	0.011	-	-	0.552	-	-	3.747	-	-	-	-	-	3.747
Subtotal: Support - Program Management Cost	-	-	0.240	-	-	0.011	-	-	0.552	-	-	3.747	-	-	-	-	-	3.747
Support - System Engineering	Cost	Г	1		1	1			T						Г	T	T	T
System Engineering	-	-	-	-	-	-	-	-	0.349	-	-	3.634	-	-	-	-	-	3.634
Subtotal: Support - System Engineering Cost	-	-	-	-	-	-	-	-	0.349	-	-	3.634	-	-	-	-	-	3.634
Support - System Test and Ev	/aluation Cost		1		1	1			ı							1		
Test and Evaluation Support	-	-	-	-	-	-	-	-	-	-	-	0.085	-	-	-	-	-	0.085
Subtotal: Support - System Test and Evaluation Cost	-	-	-	-	-	-	-	-	-	-	-	0.085	-	-	-	-	-	0.085
Support - Training Cost			ı		1		1	1	ı						1	1		1
Equipment Subtotal: Support - Training	-	-	-	-	-	0.280 0.280	-	-	0.277 0.277	-	-	0.281 0.281	-	-	-	-	-	0.281 0.28 1
Cost																		
Gross/Weapon System Cost	-	-	0.240	0.339	-	2.000	0.661	-	8.326	0.260	-	48.251	-	-	-	0.260	-	48.251
	Sec	ondary Di	istribution				FY	2017		FY 2018		FY 2 Ba		I	FY 2019 OCO		FY 20 ⁻ Tota	
Army		-	antity						-		-		-			-		-
ANG			al Obligation A	uthority					-		4.330		39.087	7		-		39.087

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Exhibit P-5, Cost Analysis: PB 2019 Army	Date: February 2018
The state of the s	Item Number / Title [DODIC]: G15325 / Handgun

ID Code (A=Service Ready, B=Not Service Read	dy): B		MDAP/MAIS Code):		
Secondar	y Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
	Total Obligation Authority	-	3.330	6.048	-	6.048
AR	Quantity	-	-	-	-	-
	Total Obligation Authority	-	0.666	3.116	-	3.116
Total:	Quantity	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	2.000	8.326	48.251	-	48.251

^(†) indicates the presence of a P-5a

LI 8635G15325 - Handgun **U** Army

Exhibit P-5a, Procurement History and Planning: PB 2019 Army

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

Date: February 2018

Item Number / Title [DODIC]:
8635G15325 / Handgun

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?	Revision	RFP Issue Date
M17 & M18 Modular Handgun System		2017	SIG SAUER, INC / NEWINGTON, NH	Option / FFP	ACC-NJ, Picatinny Arsenal, NJ	Jun 2017	Aug 2017	7,643	0.180	Υ		
M17 & M18 Modular Handgun System		2018	SIG SAUER, INC / NEWINGTON, NH	Option / FFP	ACC-NJ, Picatinny Arsenal, NJ	Mar 2018	Jun 2018	22,705	0.290	Y		
M17 & M18 Modular Handgun System		2019	SIG SAUER, INC / NEWINGTON, NH	Option / FFP	ACC-NJ, Picatinny Arsenal. NJ	Dec 2018	Feb 2019	176,800	0.170	Y		

Remarks:

The Modular Handgun System is a COTS/NDI solution, therefore, a P21 delivery schedule is not required.

LI 8635G15325 - Handgun
Army

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Exhibit P-40, Budget Line Item Justification: PB 2019 Army

Date: February 2018

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

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

3000GB3000 / MK-19 Grenade Machine Gun MODS

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

Program Elements for Code B Items: 0604601A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

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

THE ICENT HIDAL MILIO COUCE. N/A													
	Prior			FY 2019	FY 2019	FY 2019					То		
Resource Summary	Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total	
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-	
Gross/Weapon System Cost (\$ in Millions)	36.854	4.959	2.000	1.684	-	1.684	1.718	6.708	11.700	14.417	Continuing	Continuing	
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-	
Net Procurement (P-1) (\$ in Millions)	36.854	4.959	2.000	1.684	-	1.684	1.718	6.708	11.700	14.417	Continuing	Continuing	
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-	
Total Obligation Authority (\$ in Millions)	36.854	4.959	2.000	1.684	-	1.684	1.718	6.708	11.700	14.417	Continuing	Continuing	
(The following	Resource Sumi	mary rows are fo	or informational p	urposes 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)	-	-	4.124	12.292	-	12.292	13.115	6.082	6.338	6.509	Continuing	Continuing	

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, M88A1 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 MK-19 Grenade Machine Gun (GMG) MOD 5 Kits consist of vertical cams, barrels, round positioning blocks, cocking levers, and improved mechanical sights. The Fire Control Unit (FCU) and programmer 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 and programmer 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 also help when firing extreme elevation and integration of new optics and fire control due to better

Secondar	y Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	4.959	2.000	1.684	-	1.684	1.718	6.708	11.700	14.417
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	4.959	2.000	1.684	-	1.684	1.718	6.708	11.700	14.417

Justification:

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Exhibit P-40, Budget Line Item Justification:	PB 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget Sub 2033A: Procurement of W&TCV, Army / BA 02: Vehicles / BSA 20: Mod of Weapons and Other	Weapons and Other Combat	P-1 Line Item Num 3000GB3000 / MK-	nber / Title: 19 Grenade Machine Gun MODS
ID Code (A=Service Ready, B=Not Service Ready): B	Program Elements for Code E	3 Items: 0604601A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A			
	the Soldier with vertical cams, barrels, rou	nd positioning blocks, cockin	chine Gun MOD 5 Kits and 200 Mounted Machine Gun Optic (MMO). The grams, cocking levers, and improved mechanical sights. The MOD 5 Kits will Soldier increased accuracy and identification.
In accordance with Section 1815 of the FY 2008 National Edefense missions, domestic emergency responses, and pro-	,	is item is necessary for use	by the active and reserve components of the Armed Forces for homeland

LI 3000GB3000 - MK-19 Grenade Machine Gun MODS Army

Exhibit P-40, Budget Line Item Justification: PB 2019 Army

Date: February 2018

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

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

3005GZ1700 / M777 Mods

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

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

Line Item MDAP/MAIS Code: N/A

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

Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	84.896	33.600	3.985	3.086	-	3.086	2.477	11.408	16.758	17.947	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	84.896	33.600	3.985	3.086	-	3.086	2.477	11.408	16.758	17.947	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	84.896	33.600	3.985	3.086	-	3.086	2.477	11.408	16.758	17.947	Continuing	Continuing
(The following	Resource Sumr	nary 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)	-	-	166.042	-	-	-	-	-	-	-	Continuing	Continuing

Description:

The Lightweight 155mm Howitzer System (LW155) provides direct, reinforcing and general artillery fire support to maneuver forces. The M777A2 is a towed 155mm Howitzer jointly developed by the Army and Marine Corps to replace the M198 Howitzer. The extensive use of titanium in all its major structures makes it 7,000 pounds lighter than the M198 with no sacrifice in range, stability, accuracy or durability. The M777A2's independent suspension, smaller footprint and lower profile increase strategic deployability and tactical mobility. The system uses numerous improvements to enhance reliability and accuracy, and significantly increase system survivability. The system has a Digital Fire Control System (DFCS) that includes an inertial navigation unit with Global Positioning System backup to allow it to self-locate. The DFCS also includes a mission computer, displays and digital communications. Software upgrades incorporating the Enhanced Portable Inductive Artillery Fuse Setter and the Excalibur Platform Integration Kit hardware give the M777A2 the capability to program and fire the Excalibur precision-guided munition. Several ongoing modifications to enhance durability will increase the longevity of the M777A2. The LW155 offers the warfighter improved survivability, lethality, deployability and mobility to counter threat forces.

The Army has fielded the M777A2 to their Stryker Brigade Combat Teams, Fires Brigades and the National Guard. The Army began fielding the M777A2 to Infantry Brigade Combat Teams starting in FY 2014 and completed in FY 2018. The Marine Corps fielded to all active and reserve units, and there have been additional Foreign Military Sales purchases from Australia, Canada, and India.

Seconda	ary Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	17.953	2.985	1.778	-	1.778	1.197	5.303	9.271	17.947
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	15.647	1.000	1.308	-	1.308	1.280	6.105	7.487	-
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	33.600	3.985	3.086	-	3.086	2.477	11.408	16.758	17.947

Justification:

LI 3005GZ1700 - M777 Mods
Army

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P-1 Line #30

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Exhibit P-40, Budget Line Item Justification:	PB 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget Sub 2033A: Procurement of W&TCV, Army / BA 02: Vehicles / BSA 20: Mod of Weapons and Other	Weapons and Other Combat	P-1 Line Item N 3005GZ1700 / N	
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code	B Items: N/A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A			,
Control Module (I-PCCM), Electronic Thermal Warning Dev (CSD-R) and Primer Feed Mechanism (PFM) Components ranges. The Digital Fire Control System software will also be	vice (ETWD), Hydraulic Power Assist Kit (H . The PFM and ETWD retrofits are critical to be upgraded as part of these retrofits. The u	lyPAK), Muzzle Velocity (o addressing current field upgraded software require	neering Change Proposals for items such as the Improved Power Conditioning Sensor System (MVSS), Mission Computer (MSC-R), Chief of Section Display d restrictions for firing the Modular Artillery Charge System (MACS) at extended es additional operator training as it reflects significant changes to operator tactics se system durability and mitigate residue issues when firing the Modular Artillery
"In accordance with Section 1815 of the FY 2008 National defense missions, domestic emergency responses, and pro-	,	this item is necessary for	use by the active and reserve components of the Armed Forces for homeland

Exhibit P-40, Budget Line Item Justification: PB 2019 Army

Date: February 2018

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

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

3010GB3007 / M4 Carbine Mods

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

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

Line Item MDAP/MAIS Code: N/A

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

	Prior			FY 2019	FY 2019	FY 2019					То	
Resource Summary	Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	854.853	27.752	31.315	31.575	-	31.575	17.661	10.791	10.785	10.673	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	854.853	27.752	31.315	31.575	-	31.575	17.661	10.791	10.785	10.673	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	854.853	27.752	31.315	31.575	-	31.575	17.661	10.791	10.785	10.673	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	r informational p	urposes 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)	6.985	0.314	0.309	0.329	-	0.329	0.777	-	-	-	Continuing	Continuing

Description:

The M4 Carbine Modification Program provides combat optics, a Close Quarters Battle Kit (CQBK), and M4 to M4A1 carbine upgrade kits. The Improved Weapons Cleaning Kit (IWCK) and the Enhanced Performance Magazine (EPM) are both components of the Close Quarters Battle Kit (CQBK). 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 5.56 Enhanced Performance Magazine (EPM) decreases weapon wear, significantly increases reliability and durability and maintains terminal performance of the M4 and M16 family of weapons. The M4 Product Improvement Program converts all fielded M4 Carbines to M4A1 Carbine configuration to include the M4A1 heavy barrel assembly and full auto trigger mechanism and adding new ambidextrous fire control selector assembly.

Seconda	ary Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	20.536	23.085	15.647	-	15.647	6.081	10.791	10.785	10.673
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	5.551	6.502	14.336	-	14.336	10.689	-	-	-
AR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	1.665	1.728	1.592	-	1.592	0.891	-	-	-
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	27.752	31.315	31.575	-	31.575	17.661	10.791	10.785	10.673

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Exhibit P-40, Budget Line Item Justification: PB 2019 Army

Date: February 2018

Program Elements for Code B Items: N/A

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

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

3010GB3007 / M4 Carbine Mods

Other Related Program Elements: N/A

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

ID Code (A=Service Ready, B=Not Service Ready): A
Line Item MDAP/MAIS Code: N/A

	Exhibits Schedule				Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)				
P-3a	GB3007 / M4 PIP (Increase Performance)		Α		- / 854.853	- / 27.752	- / 31.315	- / 31.575	- / -	- / 31.575
P-40	Total Gross/Weapon System Cost				- / 854.853	- / 27.752	- / 31.315	- / 31.575	- 1 -	- / 31.575
	Exhibits Schedule				FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)				
P-3a	GB3007 / M4 PIP (Increase Performance)		Α		- / 17.661	- / 10.791	- / 10.785	- / 10.673	Continuing	Continuing
P-40	Total Gross/Weapon System Cost	,			- / 17.661	- /10.791	- / 10.785	- / 10,673	Continuing	Continuing

^{*}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 sum exactly due to rounding.

Justification:

FY 2019 Base procurement dollars in the amount of \$31.575 million supports the procurement of Improved Weapons Cleaning Kits (IWCK), the purchase of the enhanced performance magazine, and the conversion of M4 to M4A1 Carbine. The M4 Carbine upgrade converts the M4 to the M4A1 configuration to include the M4A1 heavy barrel assembly and full auto trigger mechanism and adding new ambidextrous fire control selector assembly. FY2019 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 Tank Automotive 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 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 20	P-1 Line Item Number / Title: 3010GB3007 / M4 Carbine Mods	Modification Number / Title: GB3007 / M4 PIP
		I

ID Code (A=Service Ready, B=Not Service Ready)	: A			MDAP/MAIS Code:									
Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total	
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-	
Gross/Weapon System Cost (\$ in Millions)	854.853	27.752	31.315	31.575	-	31.575	17.661	10.791	10.785	10.673	Continuing	Continuing	
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-	
Net Procurement (P-1) (\$ in Millions)	854.853	27.752	31.315	31.575	-	31.575	17.661	10.791	10.785	10.673	Continuing	Continuing	
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-	
Total Obligation Authority (\$ in Millions)	854.853	27.752	31.315	31.575	-	31.575	17.661	10.791	10.785	10.673	Continuing	Continuing	
(The following	Resource Sumr	mary rows are fo	r informational p	urposes only. Th	ne corresponding	g budget request	s are documente	ed elsewhere.)		:			
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-	
Gross/Weapon System Unit Cost (\$ in Thousands)	6.985	0.314	0.309	0.329	-	0.329	0.777	-	-	-	Continuing	Continuing	

Description:

The M4 Carbine Modification Program provides combat optics, a Close Quarters Battle Kit (CQBK), and M4 to M4A1 carbine upgrade kits. The Improved Weapons Cleaning Kit (IWCK) and the Enhanced Performance Magazine (EPM) are both components of the Close Quarters Battle Kit (CQBK). 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 5.56 Enhanced Performance Magazine (EPM) decreases weapon wear, significantly increases reliability and durability and maintains terminal performance of the M4 and M16 family of weapons. The M4 Product Improvement Program converts all fielded M4 Carbines to M4A1 Carbine configuration to include the M4A1 heavy barrel assembly and full auto trigger mechanism and adding new ambidextrous fire control selector assembly.

Close Quarters Battle Kit: 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 the weapon 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 nine (9) Soldiers. The enhanced performance magazine will be procured for the carbine/rifle fleet.

M4 Product Improvement Program (PIP) Phase I: 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.

Seco	ndary Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	20.536	23.085	15.647	-	15.647	6.081	10.791	10.785	10.673
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	5.551	6.502	14.336	-	14.336	10.689	-	-	-
AR	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	1.665	1.728	1.592	-	1.592	0.891	-	-	-
Total:	Quantity	-	-	-	=	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	27.752	31.315	31.575	-	31.575	17.661	10.791	10.785	10.673

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Exhibit P-3a, Individual Modification: PB 2019 Army Date: February 2018 Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: **Modification Number / Title:** 3010GB3007 / M4 Carbine Mods GB3007 / M4 PIP 2033A / 02 / 20 ID Code (A=Service Ready, B=Not Service Ready): A MDAP/MAIS Code: Related RDT&E PEs: Models of Systems Affected: M4/M4A1 CARBINE **Modification Type:** Increase Performance FY 2019 То FY 2019 FY 2019 FY 2017 FY 2018 oco FY 2020 FY 2021 FY 2023 **Prior Years** Base Total **FY 2022** Complete Total Qtv (Each) I **Financial Plan** Total Cost (\$ M) | Total Cost (\$ Total Cost (\$ M) Total Cost (\$ M) Total Cost (\$ M) Total Cost (\$ M) | Total Cost (\$ M) **Procurement** Modification Item 1 of 4: Combat Optics/Small Arms Fire Control Squad B Kits Recurring Combat Optics 459.113 I - 1 -- 1 -- 1 -- /0.000 459.113 / - / -- 1 -380.289 380.289 - / 11.550 - / 11.550 - 1 -- 1 -- 1 -- 1 -- 1 -- / -- / -- 1 -- / -- /0.000 Program Management (Non- Labor) - / 0.400 - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- /0.000 - / 0.400 - /2.990 - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- /0.000 - /2.990 Integrated Logistical Support Total Package Fielding - /2.100 - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- /0.000 - /2.100 New Equipment Training - / 0.100 - 1 -- 1 -- 1 -- 1 -- / -- 1 -- 1 -- / -- 1 -- /0.000 - / 0.100 459.113/ - / -- / -- / -- / -- / -- / -- / -- / -- / -- / -459.113 Subtotal: Recurring 397.429 397.429 459.113/ - / -- / -- /0.000 - / -- / -459.113 Subtotal: Combat Optics/Small Arms Fire Control - / -- /0.000 - / -- / -- / -397.429 397.429 Squad Modification Item 2 of 4: Close Quarters Battle Kit B Kits Recurring Close Quarters Battle Kit 149,182 I - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- /0.000 149,182 302 600 302 600 Improved Weapons Cleaning Kit (Indv) 240,811 / 50,000 / 5.270 64,788 / 6.251 42,395 / 4.649 - 1 -42,395 / 4.649 4,845 / 0.542 47,646 / 5.527 46,230 / 5.379 46,900 / 5.487 Continuing 19.911 Improved Weapons Cleaning Kit (Team) 13,251 / 1.348 - 1 -- 1 -- 1 -- 1 -- 1 -- / -- / -- / -- 1 -- /0.000 13,251 / 1.348 Improved Magazines 119.760 / 1.000 - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- /0.000 119,760 / 1.000 **Enhanced Performance Magazines** 30.250 / 0.364 166,666 / 2,000 278.000 / 3.336 - 1 -278.000 / 3.336 25.000 / 0.300 | 123.794 / 1.485 | 127.415 / 1.529 | 131.250 / 1.575 - /0.000 882.375 - 1 -10.589 - / 0.963 - / 0.190 - /0.100 - / 0.100 - / 0.150 - / 0.155 - / 0.164 - / 0.178 - /2.827 Program Management (Non-Labor) - / 0.927 - / -- /0.000 Engineering Support - / 13.788 - / 0.366 - / 0.317 - /0.400 - 1 -- / 0.400 - / 0.325 - / 0.330 - / 0.335 - / 0.340 - /0.000 - / 16.201 - 14.740 - /0.020 Integrated Logistic Support - / 0.025 - / 0.020 - 1 -- / 0.020 - / 0.020 - / 0.030 - / 0.035 - / 0.040 - /0.000 - /4.930 Total Package Fielding - /2.944 - / 0.100 - / 0.105 - / 0.050 - 1 -- / 0.050 - / 0.055 - / 0.060 - /0.000 - /3.429 - / 0.050 10.065 Subtotal: Recurring 523.004 / 80.250 / 7.083 231.454 / 8.888 320.395 / 8.555 320.395 / 8.555 29.845 / 1.387 171.440 / 7.582 173.645 / 7.502 178.150 / 7.685 Continuing Continuing 347.258 Subtotal: Close Quarters Battle Kit 523.004/ 80.250 / 7.083 | 231.454 / 8.888 | 320.395 / 8.555 320.395 / 8.555 29,845 / 1.387 | 171,440 / 7.582 | 173,645 / 7.502 | 178,150 / 7.685 Continuina Continuina 347.258

LI 3010GB3007 - M4 Carbine Mods Army

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Exhibit P-3a, Individual Modification: PB 2019 Army

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

Date: February 2018

Modification Number / Title:
3010GB3007 / M4 Carbine Mods

GB3007 / M4 PIP

ID Code (A=Service Ready, B=Not Service Ready): A MDAP/MAIS Code: Related RDT&E PEs: Models of Systems Affected: M4/M4A1 CARBINE **Modification Type:** Increase Performance FY 2019 То FY 2019 FY 2019 FY 2017 FY 2018 000FY 2020 FY 2021 FY 2023 **Prior Years** Base Total FY 2022 Complete Total Qtv (Each) I **Financial Plan** Total Cost (\$ M) | Total Cost (\$ Total Cost (\$ M) Total Cost (\$ M) Modification Item 3 of 4: M4 Product Improvement Program (PIP) Phase I B Kits Recurring 483.000 / - 1 -- 1 -- /0.000 483.000 Hardware M4 PIP Phase 1 (kit equivalent) - 1 -- / -- 1 -- 1 -- / -- 1 -- 1 -73.802 73.802 - 17.732 - /3.438 - /3.461 - /3.540 - 1 -- /3.540 - /2.837 - 1 -- /0.000 - /21.008 Hardware PIP Parts (bench stocks,others) - / -- 1 -System Support MWO Team/TACOM - 15.244 - /1.318 - / 1.065 - / 1.266 - 1 -- /1.266 - /1.289 - 1 -- 1 -- 1 -- /0.000 - / 10.182 Program Management (Non-Labor) - / 0.830 - / 0.835 - 12.576 - / 0.320 - / 0.825 - 1 -- / 0.830 - / -- 1 -- 1 -- /0.000 - /5.386 - /0.479 - / 0.550 - 1 -- / 0.500 - 1 -- 1 -- /0.000 - /4.852 **Engineering Support** - /2.903 - /0.420 - / 0.550 - 1 -- / 1.866 - 1 -- / 0.045 - /0.048 - 1 -10.048 - / 0.055 - 1 -- 1 -- 1 -- /0.000 - /2.014 Integrated Logistics Support - / 0.550 - / 0.515 - / 0.520 - / -- /3.505 Transportation Costs - *I* 1.420 - / 0.500 - 1 -- / 0.515 - 1 -- 1 -- /0.000 Inspect and Repair USAR 8th ARMY - / 0.178 - / 0.154 - / 0.168 - / 0.171 - 1 -/ 0.171 - / 0.168 - 1 -- 1 -- /0.000 - / 0.839 483.000 / - /6.150 - /6.593 - /6.920 - / -- /6.920 - /6.204 - / -- / -- / -- / -483.000 Subtotal: Recurring 95.721 121.588 Subtotal: M4 Product Improvement Program (PIP) 483,000 / - /6.150 - /6.593 - /6.920 - / -- /6.920 - /6.204 - / -- / -- / -483,000 95.721 121.588 Phase I Modification Item 4 of 4: Extended Forward Rail Systems MWO Kits A Kits Recurring Extended Rail System MWO Kit (Hardware) - / -- 1 -- 1 -- 1 -- 1 -- 1 -- / -2,021 / 1.521 1,994 / 1.500 1,707 / 1.285 - /0.000 5,722 / 4.306 Program Management - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- / 0.500 - / 0.550 - / 0.570 - /0.000 - /1.620 - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- / 0.300 - / 0.350 - / 0.360 - /0.000 - /1.010 **Engineering Support** - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- /0.080 - / 0.085 - / 0.090 - /0.000 - / 0.255 Intergrated Logistic Support - / -- / -- / -- / -- / -- / -- / -2,021 / 2.401 1,994 / 2.485 1,707 / 2.305 - / -5,722 / 7.191 Subtotal: Recurring - / -- / -- /0.000 5.722 / 7.191 - / -- / -- /0.000 - / -2,021 / 2.401 1,994 / 2.485 1,707 / 2.305 - / -Subtotal: Extended Forward Rail Systems MWO Kits Subtotal: Procurement, All Modification Items 1.465.117/ 80,250 / 13.233 231.454 / 320.395/ - / -320.395/ 29,845 / 7.591 173,461 / 9.983 175,639 / 9.987 179,857 / 9.990 Continuing Continuing 840.408 15.481 15.475 15.475 Installation

LI 3010GB3007 - M4 Carbine Mods Army

122.378 / 91.048 / 14.519

- / -

14.445

- / -

101.450 /

15.834

- 1 -

Modification Item 3 of 4: M4 Product Improvement

Modification Item 4 of 4: Extended Forward Rail Systems

Program (PIP) Phase I

MWO Kits

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- 1 -

96.000 / 16.100 | 59.490 / 10.070

2.021 / 0.808

P-1 Line #31

1.994 / 0.798

- / -

96.000 / 16.100

- 1 -

1.707 / 0.683

470.366

5.722 / 2.289

70.968

Exhibit P-3a, Individual Modificat	ion: PB 2019 Arm	ıy							Date: Feb	ruary 2018		
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 20 P-1 Line Item Number / Title: 3010GB3007 / M4 Carbine Mods Modification Number / Title: GB3007 / M4 PIP												
ID Code (A=Service Ready, B=Not Service Ready): A MDAP/MAIS Code:												
Models of Systems Affected: M4/M4A1 CARBINE Modification Type: Increase Performance Related RDT&E PEs:												
	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)											
Subtotal: Installation	122,378 / 14.445	91,048 / 14.519	101,450 / 15.834	96,000 / 16.100	0/0.000	96,000 / 16.100	59,490 / 10.070	2,021 / 0.808	1,994 / 0.798	1,707 / 0.683	- / -	476,088 / 73.257
Total	·											

31.575

31.575

17.661

10.791

10.785

Total Cost (Procurement + Support + Installation)

854.853

27.752

31.315

10.673 Continuing

Continuing

Exhibit P-3a, Indivi	dual Modification: F	B 2019 Army				Date: February 2018						
Appropriation / Bu 2033A / 02 / 20	dget Activity / Budg	et Sub Activity:	P-1 Line Item Nui 3010GB3007 / M4			Modification Number GB3007 / M4 PIP	er / Title:					
ID Code (A=Service Ready,	B=Not Service Ready) : A		1	MDAP/MAIS Co	ode:							
Modification Item 1 of 4	: Combat Optics/Small Arr	ns Fire Control Squad										
Manufacturer Informati	on											
Manufacturer Name: TBI)			Manufacturer Location: TB	BD							
Administrative Leadtime	(in Months):			Production Leadtime (in M	lonths):	:hs):						
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	Y 2021 FY 2022 FY 2023						
Contract Dates												
Delivery Dates												
Installation Information												
Method of Implementat	ion (Organic): Installed by	Soldiers			Installation C	Quantity: 0						

LI 3010GB3007 - M4 Carbine Mods Army

		2.0040.4				D-4 F.L						
	idual Modification: Pl				Date: February 2018							
Appropriation / Bu 033A / 02 / 20	dget Activity / Budge	t Sub Activity:	P-1 Line Item Nu 3010GB3007 / M4			Modification Number GB3007 / M4 PIP	er / Title:					
Code (A=Service Ready,	B=Not Service Ready) : A			MDAP/MAIS Co	ode:	0200011111111						
	: Close Quarters Battle Kit											
lanufacturer Informati	•											
	A Tailoring Logistic Support(various vendors)		Manufacturer Location: Ph	niladelphia, PA							
dministrative Leadtime				Production Leadtime (in Months): 3								
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023					
ontract Dates	Jan 2017	Jan 2018	Jan 2019	Jan 2020	Jan 2021	Jan 2022	Jan 2023					
elivery Dates	Mar 2017	Mar 2018	Mar 2019	Mar 2020	Mar 2021	Mar 2022	Mar 2023					
stallation Information												
ethod of Implementat	ion (Organic): Installed by	Soldiers			Installation 0	luantity: 0						

Exhibit P-3a, Indi	vidual Modification: P	B 2019 Army			3							
Appropriation / B 2033A / 02 / 20	udget Activity / Budge	et Sub Activity:	P-1 Line Item Nu 3010GB3007 / M ⁴									
ID Code (A=Service Read	dy, B=Not Service Ready):A		•	MDAP/MAIS Code:								
Modification Item 3 or	f 4: M4 Product Improvement	Program (PIP) Phase I		,								
Manufacturer Informa	ation											
Manufacturer Name: V	arious Vendors			Manufacturer Location: Various Locations								
Administrative Leadtim	e (in Months): 3			Production Leadtime (in	Months): 3							
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023					
Contract Dates	Oct 2016	Oct 2017	Oct 2018	Oct 2019								
Delivery Dates	Dec 2016	Dec 2017	Dec 2018	Dec 2019								

Installation Information

Method of Implementation: Installed by TACOM

	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	122,378 / 14.445	91,048 / 14.519	101,450 / 15.834	96,000 / 16.100	- 1 -	96,000 / 16.100	59,490 / 10.070	- 1 -	- 1 -	- 1 -	- 1 -	470,366 / 70.968
FY 2017	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2021	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2022	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2023	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	122,378 / 14.445	91,048 / 14.519	101,450 / 15.834	96,000 / 16.100	0 / 0.000	96,000 / 16.100	59,490 / 10.070	- 1 -	- 1 -	- 1 -	- 1 -	470,366 / 70.968

Installation Schedule

- 1																																
				FY 2	2017			FY 2	2018	_		FY 2	2019	_		FY 2	2020			FY 2	2021			FY 2	2022			FY 2	:023			
		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
	n	122,3	7 2 2,762	222,76	222,76	222,76	225,36	225,36	225,36	225,36	424,00	024,00	024,00	024,00	014,87	314,87	314,87	214,872	2 -	-	-	-	-	-	-	-	-	-	_	-	- 1	470,366
[Out	122,3	7 2 2,762	222,76	222,76	222,76	225,36	225,36	225,36	225,36	424,00	024,00	024,00	024,00	014,87	314,87	314,87	214,872	2 -	-	-	-	-	-	-	-	-	-		-	_	470,366

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Exhibit P-3a, Individual Modification: PB 2019 Army	Date: February 2018	
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 20	P-1 Line Item Number / Title: 3010GB3007 / M4 Carbine Mods	Modification Number / Title: GB3007 / M4 PIP
ID Code (A=Service Ready, B=Not Service Ready): A	MDAP/MAIS C	ode:

Modification Item 4 of 4: Extended Forward Rail Systems MWO Kits

Manufacturer Information

Manufacturer Name: TBD	Manufacturer Location: TBD
Administrative Leadtime (in Months): 3	Production Leadtime (in Months): 3

Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates					Jan 2021	Jan 2022	Jan 2023
Delivery Dates					Mar 2021	Mar 2022	Mar 2023

Installation Information

Method of Implementation: Installed by Tacom

	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	2,021 / 0.808	1,994 / 0.798	1,707 / 0.683	- 1 -	5,722 / 2.289
FY 2017	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2021	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2022	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2023	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	- 1 -	- 1 -	- 1 -	0 / 0.000	- / -	0 / 0.000	- 1 -	- 1 -	- 1 -	- / -	- 1 -	- 1 -
Total	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	2,021 / 0.808	1,994 / 0.798	1,707 / 0.683	- 1 -	5,722 / 2.289

Installation Schedule

			FY 2	2017			FY 2	2018			FY 2	2019			FY 2	2020			FY 2	2021			FY 2	022			FY 2	023			
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot																
In	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	505	505	505	506	500	500	500	494	1,707	5,722
Out	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	505	505	505	506	500	500	500	494	1,707	5,722

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Exhibit P-40, Budget Line Item Justification: PB 2019 Army

SHOLAGOII ILD

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

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

3015GB4000 / M2 50 Cal Machine Gun MODS

Date: February 2018

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

Program Elements for Code B Items: 0604601A Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

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

Line item MDAI /MAIO Oode: N/A														
	Prior			FY 2019	FY 2019	FY 2019					То			
Resource Summary	Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total		
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-		
Gross/Weapon System Cost (\$ in Millions)	300.712	48.582	47.414	21.600	4.920	26.520	12.490	10.116	3.973	0.849	Continuing	Continuing		
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	=	-	-	-	-	-	-		
Net Procurement (P-1) (\$ in Millions)	300.712	48.582	47.414	21.600	4.920	26.520	12.490	10.116	3.973	0.849	Continuing	Continuing		
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-		
Total Obligation Authority (\$ in Millions)	300.712	48.582	47.414	21.600	4.920	26.520	12.490	10.116	3.973	0.849	Continuing	Continuing		
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	ne corresponding	budget requests	s are documente	d elsewhere.)			ĺ			
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-		
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-		
Gross/Weapon System Unit Cost (\$ in Thousands)	16.013	4.218	6.433	6.923	5.899	6.707	7.743	-	14.039	3.000	Continuing	Continuing		

Description:

The M2A1 Quick Change Barrel (QCB) Kit provides enhancements for the .50 Caliber M2 Heavy Barrel Machine Gun to allow the Soldier to quickly change barrels without the need to reset the headspace and timing while also reducing 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 M3 Tripod 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 and ground mounts. Improvements being implemented provide increased stabilization to minimize weapon bounce during vehicle operations which will increase the probability of hit on target while still allowing fast changes in both azimuth and elevation. Continues engineering studies on the M2A1 Machine Gun components, the M205 Lightweight Tripod to lighten the Soldier's load and improve performance, and the upgrades to the MK93 Mount.

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Exhibit P-40, Budget Line Item Justification: PB 2019 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

3015GB4000 / M2 50 Cal Machine Gun MODS

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

Program Elements for Code B Items: 0604601A

Other Related Program Elements: N/A

Date: February 2018

Line Item MDAP/MAIS Code: N/A

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

	Exhibits Schedule				Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-3a	GB4000 / M2 Mods (Increase performance)		Α		- / 300.712	- / 48.582	- / 47.414	- /21.600	- / 4.920	- / 26.520
P-40	Total Gross/Weapon System Cost				- / 300.712	- / 48.582	- / 47.414	- / 21.600	- / 4.920	- / 26.520
	Exhibits Schedule				FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-3a	GB4000 / M2 Mods (Increase performance)		Α		- / 12.490	- / 10.116	- /3.973	- / 0.849	Continuing	Continuing

^{*}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 sum exactly due to rounding.

Justification:

FY 2019 Base procurement dollars in the amount of \$21.600 million supports the Active Army and National Guard by purchasing 1,517 MK93 Improvement Kits and 3,120 Mounted Machine Gun Optics. Continues the installation of 1,071 Quick Change Barrel Kits to convert the M2 Machine Gun to a M2A1 Machine Gun.

The FY 2019 Overseas Contingency Operations (OCO) procurement dollars in the amount of \$4.920 million supports COCOM requirement for unit equipment sets to deter potential adversaries and support the European Deterrence Initiative (EDI). Funding will support the procurement of 539 M205 Tripods. Support the Active Army.

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 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activi	ty: P-1 Line Item Number / Title:	Modification Number / Title:
2033A / 02 / 20	3015GB4000 / M2 50 Cal Machine Gun MODS	GB4000 / M2 Mods

ID Code (A=Service Ready, B=Not Service Ready)	: A					MDAP/MA	IS Code:					
Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	300.712	48.582	47.414	21.600	4.920	26.520	12.490	10.116	3.973	0.849	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	300.712	48.582	47.414	21.600	4.920	26.520	12.490	10.116	3.973	0.849	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	300.712	48.582	47.414	21.600	4.920	26.520	12.490	10.116	3.973	0.849	Continuing	Continuing
(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)	16.013	4.218	6.433	6.923	5.899	6.707	7.743	-	14.039	3.000	Continuing	Continuing

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 M3 Tripod 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 and ground mounts. 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, the M205 Lightweight Tripod to lighten the Soldier's load and the upgrades to the MK93 Mount.

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Exhibit P-3a, Individual Modification: PB 2019 Army

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

P-1 Line Item Number / Title:
3015GB4000 / M2 50 Cal Machine Gun MODS

GB4000 / M2 Mods

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

| Models of Systems Affected: Machine Gun, CAL .50 | Modification Type: Increase performance | Related RDT&E PEs:

	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M										
rocurement												
Modification Item 1 of 4: M2A1 Quick Change Barrel Kit												
B Kits												
Recurring												
Hardware Quick Change Barrel Kits	3,800 / 198.085	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	Continuing	Continuing
Engineering Support	- /7.919	- / 1.150	- /1.150	- / 0.855	- 1 -	- / 0.855	- / 0.750	- / 0.896	- / 0.346	- 1 -	- / 0.000	- / 13.06
Program Management Support (Non-Labor)	- /2.376	- / 0.570	- / 0.828	- / 0.675	- 1 -	- / 0.675	- / 0.626	- / 0.697	- / 0.639	- / 0.299	- / 0.000	- /6.71
Integrated Logistics Support	- /1.280	- / 0.330	- / 0.330	- / 0.330	- 1 -	- / 0.330	- / 0.300	- / 0.330	- / 0.150	- 1 -	- /0.000	- /3.05
Fielding	- /1.400	- / 0.300	- / 0.300	- / 0.600	- 1 -	- / 0.600	- / 0.600	- / 0.600	- / 0.300	- 1 -	- /0.000	- /4.10
New Equipment Training	- /1.470	- / 0.300	- / 0.400	- / 0.700	- 1 -	- /0.700	- / 0.700	- /0.700	- / 0.300	- / 0.275	- /0.000	- /4.84
First Destination Transportation	- /1.741	- / 0.100	- / 0.100	- / 0.100	- 1 -	- / 0.100	- / 0.100	- / 0.100	- 1 -	- / 0.275	- /0.000	- /2.51
Engineering Studies	- /2.137	- / 1.378	- /1.870	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / -	- /0.000	- /5.38
Testing	- / 0.800	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- / -	- 1 -	- 1 -	- / -	- /0.000	- / 0.80
Anniston Packaging	- /2.122	- / 1.226	- /2.453	- / 0.447	- 1 -	- / 0.447	- 1 -	- 1 -	- 1 -	- / -	- /0.000	- /6.24
Subtotal: Recurring	3,800 / 219.330	- /5.354	- /7.431	- /3.707	- / -	- /3.707	- /3.076	- /3.323	- /1.735	- /0.849	Continuing	Continuing
Subtotal: M2A1 Quick Change Barrel Kit	3,800 / 219.330	- /5.354	- /7.431	- /3.707	- / -	- /3.707	- /3.076	- /3.323	- /1.735	- /0.849	Continuing	Continuing
Modification Item 2 of 4: Tripods				'								,
B Kits												
Recurring												
M3 Tripods	1,305 / 8.500	- / -	- / -	- 1 -	- 1 -	- / -	- / -	- / -	- 1 -	- 1 -	- /0.000	1,305 / 8.50
M205 Tripod	· ·	10,072 / 18.637	1,173 / 6.055	0 / 0.000	539 / 3.982	539 / 3.982	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	19,076 / 78.84
Engineering Support	- /2.331	- /3.700	- / 0.850	- /0.000	- /0.200	- /0.200	- /0.700	- 1 -	- 1 -	- 1 -	- /0.000	- 17.78
Program Management Support (Non-Labor)	- /6.115	- /3.262	- /4.459	- /0.000	- / 0.738	- /0.738	- / 1.405	- 1 -	- 1 -	- 1 -	- /0.000	- / 15.97
Integrated Logistics Support	- /0.600	- / 0.275	- / 0.150	- 1 -	- 1 -	- 1 -	- / 0.140	- 1 -	- 1 -	- 1 -	- /0.000	- /1.16
New Equipment Training	- / 0.667	- / 0.325	- / 0.425	- 1 -	- 1 -	- 1 -	- / 0.500	- / 0.150	- 1 -	- 1 -	- /0.000	- /2.06
Fielding	- / 0.565	- / 0.275	- /0.400	- 1 -	- 1 -	- 1 -	- / 0.600	- / 0.100	- 1 -	- 1 -	- /0.000	- /1.94
Engineering Study	- / 0.575	- / 0.693	- /0.700	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	- /1.96
M205 Tripod - Rock Island Arsenal (RIA)	- 1 -	350 / 3.493	117 / 3.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 0.000	467 / 6.49
Engineering Change Proposal	- 1 -	- /1.750	- / 0.400	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 0.000	- /2.15
	- /1.780	- 1 -	- / 0.750	- 1 -	- 1 -	- 1 -	- 1 -	- / -	- 1 -	- 1 -	- /0.000	- /2.53
Testing (First Article)	- / 1./00											

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LI 3015GB4000 - M2 50 Cal Machine Gun MODS

Exhibit P-3a, Individual Modification: PB 2019 Army Date: February 2018

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

3015GB4000 / M2 50 Cal Machine Gun MODS 2033A / 02 / 20 GB4000 / M2 Mods

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

Models of Systems Affected: Machine Gun, CAL .50 Modification Type: Increase performance Related RDT&E PEs:

M2 and MK-19 Grenade Machine Gun FY 2019 FY 2019 FY 2019 То FY 2017 oco Complete **Prior Years** FY 2018 Base Total **FY 2020** FY 2021 FY 2022 FY 2023 Total Qty (Each) I **Financial Plan** Total Cost (\$ M) | Total Cost (\$ M) Total Cost (\$ M) Prototype Integration Facility - / 0.225 - /0.000 - / 0.225

Subtotal: Recurring	8,597 / 72.031	10,422 / 32.619	1,290 / 17.239	- / -	539 / 4.920	539 / 4.920	- /3.370	- /0.250	- / -	- / -	- / -	20,848 130.42
Subtotal: Tripods	8,597 / 72.031	10,422 / 32.619	1,290 / 17.239	- /0.000	539 / 4.920	539 / 4.920	- /3.370	- /0.250	- / -	- / -	- / -	20,848 130.42
Modification Item 3 of 4: MK93 Improvements				'	,		'	'	'			,
B Kits												
Recurring												
MK93 Improvements	- 1 -	3,445 / 5.482	4,681 / 8.340	1,517 / 5.666	- 1 -	1,517 / 5.666	244 / 2.295	650 / 2.598	90 / 0.369	- 1 -	- /0.000	10,627 / 24.7
Engineering Support	- /0.710	- /1.000	- / 0.550	- / 0.400	- 1 -	- / 0.400	- / 0.226	- / 0.435	- / 0.305	- 1 -	- /0.000	- /3.6
Program Management Support (Non-Labor)	- 12.244	- / 0.977	- / 1.851	- / 1.911	- 1 -	- / 1.911	- / 0.927	- / 0.860	- / 0.496	- / -	- /0.000	- 19.2
Integrated Logistics Support	- / -	- / 0.100	- / 0.125	- / 0.175	- 1 -	- / 0.175	- / 0.150	- / 0.175	- / 0.150	- / -	- /0.000	- /0.8
Material Work Order (ANAD)	- / 0.650	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / -	- 1 -	- / -	- /0.000	- /0.6
Material Work Order (TACOM)	- / -	- /0.400	- / 0.625	- / 0.625	- 1 -	- / 0.625	- / 0.325	- / 0.450	- / 0.075	- / -	- /0.000	- 12.5
Testing (First Article)	- / -	- / 0.350	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	- /0.3
Testing	- / 0.500	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / -	- /0.000	- /0.
Engineering Studies	- / 1.525	- / 1.450	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	- /2.
First Destination Transportation	- 1 -	- 1 -	- / 0.020	- / 0.020	- 1 -	- / 0.020	- / 0.010	- / 0.025	- / 0.005	- 1 -	- /0.000	- /0.0
Subtotal: Recurring	- /5.629	3,445 / 9.759	4,681 / 11.511	1,517 / 8.797	- / -	1,517 / 8.797	244 / 3.933	650 / 4.543	90 / 1.400	- / -	- / -	10,627 / 45.5
Subtotal: MK93 Improvements	- /5.629	3,445 / 9.759	4,681 / 11.511	1,517 / 8.797	- / -	1,517 / 8.797	244 / 3.933	650 / 4.543	90 / 1.400	- / -	- / -	10,627 / 45.5
Modification Item 4 of 4: Mounted Machine Gun Optic												
B Kits												
Recurring												
Mounted MG Optic	- 1 -	- 1 -	1,400 / 8.436	3,120 / 5.441	- 1 -	3,120 / 5.441	785 / 1.325	729 / 1.064	203 / 0.042	- 1 -	Continuing	Continuing
Engineering Support	- 1 -	- 1 -	- / 0.404	- / 0.825	- 1 -	- / 0.825	- / 0.375	- / 0.325	- / 0.142	- 1 -	- /0.000	- /2.0
Program Management Support (Non-Labor)	- 1 -	- 1 -	- /1.038	- / 1.362	- 1 -	- / 1.362	- / 0.211	- / 0.211	- / 0.329	- 1 -	- / 0.000	- /3.
Integrated Logistics Support	- 1 -	- 1 -	- / 0.080	- / 0.350	- 1 -	- / 0.350	- / 0.100	- / 0.200	- / 0.100	- 1 -	- /0.000	- /0.8
Fielding	- 1 -	- 1 -	- / 0.300	- / 0.350	- 1 -	- / 0.350	- / 0.050	- / 0.100	- / 0.100	- 1 -	- /0.000	- /0.9
New Equipment Training	- 1 -	- 1 -	- / 0.125	- / 0.375	- 1 -	- / 0.375	- / 0.050	- / 0.100	- / 0.125	- 1 -	- / 0.000	- /0.
Subtotal: Recurring	- / -	- / -	1,400 / 10.383	3,120 / 8.703	- / -	3,120 / 8.703	785 / 2.111	729 / 2.000	203 / 0.838	- / -	Continuing	Continuing
Subtotal: Mounted Machine Gun Optic	- / -	- / -	1,400 / 10.383	3,120 / 8.703	- / -	3,120 / 8.703	785 / 2.111	729 / 2.000	203 / 0.838	- / -	Continuing	Continuing
Subtotal: Procurement, All Modification Items	12,397 / 296,990		7,371 / 46.564	4,637 / 21.207	539 / 4.920	5,176 / 26.127	1,029 / 12.490	1,379 / 10.116	293 / 3.973	- /0.849	Continuing	Continuing

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Date: February 2018 Exhibit P-3a, Individual Modification: PB 2019 Army Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Modification Number / Title: 2033A / 02 / 20 3015GB4000 / M2 50 Cal Machine Gun MODS GB4000 / M2 Mods

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

Models of Systems Affected: Machine Gun, CAL .50 **Modification Type:** Increase performance Related RDT&E PEs:

M2 and MK-19 Grenade Machine Gun												
	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)											
Installation												
Modification Item 1 of 4: M2A1 Quick Change Barrel Kit	19,925 / 3.722	5,400 / 0.850	5,400 / 0.850	1,071 / 0.393	- 1 -	1,071 / 0.393	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	31,796 / 5.815
Subtotal: Installation	19,925 / 3.722	5,400 / 0.850	5,400 / 0.850	1,071 / 0.393	0 / 0.000	1,071 / 0.393	- / -	- / -	- / -	- / -	- / -	31,796 / 5.815
Total												
Total Cost (Procurement + Support + Installation)	300.712	48.582	47.414	21.600	4.920	26.520	12.490	10.116	3.973	0.849	Continuing	Continuing

Exhibit P-3a, Indivi	dual Modification: P	B 2019 Army				Date: February 2018	}
Appropriation / Buo 2033A / 02 / 20	dget Activity / Budge	et Sub Activity:	P-1 Line Item Numb 3015GB4000 / M2 5	oer / Title: 0 Cal Machine Gun M	ODS	Modification Number GB4000 / M2 Mods	er / Title:
ID Code (A=Service Ready, E	B=Not Service Ready):A			MDAP/MAIS Co	ode:		
Modification Item 1 of 4.	: M2A1 Quick Change Barr	el Kit					
Manufacturer Information	on						
Manufacturer Name: Gen	eral Dynamics Ordnance T	actical Systems		Manufacturer Location: Sa	aco, ME		
Administrative Leadtime (in Months): 5			Production Leadtime (in N	Nonths): 8		
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023

Feb 2019

Oct 2019

Installation Information

Contract Dates

Delivery Dates

Method of Implementation: Overhaul/conversion

Feb 2017

Oct 2017

Feb 2018

Oct 2018

				r		r	1		r			1
	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	19,925 / 3.722	5,400 / 0.850	5,400 / 0.850	1,071 / 0.393	- 1 -	1,071 / 0.393	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	31,796 / 5.815
FY 2017	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2021	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2022	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2023	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	19,925 / 3.722	5,400 / 0.850	5,400 / 0.850	1,071 / 0.393	0 / 0.000	1,071 / 0.393	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	31,796 / 5.815

Installation Schedule

		_	FY 2	017			FY 2	2018			FY 2	2019			FY 2	2020			FY 2	021			FY 2	022			FY 2	023			
	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	19,92	51,350	1,350	1,350	1,350	1,350	1,350	1,350	1,350	1,071	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31,796
Out	19,92	51,350	1,350	1,350	1,350	1,350	1,350	1,350	1,350	1,071	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31,796

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Exhibit P-3a, Indiv	idual Modification: P	B 2019 Army				Date: February 2018	}			
Appropriation / Bu 2033A / 02 / 20	idget Activity / Budge	et Sub Activity:	P-1 Line Item Nu 3015GB4000 / M2	mber / Title: 2 50 Cal Machine Gun I	MODS	Modification Number GB4000 / M2 Mods	er / Title:			
D Code (A=Service Ready	, B=Not Service Ready) : A			MDAP/MAIS (Code:					
nodification Item 2 of	4: Tripods			l						
lanufacturer Informat	ion									
lanufacturer Name: Ca	pco, Inc.			Manufacturer Location:	Grand Junction, CO					
dministrative Leadtime	(in Months): 6			Production Leadtime (in Months): 9						
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023			
ontract Dates	Mar 2017	Mar 2018	Mar 2019							
elivery Dates	Dec 2017	Dec 2018	Dec 2019							
stallation Information	1									
lethod of Implementa	tion (Organic): Installed by	Troops			Installation	Quantity: 0				

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xhibit P-3a, Indiv	idual Modification: P	B 2019 Army				Date: February 2018	}					
Appropriation / Bu 033A / 02 / 20	dget Activity / Budge	et Sub Activity:	P-1 Line Item Nur 3015GB4000 / M2	nber / Title: 50 Cal Machine Gun M	IODS	Modification Number GB4000 / M2 Mods	er / Title:					
Code (A=Service Ready,	B=Not Service Ready) : A			MDAP/MAIS C	ode:							
lodification Item 3 of 4	: MK93 Improvements			_								
lanufacturer Informati	on											
lanufacturer Name: TBI)			Manufacturer Location: TBD								
dministrative Leadtime	(in Months): 7			Production Leadtime (in Months): 8								
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023					
Contract Dates	Jul 2017	Apr 2018	Apr 2019	Apr 2020	Apr 2021	Apr 2022						
elivery Dates	Mar 2018	Dec 2018	Dec 2019	Dec 2020	Dec 2021	Dec 2022						

xhibit P-3a, Indivi	idual Modification: P	B 2019 Army				Date: February 2018	
Appropriation / Bu 2033A / 02 / 20	dget Activity / Budge	et Sub Activity:	P-1 Line Item Nur	nber / Title: 50 Cal Machine Gun M	IODS	Modification Number GB4000 / M2 Mods	er / Title:
	. Λ		301300400071012			GD40007 WZ WOUS	
D Code (A=Service Ready,				MDAP/MAIS Co	oae:		
	1: Mounted Machine Gun O	ptic					
lanufacturer Informati							
lanufacturer Name: TBI				Manufacturer Location: TE			
dministrative Leadtime	,	T		Production Leadtime (in N			T
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates		Mar 2018	Mar 2019	Mar 2020	Mar 2021	Mar 2022	
elivery Dates		Jan 2019	Jan 2020	Jan 2021	Jan 2022	Jan 2023	
					·		

Exhibit P-40, Budget Line Item Justification: PB 2019 Army

Date: February 2018

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

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

3020GZ1290 / M249 SAW Machine Gun MODS

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

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

P-1 Line #33

Line Item MDAP/MAIS Code: N/A

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

Zino Rom mb/ ii /mi/ iio oodor ii// i												
	Prior			FY 2019	FY 2019	FY 2019					То	
Resource Summary	Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	215.431	1.179	3.339	3.924	-	3.924	4.487	3.414	-	-	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	215.431	1.179	3.339	3.924	-	3.924	4.487	3.414	-	-	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	215.431	1.179	3.339	3.924	-	3.924	4.487	3.414	-	-	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	ne corresponding	budget request	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway 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 200round 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 SAW and M240B Medium Machine Gun 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.

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.

Secondary	Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	1.179	3.339	3.924	-	3.924	4.487	3.414	-	-
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	1.179	3.339	3.924	-	3.924	4.487	3.414	-	-

Justification:

FY 2019 Base procurement dollars in the amount of \$3.924 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 support on Short Barrels, Short Barrel Blank Firing Adapters (BFA), M192 Lightweight Ground Mount improvements (MWO Kits), and Feedbox Support

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Exhibit P-40, Budget Line Item Justificatio	n: PB 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget S 2033A: Procurement of W&TCV, Army / BA 0 Vehicles / BSA 20: Mod of Weapons and Oth	2: Weapons and Other Combat	P-1 Line Item N 3020GZ1290 / N	lumber / Title: M249 SAW Machine Gun MODS
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code E	Items: N/A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A			
The shorter length improves Military Operation in Urban	Terrain (MOUT) and Airborne/Air Assault Opevements to the short barrel will also increase d	rations. It allows for eas	reapon length by 10 inches, when compared to the standard issue M249 SAW. sier egress and entrance into vehicles and confined areas, also facilitates clearing ne operability by the Warfighter. The shortened M249 SAW improves survivability in
` '	•		ammo handling system. These upgrades provide capability improvements ary lightweight ground mount used for the M249 to address shortcomings detected
In accordance with Section 1815 of the FY2008 National defense missions, domestic emergency responses, and		s item is necessary for u	ise by the active and reserve components of the Armed Forces for homeland

LI 3020GZ1290 - M249 SAW Machine Gun MODS Army

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Exhibit P-40, Budget Line Item Justification: PB 2019 Army

P-1 Line Item Number / Title:

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

3030GZ1300 / M240 Medium Machine Gun MODS

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

Appropriation / Budget Activity / Budget Sub Activity:

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Date: February 2018

Line Item MDAP/MAIS Code: N/A

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

	Prior			FY 2019	FY 2019	FY 2019					То	
Resource Summary	Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	164.817	1.784	4.577	6.940	0.007	6.947	10.315	6.635	5.358	3.390	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	164.817	1.784	4.577	6.940	0.007	6.947	10.315	6.635	5.358	3.390	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	164.817	1.784	4.577	6.940	0.007	6.947	10.315	6.635	5.358	3.390	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	e corresponding	budget requests	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	1.750	1,736.750	8.525	7.397	6.296	2.827	Continuing	Continuing

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 improve 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 Squad Automatic Weapon 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. 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 enhances 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.

Seconda	ry Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	1.784	4.577	6.940	0.007	6.947	10.315	6.635	5.358	3.390
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	1.784	4.577	6.940	0.007	6.947	10.315	6.635	5.358	3.390

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Exhibit P-40, Budget Line Item Justification: PB 2019 Army

Date: February 2018

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

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

3030GZ1300 / M240 Medium Machine Gun MODS

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

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

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

	Exhibits Schedule				Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-3a	GZ1300 / M240 Series System Improvements (Increase Performance)	Α		- / 164.817	- / 1.784	- /4.577	- / 6.940	- / 0.007	- / 6.947	
P-40	Total Gross/Weapon System Cost			- / 164.817	- / 1.784	- / 4.577	- / 6.940	- / 0.007	- / 6.947	
	Exhibits Schedule				FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Exhibit Type	Title*	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)							
P-3a	GZ1300 / M240 Series System Improvements (Increase Performance)		- / 10.315	- / 6.635	- / 5.358	- /3.390	Continuing	Continuing		
P-40	Total Gross/Weapon System Cost		- / 10.315	- / 6.635	- / 5.358	- / 3.390	Continuing	Continuing		

^{*}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 sum exactly due to rounding.

Justification:

FY 2019 Base procurement dollars in the amount of \$6.940 million supports the Active Army by purchasing system enhancements for the M240B/L Medium Machine Gun Weapon System. Systems enhancements have been identified by fielded units to further improve the reliability and functionality of this weapon system. These include improved lightweight bipods and M192 MWO Kit which delivers a system improvement to this lightweight tripod. Production of the items allow for fielding to approximately 22 Infantry Brigade Combat Teams (IBCT). Funding also continues support on the Improved Buffer, Improved Barrel, and M197 Modification Work Order (MWO) Kit (drop-in mount cradle). M240L reduces the Soldier's combat load while allowing easier handling and movement of the weapon.

FY 2019 Overseas Contingency Operations (OCO) in the amount of \$0.007 million supports COCOM requirement for unit equipment sets to deter potential adversaries and support the European Deterrence Initiative (EDI). Funding will support the Active Army by purchasing system enhancements for the M240B/L Medium Machine Gun Weapon System

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 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 20	P-1 Line Item Number / Title: 3030GZ1300 / M240 Medium Machine Gun MODS	Modification Number / Title: GZ1300 / M240 Series System
2000A7 027 20	303002 1300 / Wiz40 Wedidii Waciiile Gui Wobo	Improvements

ID Code (A=Service Ready, B=Not Service Ready)	: A					MDAP/MA	S Code:					
	Prior			FY 2019	FY 2019	FY 2019					То	
Resource Summary	Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	164.817	1.784	4.577	6.940	0.007	6.947	10.315	6.635	5.358	3.390	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	164.817	1.784	4.577	6.940	0.007	6.947	10.315	6.635	5.358	3.390	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	164.817	1.784	4.577	6.940	0.007	6.947	10.315	6.635	5.358	3.390	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	ne corresponding	budget request	s are documente	d elsewhere.)			Ì	
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	1.750	1,736.750	8.525	7.397	6.296	2.827	Continuing	Continuing

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 improve 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 improvements for the Lightweight Ground Mount. Additional enhancements include improved bipod, sling, short barrel, improved barrel, combat ammo pack, improved hydraulic buffer, drop-in mount cradle, 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.

Secondar	ry Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	1.784	4.577	6.940	0.007	6.947	10.315	6.635	5.358	3.390
Total: Secondary Distribution	Quantity	-	-	-	-	-	-	-	-	=
	Total Obligation Authority	1.784	4.577	6.940	0.007	6.947	10.315	6.635	5.358	3.390

Exhibit P-3a, Individual Modification: P	B 2019 Arm	y							Date: Feb	ruary 2018		
Appropriation / Budget Activity / Budge 2033A / 02 / 20	P-1 Line Item Number / Title:							Modification Number / Title: GZ1300 / M240 Series System Improvements				
D Code (A=Service Ready, B=Not Service Ready): A			l .		MDA	AP/MAIS Co	ode:		l .			
Models of Systems Affected: M240 Med	dium Machin	o Modifi	cation Typ	n: Increase				lated RDT	&E DEc:			
Gun	diulii Macilli	Wiodin	cation Typ	e. IIICI cast	e r enoma	iice	IXe	iateu NDT	αL FLS.			
	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	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)							
Procurement								1				1
Modification Item 1 of 1: M240 Series System Improvements												
B Kits												-
Recurring												
Bipods	4,700 / 16.413	856 / 0.566	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / -	- / -	- /0.000	5,556 / 16.9
Collapsible Buttstock	6,890 / 14.724	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	· '
Ti Adjustable Bipods	1,277 / 0.453	- 1 -	800 / 0.507	2,200 / 1.429	- 1 -	2,200 / 1.429	3,200 / 2.130	838 / 0.572	- 1 -	- 1 -	- /0.000	8,315 / 5.0
Improved Buffer	34,196 / 19.200	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	34,196 / 19.2
Improved Barrel	4,400 / 13.520	- 1 -	2,000 / 1.876	2,600 / 2.488	- 1 -	2,600 / 2.488	2,900 / 2.830	2,000 / 1.991	2,000 / 2.011	- 1 -	- /0.000	15,900 / 24.7
M197 MWO Kit Drop-in Mount Cradle	230 / 10.150	879 / 0.609	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	1,109 / 10.7
M192 Modification Work Order Kit	- 1 -	- 1 -	- 1 -	384 / 0.581	- / -	384 / 0.581	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	384 / 0.5
Engineering Support	- /30.998	- / 0.234	- / 0.994	- / 0.802	- / 0.007	- / 0.809	- /1.256	- / 0.891	- / 0.502	- / 0.170	- /0.000	- / 35.8
Program Management Support	- /31.031	- /0.120	- / 0.555	- / 0.876	- 1 -	- / 0.876	- /1.042	- /0.672	- / 0.424	- / 0.482	- /0.000	- /35.2
Integrated Logistical Support	- / 15.799	- / 0.130	- /0.220	- / 0.314	- 1 -	- / 0.314	- / 0.312	- / 0.295	- / 0.140	- / 0.121	- /0.000	- / 17.3
Fielding	- / 12.529	- / 0.125	- / 0.425	- / 0.450	- 1 -	- / 0.450	- / 0.450	- / 0.492	- / 0.460	- / 0.300	- /0.000	- / 15.2
Mounted MG Optic (MM0)	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	1,210 / 2.295	897 / 1.722	851 / 1.821	1,199 / 2.317	Continuing	Continuing
Subtotal: Recurring	51,693 / 164.817	1,735 / 1.784	2,800 / 4.577	5,184 / 6.940	- /0.007	5,184 / 6.947	7,310 / 10.315	3,735 / 6.635	2,851 / 5.358	1,199 / 3.390	Continuing	Continuing
Subtotal: M240 Series System Improvements	51,693 / 164.817	1,735 / 1.784	2,800 / 4.577	5,184 / 6.940	- /0.007	5,184 / 6.947	7,310 / 10.315	3,735 / 6.635	2,851 / 5.358	1,199 / 3.390	Continuing	Continuing
Subtotal: Procurement, All Modification Items	51,693 / 164.817	1,735 / 1.784	2,800 / 4.577	5,184 / 6.940	- /0.007	5,184 / 6.947	7,310 / 10.315	3,735 / 6.635	2,851 / 5.358	1,199 / 3.390	Continuing	Continuing
nstallation												
Subtotal: Installation	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- /
Total Total												
Total Cost (Procurement + Support + Installation)	164.817	1.784	4.577	6.940	0.007	6.947	10.315	6.635	5.358	3.390	Continuing	Continuing

LI 3030GZ1300 - M240 Medium Machine Gun MODS

Army

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xhibit P-3a, Individu	al Modification: PB	2019 Army				Date: February 2018	3
ppropriation / Budge 033A / 02 / 20	et Activity / Budget	Sub Activity:	P-1 Line Item Num 3030GZ1300 / M240	ber / Title:) Medium Machine Gu	Modification Number / Title: GZ1300 / M240 Series System Improvements		
Code (A=Service Ready, B=No	ot Service Ready) : A			MDAP/MAIS Co	ode:	'	
odification Item 1 of 1: M	240 Series System Improv	vements					
anufacturer Information							
anufacturer Name: N/A				Manufacturer Location: N/	'A		
Iministrative Leadtime (in N	Months): 6			Production Leadtime (in M	fonths): 7		
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
ontract Dates	Mar 2017	Mar 2018	Mar 2019	Mar 2020	Mar 2021	Mar 2022	Mar 2023
elivery Dates	Oct 2017	Oct 2018	Oct 2019	Oct 2020	Oct 2021	Oct 2022	Oct 2023

P-1 Line #34

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Exhibit P-40, Budget Line Item Justification: PB 2019 Army

Date: February 2018

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

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

3181GZ1500 / Sniper Rifles Modifications

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

Program Elements for Code B Items: 0604601A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

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

Zino Rom mb/ ii /mi/ iio oodor ii// i												
	Prior			FY 2019	FY 2019	FY 2019					То	
Resource Summary	Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	39.585	1.963	1.488	2.747	-	2.747	0.958	1.932	1.890	1.926	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	39.585	1.963	1.488	2.747	-	2.747	0.958	1.932	1.890	1.926	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	39.585	1.963	1.488	2.747	-	2.747	0.958	1.932	1.890	1.926	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	or informational p	urposes 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)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

Program to conduct investigative engineering studies, procure modifications or conversions of sniper weapons and related system components, Advanced Sniper Accessory Kit (ASAK) items, M151 Spotting Scope System, Tactical Tripod Kit (TTK) components, sniper optics, laser range finders, and ballistic compensating 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, an accompanying Accessory Interface Mounting kit (AIM), and improved capabilities including an enhanced Army common mil-radian 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 intelligent rails, ballistic chronographs, Ballistic Weather Meter (BWM), light weight barrels, fire controls, muzzles with suppressors, other components, and support costs. The current army fleet of sniper weapons, consisting of the M14 Enhanced Battle Rifle (EBR) as interim Squad Designated Marksman weapon, the M110 Semi-Automatic Sniper System (SASS), the 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. Sniper upgrades seek to enhance sniper mission capability, effectiveness, and survivability by extending the sniper's influence through emerging technologies in perfecting ballistics with exacting hardware and precise calculations, reducing sniper team burden through decreased weight and enhanced ergonomics, portability, signature-reduction, faster more precise target reconnaissance, surveillance, and target acquisition (RSTA) and precision aiming with automated ballistic prediction systems. Upgrades also support sniper/spotter mission collaboration with information sharing of targets and better situational awareness.

Secondary	/ Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	1.963	1.488	2.747	-	2.747	0.958	1.932	1.890	1.926
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	1.963	1.488	2.747	-	2.747	0.958	1.932	1.890	1.926

Justification:

FY 2019 Base procurement dollars in the amount of \$2.747 million supports the Active Army through engineering studies and procurement of weapon conversions using engineering change proposals (ECP's), modifications or upgrades and additional components to be included in Advanced Sniper Accessory Kits (ASAK) and M151 Spotting Scope System, such as the Ballistic Weather Meter (BWM), Tripod Weapon Cradle, and the Accessory Interface Mounting (AIM) kit, respectively. Continued support for modifications of the M110 SASS, M2010 ESR, and M107 LRSR Modifications. These studies, modifications, and

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Exhibit P-40, Budget Line Item Justification: PB 20	019 Army		Date: February 2018	3
Appropriation / Budget Activity / Budget Sub Activity / Budget Sub Activity / BA 02: Weap Vehicles / BSA 20: Mod of Weapons and Other Comb	oons and Other Combat	P-1 Line Item Num 3181GZ1500 / Snip	ber / Title: er Rifles Modifications	
ID Code (A=Service Ready, B=Not Service Ready): B	Program Elements for Code	B Items : 0604601A	Other Related Program Elements: N/A	
Line Item MDAP/MAIS Code: N/A			·	
upgrades provide a more full-spectrum and versatile suite of snipe include evaluation and/or validation of any proposed ECP's regard enhancements and also to procure samples for evaluation.				
In accordance with Section 1815 of the FY 2008 National Defense authorities.	e Authorization Act (P.L. 110-181), t	his item is homeland defense	missions, domestic emergency responses, and providi	ng military support to civil

LI 3181GZ1500 - Sniper Rifles Modifications Army

Program Elements for Code B Items: N/A

Exhibit P-40, Budget Line Item Justification: PB 2019 Army

Date: February 2018

Other Related Program Elements: N/A

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

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

3640GC0401 / M119 Modifications

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

Line Item MDAP/MAIS Code: N/A

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

Line item widar/wais code. N/A												
Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	331.630	37.243	12.678	5.704	-	5.704	6.559	2.087	-	-	-	395.901
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	331.630	37.243	12.678	5.704	-	5.704	6.559	2.087	-	-	-	395.901
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	331.630	37.243	12.678	5.704	-	5.704	6.559	2.087	-	-	-	395.901
(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:

The M119A3 Towed Howitzer provides direct fire support for the Infantry Brigade Combat Teams (IBCT). Funding in the M119A3 modifications budget supports the application of modernization system enhancements and includes the integration of digital fire control components previously type classified on other weapons. Other modifications to the howitzer include items such as: Recoil System Capability Package, to enhance survivability and durability by replacing the Buffer and Recuperator and modifying the suspension; Titanium firing platforms for enhanced durability; Fire Control Computer (FCC) covers to protect the FCC from damage; FCC thumb stick/mouse to allow FCC to remain mission capable with damaged touch screen; Resiliency and Software Assurance Modification to ensure robust Global Positioning System (GPS) capability; Software upgrade to accurately account for the effects of Blast Over Pressure; and radio modification which provides for the integration of a new Army software defined radio into the digital fire control system of the M119A3 howitzer. Funding in this program also supports the installation and retrofit of modification kits, training devices products and program management and technical support to the M119A3 Howitzer.

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Secondary Distribution		FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	
Army	Quantity	-	-	-	-	-	-	-	-	-	
	Total Obligation Authority	19.186	3.608	2.912	-	2.912	3.502	1.196	-	-	
ANG	Quantity	-	-	-	-	-	-	-	-	-	
	Total Obligation Authority	18.057	9.070	2.792	-	2.792	3.057	0.891	-	-	
Total:	Quantity	-	-	-	-	-	-	-	-	-	
Secondary Distribution	Total Obligation Authority	37.243	12.678	5.704	-	5.704	6.559	2.087	-	-	

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Exhibit P-40, Budget Line Item Justification: PB 2019 Army Date: February 2018

Program Elements for Code B Items: N/A

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

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

3640GC0401 / M119 Modifications

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

Line Item MDAP/MAIS Code: N/A

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

	Exhibits Schedule				Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Exhibit Type	t Title* Subexhibits CD Code		Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)						
P-3a	GC0401 / M119 Modifications (Increase Performance)		Α		- / 331.630	- / 37.243	- / 12.678	- / 5.704	- / -	- / 5.704
P-40	Total Gross/Weapon System Cost				- / 331.630	- / 37.243	- / 12.678	- / 5.704	- 1 -	- / 5.704
	Exhibits Schedule				FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)				
P-3a	GC0401 / M119 Modifications (Increase Performance)		Α		- / 6.559	- /2.087	- / -	- / -	- / -	- / 395.901
P-40	Total Gross/Weapon System Cost		- / 6.559	- / 2.087	- 1 -	- 1 -	- 1 -	- / 395.901		

^{*}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 sum exactly due to rounding.

Justification:

FY 2019 Base procurement dollars in the amount of \$5.704 million supports activities that include:

Retrofit activities of previously purchased Recoil System Capability Package. Recoil System Capability enhances the durability of the howitzer and addresses deficiencies in the legacy recoil system. Resiliency and Software Assurance Modification (RSAM) to the M119A3 Digital Fire control System. The RSAM is a software modification which provides a more robust capability to receive Global Positioning System (GPS) signal to enhance survivability.

Replacement radio integration hardware, (brackets and mounts) for the Digital Fire Control System. The radio currently in use on the howitzer is approaching obsolescence. The replacement radio will ensure continued ability to interface with the Fire Direction Center and receive accurate fire missions.

Program lifecycle management, coordination, synchronization, technical oversight, business functions for the M119 howitzer.

"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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Other Related Program Elements: N/A

Exhibit P-3a, Individual Modification: PB 2019 Army	Date: February 2018	
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 20	P-1 Line Item Number / Title: 3640GC0401 / M119 Modifications	Modification Number / Title: GC0401 / M119 Modifications

ID Code (A=Service Ready, B=Not Service Ready)	de (A=Service Ready, B=Not Service Ready):A								MDAP/MAIS Code:							
Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total				
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-				
Gross/Weapon System Cost (\$ in Millions)	331.630	37.243	12.678	5.704	-	5.704	6.559	2.087	-	-	-	395.901				
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-				
Net Procurement (P-1) (\$ in Millions)	331.630	37.243	12.678	5.704	-	5.704	6.559	2.087	-	-	-	395.901				
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-				
Total Obligation Authority (\$ in Millions)	331.630	37.243	12.678	5.704	-	5.704	6.559	2.087	-	-	-	395.901				
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	ne corresponding	budget request	s are documente	d elsewhere.)		:						
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-				
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-				

Description:

Modifications to M119A2 Howitzer.

Mod 1 (Digitization): Procurement of the Digital Fire Control System contracted separately for each major component, with various contract award dates. Application occurs in Battalion sets of 17 each over two-month periods.

Mod 2 (Recoil Capability Package): New recoil system which enhances the survivability of the M119. The recoil system upgrade consists of the recoil buffer, recuperator, and suspension modification.

Mod 3 (TADSS): 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.

Mod 4 (Power System): Procure new power supply for the M119A3 Digital Fire Control System. The modification increased system electrical power to meet system operating requirements for low temperature environments

Mod 5 (Durability): Procurement of: 502 each lightweight more durable titanium firing platforms, 502 each Fire Control Computer (FCC) covers to protect FCC from damage and, 250 each FCC thumb sticks/ mouse to allow FCCs with damaged touch screens to remain mission capable. Prior years optimized the design of the spades on the M119 howitzer to increase durability and decrease weight.

Mod 6 (Retrofit and Composite Fielding Activities): Retrofit current howitzer fleet with upgraded recoil capability package, Digital Fire Control System, Resiliency and Software Assurance Modification, Blast Over Pressure software upgrade and Software Defined Radio. Fielding of the Digital Fire Control System will complete in FY18, while other retrofit activities will continue through FY21.

Mod 7 (Program Management): Program management support to the M119A3 Howitzer: lifecycle management, coordination & synchronization of field artillery solutions, technical oversight of projects, and business management functions.

Mod 8 (Software, Cyber Security) Resiliency Software Assurance Modification (RSAM): Qualify the Resiliency and Software Assurance Modification to ensure a robust GPS capability on the M119 howitzer. Apply software upgrade to the GPS GB-GRAM receiver on the M119 fleet via a Modification Work Order. Upgrade software on the FCC to more accurately account for Blast Over Pressure effects on M119 crew and send a warning when safety limits approach.

Mod 9 (Digital Fire Control Tech Refresh) Procures integration hardware, such as cables and mounting brackets for software defined radio into digital fire control of M119 platform.

Secondary Distribution		FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	19.186	3.608	2.912	-	2.912	3.502	1.196	-	-
ANG	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	18.057	9.070	2.792	-	2.792	3.057	0.891	-	-
Total:	Quantity	-	-	-	-	-	-	-	-	-

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Exhibit P-3a, Individual Modification: PB 2019 Army					Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 20	P-1 Line Item 3640GC0401				Modification Number / Title: GC0401 / M119 Modifications
ID Code (A=Service Ready, B=Not Service Ready) : A			MDAP/MA	AIS Code:	
	-	EV 0040	EV 0040	EV 0040	

Appropriation / B 2033A / 02 / 20	udget Activity / Budget	Sub Activity:		tem Number 401 / M119 M			Modification Number / Title: GC0401 / M119 Modifications			
D Code (A=Service Read	ly, B=Not Service Ready): A									
Secon	dary Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Secondary Distribution	Total Obligation Authority	37.243	12.678	5.704	-	5.704	6.559	2.087	-	

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Exhibit P-3a, Individual Modification: PB 2019 ArmyDate: February 2018Appropriation / Budget Activity / Budget Sub Activity:
2033A / 02 / 20P-1 Line Item Number / Title:
3640GC0401 / M119 ModificationsModification Number / Title:
GC0401 / M119 Modifications

2033A / 02 / 20		00.000		Modification	GC04017 M119 Modifications							
D Code (A=Service Ready, B=Not Service Ready): A					MD							
Models of Systems Affected: M119A2/	A3 Howitzer	Modif	cation Typ	e: Increas	e Performa	ince	Re	lated RDT	&E PEs:			
	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ A										
Procurement											,	
Modification Item 1 of 9: Digitization												
A Kits												
Recurring												
Integration Prod/Init Spares	502 / 133.497	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	502 / 133.49
Logistics & Fielding	- / 16.883	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 0.000	- / 16.88
Program Management	- /11.409	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	- / 11.40
System Engineering	- / 19.576	- 1 -	- / -	- / -	- / -	- 1 -	- / -	- / -	- 1 -	- 1 -	- /0.000	- / 19.57
Engineering Change Orders (ECO)	- / 15.723	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	- <i>I</i> 15.72
Subtotal: Recurring	502 / 197.088	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	502 / 197.08
Subtotal: Digitization	502 / 197.088	- / -	- / -	- /0.000	- / -	- /0.000	- / -	- / -	- / -	- / -	- / -	502 / 197.08
Modification Item 2 of 9: Recoil Capability Package											•	,
A Kits												
Recurring												
Recoil System Upgrade	502 / 47.579	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	502 / 47.57
Subtotal: Recurring	502 / 47.579	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	502 / 47.57
Subtotal: Recoil Capability Package	502 / 47.579	- / -	- / -	- /0.000	- / -	- /0.000	- / -	- / -	- / -	- / -	- / -	502 / 47.57
Modification Item 3 of 9: Training Devices (TADSS)					1							1
A Kits												
Non-Recurring												
Training Devices	- /5.747	- /3.845	- /3.878	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	- / 13.47
Subtotal: Non-Recurring	- /5.747	- /3.845		- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- /13.47
Subtotal: Training Devices (TADSS)	- /5.747	- /3.845	- /3.878	- /0.000	- / -	- /0.000	- / -	- / -	- / -	- / -	- / -	- /13.47
Modification Item 4 of 9: Power System Management	:		I	I			I	I	I	I	l	l
A Kits												
Non-Recurring												
Power System Mods	502 / 6.815	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	502 / 6.81
Subtotal: Non-Recurring	502 / 6.815	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	502 / 6.81
Subtotal: Power System Management	502 / 6.815	- / -	- / -	- /0.000	- / -	- /0.000	- / -	- / -	- / -	- / -	- / -	502 / 6.8
Modification Item 5 of 9: Durability Modification			1	1	1		1					J
A Kits												

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Exhibit P-3a, Individual Modification: PB 2019 Army

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

Date: February 2018

Modification Number / Title:
3640GC0401 / M119 Modifications

GC0401 / M119 Modifications

ID Code (A=Service Ready, B=Not Service Ready): A MDAP/MAIS Code: Related RDT&E PEs: Models of Systems Affected: M119A2/A3 Howitzer **Modification Type:** Increase Performance FY 2019 То FY 2019 FY 2019 FY 2017 FY 2018 OCO FY 2020 FY 2021 FY 2022 FY 2023 **Prior Years** Base Total Complete Total Qtv (Each) I Qty (Each) I Qtv (Each) I **Financial Plan** Total Cost (\$ M) | Total Cost (\$ Total Cost (\$ M) Total Cost (\$ M) Total Cost (\$ M) Recurring Spades - /2.335 - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- /0.000 - /2.335 - / -- / -- / -- /2.335 - / -- / -- / -- / -- / -- / -- / -- /2.335 Subtotal: Recurring Non-Recurring Fire Control Computer Thumbsticks - 1 -250 / 1.658 - 1 -- 1 -- 1 -- / -- / -- / -- 1 -- / -- /0.000 250 / 1.658 - 1 -- 1 -- 1 -- 1 -- 1 -Titanium Firing Platforms - 1 -502 / 24.769 - 1 -- 1 -- 1 -- /0.000 502 / 24.769 Fire Control Computer Cover - 1 -502 / 1.443 - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- /0.000 502 / 1.443 1.254 / 27.870 - / -1.254 / 27.870 Subtotal: Non-Recurring - / -- / -- / -- / -- / -- / -- / -- / -- / -- /2.335 1,254 / 27.870 - / -- /0.000 - / -- /0.000 - / -- / -- / -- / -1,254 / 30.205 - / -Subtotal: Durability Modification Modification Item 6 of 9: Retrofit and Composite Fielding Activities A Kits Recurring Retrofit and Composite Fielding Activiti - 172.066 - /2.200 - /8.800 - /2.171 - 1 -- /2.171 - / 1.684 - / 0.822 - 1 -- /0.000 - /87.743 - /72.066 - /2.200 - /8.800 - /2.171 - / -- /2.171 - /1.684 - /0.822 - / -- / -- / -- /87.743 Subtotal: Recurring Subtotal: Retrofit and Composite Fielding Activities - /72.066 - /2.200 - /8.800 - /2.171 - / -- /2.171 - /1.684 - /0.822 - / -- / -- / -- /87.743 Modification Item 7 of 9: Program Management A Kits Recurring Program Management - 1 -- 1 -- 1 -- /1.003 - 1 -- /1.003 - /1.122 - / 1.265 - 1 -- 1 -- /0.000 - /3.390 - / -- / -- / -- /1.003 - / -- /1.003 - /1.122 - /1.265 - / -- / -- / -- /3.390 Subtotal: Recurring - / -- / -- / -- /1.003 - / -- /1.003 - /1.122 - /1.265 - / -- / -- / -- /3.390 Subtotal: Program Management Modification Item 8 of 9: Software, Cyber Security A Kits Non-Recurring Blast Over Pressure Mitigation Software - /3.328 - 1 -- 1 -- 1 -- / -- 1 -- 1 -- 1 -- /0.000 - /3.328 - 1 -- / -**RSAM** - 1 -- 1 -- 1 -- 1 -- 1 -- / 0.683 - 1 -- /0.000 - / 0.683 - /3.328 - / -- / -- /0.683 - / -- / -- / -- / -- /4.011 Subtotal: Non-Recurring - / -- / -- / -Subtotal: Software, Cyber Security - / -- /3.328 - / -- /0.000 - / -- /0.000 - /0.683 - / -- / -- / -- / -- /4.011 Modification Item 9 of 9: Digital Fire Control Tech Refresh A Kits

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Exhibit P-3a, Individual Modification: PB 2019 Army	Exhibit P-3a, Individual Modification: PB 2019 Army								
		Modification Number / Title:							
2033A / 02 / 20	3640GC0401 / M119 Modifications	GC0401 / M119 Modifications							

ID Code (A=Service Ready, B=Not Service Ready): A			MDAP/MAIS Code:									
Models of Systems Affected: M119A2//	A3 Howitzer	Modifi	cation Typ	Re	lated RDT	&E PEs:						
	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)											
Non-Recurring												_
Software Defined Radio	- 1 -	- / -	- 1 -	- /2.530	- 1 -	- /2.530	43 / 3.070	- 1 -	- 1 -	- 1 -	- /0.000	43 / 5.600
Subtotal: Non-Recurring	- / -	- / -	- / -	- /2.530	- / -	- /2.530	43 / 3.070	- / -	- / -	- / -	- / -	43 / 5.600
Subtotal: Digital Fire Control Tech Refresh	- / -	- / -	- / -	- /2.530	- / -	- /2.530	43 / 3.070	- / -	- / -	- / -	- / -	43 / 5.600
Subtotal: Procurement, All Modification Items	1,506 / 331.630	1,254 / 37.243	- /12.678	- /5.704	- / -	- /5.704	43 / 6.559	- /2.087	- / -	- / -	- / -	2,803 / 395.901
Installation												
Subtotal: Installation	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
Total												•
Total Cost (Procurement + Support + Installation)	331.630	37.243	12.678	5.704	-	5.704	6.559	2.087	-	-	-	395.901

Exhibit P-3a, Indivi	dual Modification: P	B 2019 Army				Date: February 2018	
	dget Activity / Budge	et Sub Activity:					
ID Code (A=Service Ready, I	B=Not Service Ready):A		1	MDAP/MAIS Co	ode:		
Modification Item 1 of 9	: Digitization						
Manufacturer Information	on						
Manufacturer Name: Vari	ous			Manufacturer Location: Va	rious		
Administrative Leadtime	(in Months): 4			Production Leadtime (in M	lonths): 11		
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates							
Delivery Dates							
Exhibit P-3a, Individual Modification: PB 2019 Army Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Modification Number / Title: GC0401 / M119 Modification S GC0401 / M119 Mcdification S GC0401 / M119							
Method of Implementati	on (Organic): Organic	Quantity: 0					

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Exhibit P-3a, Indivi	dual Modification: P	B 2019 Army				Date: February 2018	<u> </u>
Appropriation / Bud 2033A / 02 / 20	dget Activity / Budge	et Sub Activity:					
ID Code (A=Service Ready, I	B=Not Service Ready):A		1	MDAP/MAIS Co	ode:		
Modification Item 2 of 9	: Recoil Capability Package	e					
Manufacturer Information	on						
Manufacturer Name: Vari	ous			Manufacturer Location: Va	rious		
Administrative Leadtime	(in Months): 4			Production Leadtime (in M	lonths): 2		
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates							
Delivery Dates							
MDAP/MAIS Code: Modification Item 2 of 9: Recoil Capability Package Manufacturer Information Manufacturer Name: Various Administrative Leadtime (in Months): 4 Dates FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2022 Contract Dates							
Method of Implementati	ion (Organic): Organic				Installation (Quantity: 0	

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Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 20 ID Code (A=Service Ready, B=Not Service Ready): A Modification Modification MDAP/MAIS Code: Modification Item 3 of 9: Training Devices (TADSS) Manufacturer Information Manufacturer Name: Organic Administrative Leadtime (in Months): 9 Modification Modification Modifications Modificat				UNCL	LASSIFIED			
2033A / 02 / 20 ID Code (A=Service Ready, B=Not Service Ready): A Modification Item 3 of 9: Training Devices (TADSS) Manufacturer Information Manufacturer Name: Organic Administrative Leadtime (in Months): 9 Production Leadtime (in Months): 1 Dates FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2020 Contract Dates Jun 2016 Jun 2017 Delivery Dates Jul 2016 Jul 2017 Installation Information	P-3a, Individual	Modification: P	B 2019 Army				Date: February 2018	
Modification Item 3 of 9: Training Devices (TADSS) Manufacturer Information Manufacturer Name: Organic Administrative Leadtime (in Months): 9 Production Leadtime (in Months): 1 Dates FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY		Activity / Budge	et Sub Activity:				Modification Number GC0401 / M119 Mod	
Manufacturer Information Manufacturer Name: Organic Administrative Leadtime (in Months): 9 Production Leadtime (in Months): 1 Dates FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2020 Contract Dates Jun 2016 Jun 2017 Delivery Dates Jul 2016 Jul 2017	(A=Service Ready, B=Not S	Service Ready):A			MDAP/MAIS C	ode:		
Manufacturer Name: Organic Idministrative Leadtime (in Months): 9 Dates FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2020 FY 2020 FY 2021 FY 2020 FY 2020 FY 2021 FY 2020 FY 2021 FY 2020 FY 2020 FY 2021 FY 2020 FY 2020 FY 2021 FY 2020 FY 2021 FY 2020 FY 2020 FY 2021 FY 2020	tion Item 3 of 9: Train	ning Devices (TADSS	<u>;)</u>					
Production Leadtime (in Months): 1 Dates FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2020 Contract Dates Jun 2016 Jun 2017 Delivery Dates Jul 2016 Jul 2017 Description Information	turer Information							
Dates FY 2017 FY 2018 FY 2019 FY 2020 FY 2021 FY 2020 ontract Dates Jun 2016 Jun 2017 Image: Contract Dates of the property of the propert	turer Name: Organic				Manufacturer Location: V	/arious		
contract Dates Jun 2016 Jun 2017 relivery Dates Jul 2016 Jul 2017 Installation Information	rative Leadtime (in Mo	onths): 9			Production Leadtime (in I	Months): 1		
netivery Dates Jul 2016 Jul 2017 Installation Information	Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
nstallation Information	Dates	Jun 2016	Jun 2017					
	Dates	Jul 2016	Jul 2017					
	ion Information							
installation (organic). Organic		Pranic): Organic				Installation	Quantity: 0	
	(-							

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Exhibit P-3a, Indivi	dual Modification: P	B 2019 Army				Date: February 2018	<u> </u>
Appropriation / Bud 2033A / 02 / 20	dget Activity / Budge	et Sub Activity:					
ID Code (A=Service Ready, B	B=Not Service Ready) : A		- 1	MDAP/MAIS Co	ode:		
Modification Item 4 of 9	: Power System Managem	ent					
Manufacturer Information	on						
Manufacturer Name: TBD)			Manufacturer Location: TB	BD		
Administrative Leadtime (′in Months): 4			Production Leadtime (in M	lonths): 2		
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates							
Delivery Dates							
Method of Implementati	on (Organic): Organic				Installation (Quantity: 0	

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Exhibit P-3a, Indivi	idual Modification: P	B 2019 Army				Date: February 2018	3						
Appropriation / Bu 2033A / 02 / 20	dget Activity / Budge	et Sub Activity:	P-1 Line Item Nu 3640GC0401 / M										
D Code (A=Service Ready,	B=Not Service Ready) : A			MDAP/MAIS Co	ode:	·							
Modification Item 5 of 9	: Durability Modification												
anufacturer Information	on			Date: February 2018 wmber / Title: Modification Number / GC0401 / M119 Modification MDAP/MAIS Code: Manufacturer Location: Hampton, VA Production Leadtime (in Months): 14 FY 2020 FY 2021 Installation Quantity: 0									
lanufacturer Name: How	wmet Corporation			Manufacturer Location: Hampton, VA									
dministrative Leadtime	(in Months): 4			Production Leadtime (in M	Months): 14								
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023						
Contract Dates	Jan 2017												
elivery Dates	Mar 2018												
nstallation Information													
lethod of Implementati					Installation	Quantity: 0							

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			UNCL	ASSIFIED			
Exhibit P-3a, Indiv	idual Modification: P	B 2019 Army				Date: February 2018	3
Appropriation / Bu 2033A / 02 / 20	dget Activity / Budge	et Sub Activity:	P-1 Line Item Nu 3640GC0401 / M ²			Modification Numb GC0401 / M119 Mod	
D Code (A=Service Ready,	B=Not Service Ready) : A		'	MDAP/MAIS C	ode:	1	
lodification Item 6 of 9	: Retrofit and Composite Fi	elding Activities		_			
lanufacturer Informati	on						
lanufacturer Name: TBI)			Manufacturer Location: Va	arious		
dministrative Leadtime	(in Months): 4			Production Leadtime (in N	Months): 2		
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates	Jan 2017	Jan 2018	Jan 2019	Jan 2020	Jan 2021		
Delivery Dates	Mar 2017	Mar 2018	Mar 2019	Mar 2020	Mar 2021		

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			UNCL	ASSIFIED			
Exhibit P-3a, Indiv	idual Modification: Pl	3 2019 Army				Date: February 2018	}
Appropriation / Bu 2033A / 02 / 20	dget Activity / Budge	t Sub Activity:	P-1 Line Item Nun 3640GC0401 / M1			Modification Number GC0401 / M119 Mod	
D Code (A=Service Ready,	, B=Not Service Ready) : A			MDAP/MAIS Co	ode:	'	
Modification Item 7 of 9	9: Program Management						
Manufacturer Informati	ion						
Manufacturer Name: NA				Manufacturer Location: NA	A		
Administrative Leadtime	(in Months):			Production Leadtime (in M	Months):		
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates			Oct 2018	Oct 2019	Oct 2020		
Delivery Dates			Oct 2018	Oct 2019	Oct 2020		

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FIRM BOLL WILLIAM RECUIPED CO. A.	Data. Fahmuam. 200	
Exhibit P-3a, Individual Modification: PB 2019 Army	Date: February 201	18
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 20 P-1 Line Item Number / Title: 3640GC0401 / M119 Modifications	Modification Num GC0401 / M119 Mo	
D Code (A=Service Ready, B=Not Service Ready): A MDAP/MAIS Code:		
Modification Item 8 of 9: Software, Cyber Security		
anufacturer Information		
lanufacturer Name: NA Manufacturer Location: NA		
dministrative Leadtime (in Months): 6 Production Leadtime (in Months):		
Dates FY 2017 FY 2018 FY 2019 FY 2020	FY 2021 FY 2022	FY 2023
Contract Dates Mar 2017 Mar 2020		
elivery Dates Mar 2017 Mar 2020		
nstallation Information		
	Installation Quantity: 0	

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Exhibit P-3a, Indivi	dual Modification: P	B 2019 Army				Date: February 2018	3		
Appropriation / Bud 2033A / 02 / 20	dget Activity / Budge	et Sub Activity:	P-1 Line Item Nur 3640GC0401 / M1			Modification Number GC0401 / M119 Mod			
D Code (A=Service Ready, I	B=Not Service Ready): A		·	MDAP/MAIS Co	ode:	·			
Modification Item 9 of 9	Digital Fire Control Tech	Refresh							
lanufacturer Information	on								
anufacturer Name: TBD				Manufacturer Location: TB	BD				
dministrative Leadtime (in Months):			Production Leadtime (in Months):					
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023		
ontract Dates			Nov 2018	Nov 2019					
elivery Dates									
stallation lufoussation									
stallation Information									
ethod of Implementati	on (Organic): Organic				Installation	Quantity: 0			

LI 3640GC0401 - M119 Modifications Army

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Exhibit P-40, Budget Line Item Justification: PB 2019 Army Date: February 2018

Program Elements for Code B Items: N/A

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

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

7054G02100 / Mortar Modification

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

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

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

Line item widai hiialo oode. N/A												
Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	121.482	12.118	3.998	3.965	-	3.965	-	-	-	-	-	141.563
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	121.482	12.118	3.998	3.965	-	3.965	-	-	-	-	-	141.563
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	121.482	12.118	3.998	3.965	-	3.965	-	-	-	-	-	141.563
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	ne corresponding	g budget request	s are documente	ed elsewhere.)	Ť			
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	_
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	65.524	17.238	15.992	15.672	-	15.672	-	-	-	-	-	46.262

Description:

Mortar System Modifications for 60mm Light Weight M224A1, 81mm Light Weight M252A1, 120mm M120A1/M121 Mortar Weapon Systems, Aiming Posts and Lights (tritium free) for all mortar calibers, Handle and Firing Mechanism improvement for the M224A1 mortar, Range Indicators to include 60mm HE Enhanced Fragment (EF) M1061 markings, and the M8A1 patrolling baseplate for the 60mm M224A1 mortar.

Justification:

FY 2019 Base procurement dollars in the amount of \$3.965 million supports the procurement of 253 improved Handle and Firing Mechanisms (H&FM) for use with the M224A1 lightweight 60mm mortar, associated production, and fielding supports. The Mortar Modification support funds are essential to meet US Army requirements to modernize mortar systems currently fielded to Infantry Brigade Combat Teams (IBCTs), Stryker Brigade Combat Teams (SBCTs), Armored Brigade Combat Teams (ABCTs), as well as the Special Forces Groups and Ranger Regiment.

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-40, Budget Line Item Justification: PB 2019 Army

Date: February 2018

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

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

9280GC0925 / Modifications Less Than \$5.0m (WOCV-WTCV)

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

Program Elements for Code B Items: 0604601A Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

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

	Prior			FY 2019	FY 2019	FY 2019					То	
Resource Summary	Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	203.103	3.157	2.219	5.577	-	5.577	5.089	3.386	3.158	3.150	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	203.103	3.157	2.219	5.577	-	5.577	5.089	3.386	3.158	3.150	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	203.103	3.157	2.219	5.577	-	5.577	5.089	3.386	3.158	3.150	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	ne corresponding	budget request	s are documente	d elsewhere.)	•			1
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	592.137	-	-	-	-	-	-	-	-	-	Continuing	Continuing

Description:

This program procures modifications of small arms with a cost less than \$5.000 million to include the procurement of accessory components for individual weapons, crew served weapons, sniper weapons, handguns, shotguns, optics, protective lens coatings, mounting systems and mount improvements, bipods, tripods and tripod improvements/upgrades. 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 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. This will be accomplished thru a Maintenance Work Order (MWO). 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. An engineering study is on-going to improve performance of this lightweight tripod through a Maintenance Work Order. 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. An engineering study will investigate these issues and provide design alternatives.

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Exhibit P-40, Budget Line Item Justification: PB 2019 Army

Date: February 2018

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

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

9280GC0925 / Modifications Less Than \$5.0m (WOCV-WTCV)

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

Program Elements for Code B Items: 0604601A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

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

	Exhibits Schedule				Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-3a	GC0925 / Modifications Less Than \$5.0M (Increase performance)		Α		- / 203.103	- / 3.157	- /2.219	- / 5.577	- / -	- / 5.577
P-40	Total Gross/Weapon System Cost		- / 203.103	- / 3.157	- / 2.219	- / 5.577	- 1 -	- / 5.577		
	Exhibits Schedule			FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total	
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-3a	GC0925 / Modifications Less Than \$5.0M (Increase performance)		Α		- /5.089	- / 3.386	- / 3.158	- / 3.150	Continuing	Continuing
	P-40 Total Gross/Weapon System Cost				- / 5.089	- / 3.386	- / 3.158	- /3.150	Continuing	Continuing

^{*}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 sum exactly due to rounding.

Justification:

FY 2019 Base procurement dollars in the amount of \$5.577 million supports the Active Army by procuring 4,595 M192 MWO Kits to modify fielded systems. The M192 MWO Kit delivers a system improvement to this lightweight tripod. Fielded in 2005, the M192 is no longer compatible with the various body armor designs fielded in recent years. The M192 MWO Kit addresses identified shortcomings in the design and provides increased height of the pintle as well as improved performance of the traversing and elevation mechanism. Funding also supports the M197 MWO Kit that upgrades 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.

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 2019 Army		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 20	P-1 Line Item Number / Title: 9280GC0925 / Modifications Less Than \$5.0m (WOCV-	Modification Number / Title: GC0925 / Modifications Less Than \$5.0M
2000/17 027 20	WTCV)	COUSE 7 Modifications 2005 Than \$6.0M

ID Code (A=Service Ready, B=Not Service Ready)	Code (A=Service Ready, B=Not Service Ready): A						MDAP/MAIS Code:					
Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	203.103	3.157	2.219	5.577	-	5.577	5.089	3.386	3.158	3.150	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	203.103	3.157	2.219	5.577	-	5.577	5.089	3.386	3.158	3.150	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	203.103	3.157	2.219	5.577	-	5.577	5.089	3.386	3.158	3.150	Continuing	Continuing
(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)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	592.137	-	-	-	-	-	-	-	-	-	Continuing	Continuing

Description:

This program procures modification of small arms with a cost less than \$5.000 million to include the procurement of accessory components of snipers, optics, mounting systems, bipods, and tripods. The M197 MWO Kit 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 delivers a system improvement to this lightweight tripod. It will address identified shortcomings in the design and provide increased height of the pintle as well as improved performance of the traversing and elevation mechanism.

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Exhibit P-3a, Individual Modification: PB 2019 Army Date: February 2018 Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: **Modification Number / Title:** 9280GC0925 / Modifications Less Than \$5.0m (WOCV-2033A 1 02 1 20 GC0925 / Modifications Less Than \$5.0M WTCV) MDAP/MAIS Code: ID Code (A=Service Ready, B=Not Service Ready): A Models of Systems Affected: Small Arms Weapons Modification Type: Increase performance Related RDT&E PEs: FY 2019 FY 2019 FY 2019 To **Prior Years** FY 2017 **FY 2018** Base oco Total FY 2020 FY 2021 **FY 2022** FY 2023 Complete Total Qtv (Each) I **Financial Plan** Total Cost (\$ M) | Total Cost (\$ Total Cost (\$ M) Total Cost (\$ M) **Procurement** Modification Item 1 of 8: M150 Rifle Combat Optic (RCO) B Kits Recurring M150 Rifle Combat Optic (RCO) 36.223 / 11.670 - / -- 1 -- 1 -- / -- / -- 1 -- / -- / -- / 0.000 | 36.223 / 11.670 - / 0.400 - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- /0.000 - /0.400 **Engineering Support** Testing - /0.200 - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- /0.000 - /0.200 - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- / 0.300 Integrated Logistical Support - / 0.300 - 1 -- 1 -- 1 -- /0.000 - / 0.300 - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- /0.000 - /0.300 - / -- 1 -- / -36.223 / 12.870 - / -- / -- / -- / -- / -- / -- / -- / -- / -36.223 / 12.870 Subtotal: Recurring 36.223 / 12.870 Subtotal: M150 Rifle Combat Optic (RCO) - / -- / -- /0.000 - / -- /0.000 - / -- / -- / -36.223 / 12.870 Modification Item 2 of 8: Sniper Components and Accessories B Kits Recurring Sniper Components and Accessories 1,226 / 0.561 - 1 -- 1 -- 1 -- 1 -- / -- 1 -- 1 -- 1 -- 1 -- /0.000 1,226 / 0.561 - 1 -- /0.100 - 1 -- / -- / -- 1 -- 1 -- 1 -- / -- 1 -- /0.000 - /0.100 **Engineering Support** - / 0.100 - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- /0.000 - / 0.100 Integrated Logistical Support - / 0.100 - 1 -- 1 -- 1 -- / -- 1 -- 1 -- 1 -- 1 -- / -- /0.000 - / 0.100 - 1 -- / 0.100 - 1 -- 1 -- 1 -- 1 -- 1 -- /0.000 - /0.100 Fielding - 1 -- 1 -- 1 -- / -- / -- / -- / -- / -- / -1.226 / 0.961 - / -- / -- / -- / -1.226 / 0.961 Subtotal: Recurring 1.226 / 0.961 - / -- / -- /0.000 - / -- /0.000 - / -- / -- / -- / -- / -1.226 / 0.961 Subtotal: Sniper Components and Accessories Modification Item 3 of 8: M145 Machine Gun Optic B Kits Recurring M145 Machine Gun Optic 37,349 / 23.900 - 1 -- 1 -- 1 -- 1 -- 1 -- / -- 1 -- 1 -- / -- / 0.000 | 37,349 / 23.900 - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -Support Equipment - /3.200 - 1 -- 1 -- / 0.000 - /3.200 Integrated Logistical Support - / 0.300 - 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- 1 -- /0.000 - /0.300 Fielding - / 0.417 - 1 -- 1 -- 1 -- 1 -- 1 -- / -- 1 -- 1 -- / -- /0.000 - / 0.417 - / -- / -- / -- / -- / -Subtotal: Recurring 37,349 / 27.817 - / -- / -- / -- / -37,349 / 27.817 Subtotal: M145 Machine Gun Optic 37,349 / 27.817 - / -- / -- /0.000 - / -- /0.000 - / -- / -- / -- / -37,349 / 27.817

LI 9280GC0925 - Modifications Less Than \$5.0m (WOCV-WTCV... Army

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Exhibit P-3a, Individual Modification: PB 2019 Army

Appropriation / Budget Activity / Budget Sub Activity:

2033A / 02 / 20

P-1 Line Item Number / Title:
9280GC0925 / Modifications Less Than \$5.0m (WOCV-WTCV)

Modification Number / Title:
GC0925 / Modifications Less Than \$5.0M

$\textbf{ID Code} \ (\textbf{A=Service Ready}, \textbf{B=Not Service Ready}) \vdots A$					MD	AP/MAIS Co	ode:					
Models of Systems Affected: Small	Arms Weapons	Modifi	cation Typ	e: Increas	e performa	ance	Re	lated RDT	&E PEs:			
	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M										
Modification Item 4 of 8: Closed Mods												
A Kits												
Recurring												
Closed Mods	1 / 152.781	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	1 / 152.78
Subtotal: Recurring	1 / 152.781	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1 / 152.78
Subtotal: Closed Mods	1 / 152.781	- / -	- / -	- /0.000	- / -	- /0.000	- / -	- / -	- / -	- / -	- / -	1 / 152.78
Modification Item 5 of 8: Tripods												
B Kits												
Recurring												
Tripods	1,821 / 4.223	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	1,821 / 4.22
Engineering Support	- /1.256	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	- /1.25
Subtotal: Recurring	1,821 / 5.479	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	1,821 / 5.47
Subtotal: Tripods	1,821 / 5.479	- / -	- / -	- /0.000	- / -	- /0.000	- / -	- / -	- / -	- / -	- / -	1,821 / 5.47
Modification Item 6 of 8: M197 MWO Kits						'						
B Kits												
Recurring												
M197 MWO Kits	1,270 / 1.252	1,028 / 0.983	467 / 0.318	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	2,765 / 2.55
Engineering Support	- / 0.185	- / 0.239	- / 0.126	- / 0.185	- 1 -	- / 0.185	- / 0.210	- / 0.250	- 1 -	- 1 -	- /0.000	- /1.19
Program Management	- / 0.185	- / 0.254	- /0.206	- / 0.178	- 1 -	- / 0.178	- / 0.211	- /0.208	- 1 -	- 1 -	- /0.000	- /1.24
Integrated Logistical Support	- / 0.030	- / 0.030	- / 0.050	- / 0.075	- 1 -	- / 0.075	- /0.075	- / 0.060	- 1 -	- 1 -	- /0.000	- / 0.32
Modification Work Order Support	- / 0.285	- / 0.300	- / 0.250	- / 0.325	- 1 -	- / 0.325	- / 0.350	- / 0.300	- 1 -	- 1 -	- /0.000	- / 1.81
Testing (First Article)	- /0.020	- /0.070	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	- / 0.09
First Destination	- 1 -	- 1 -	- / 0.015	- / 0.015	- 1 -	- / 0.015	- / 0.015	- / 0.010	- 1 -	- 1 -	- /0.000	- / 0.05
ARDEC PIF	- 1 -	- / 0.150	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 0.000	- / 0.15
Subtotal: Recurring	1,270 / 1.957	1,028 / 2.026	467 / 0.965	- /0.778	- / -	- /0.778	- /0.861	- /0.828	- / -	- / -	- / -	2,765 / 7.41
Subtotal: M197 MWO Kits	1,270 / 1.957	1,028 / 2.026	467 / 0.965	- /0.778	- / -	- /0.778	- /0.861	- /0.828	- / -	- / -	- / -	2,765 / 7.41
Modification Item 7 of 8: M192 MWO Kits												
B Kits												
Recurring												
M192 MWO Kits	- 1 -	295 / 0.448	603 / 0.509	4,595 / 2.884	- 1 -	4,595 / 2.884	2,844 / 1.839	1,096 / 0.730	1,316 / 0.903	1,379 / 0.980	Continuing	Continuing
Engineering Support	- / 0.065	- 1 -	- / 0.135	- / 0.225	- 1 -	- / 0.225	- / 0.250	- / 0.250	- / 0.250	- / 0.250	- /0.000	- /1.42

Exhibit P-3a, Individual Modification: PB 2019 Army

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

Modification Number / Title:

2033A / 02 / 20 9280GC0925 / Modifications Less Than \$5.0m (WOCV-

WTCV)

0GC0925 / Modifications Less Than \$5.0m (WOCV-GC0925 / Modifications Less Than \$5.0M

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

MDAP/MAIS Code:

Models of Systems Affected: Small Ar	ms Weapons	Modifi	ication Typ	e: Increas	e performa	nce	Re	Related RDT&E PEs:				
	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M										
Program Management Support	- / 0.242	- / 0.261	- / 0.280	- / 0.785	- 1 -	- / 0.785	- / 0.670	- / 0.537	- / 0.499	- / 0.529	- /0.000	- /3.803
Engineering Study	- 1 -	- / 0.392	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	- / 0.392
Integrated Logistical Support	- 1 -	- 1 -	- 1 -	- / 0.050	- 1 -	- / 0.050	- / 0.060	- / 0.060	- / 0.060	- / 0.075	- /0.000	- / 0.305
Modification Work Order Support	- 1 -	- / -	- / 0.300	- / 0.425	- 1 -	- / 0.425	- / 0.450	- / 0.450	- / 0.450	- / 0.450	- /0.000	- / 2.52
Design Improvements	- / 0.499	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	- / 0.499
ARDEC PIF	- / 0.145	- 1 -	- / -	- /0.200	- 1 -	- /0.200	- / 0.250	- / 0.200	- / 0.250	- / 0.150	- /0.000	- / 1.19
Aberdeen Test Center	- / 0.150	- / -	- / -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- /0.000	- / 0.150
User Guides	- / 0.107	- 1 -	- 1 -	- /0.200	- 1 -	- / 0.200	- / 0.075	- / 0.175	- / 0.075	- / 0.075	- /0.000	- / 0.707
First Destination Transportation	- / 0.030	- / 0.030	- / 0.015	- / 0.030	- 1 -	- / 0.030	- / 0.060	- /0.006	- / 0.060	- / 0.030	- /0.000	- / 0.26
Subtotal: Recurring	- /1.238	295 / 1.131	603 / 1.239	4,595 / 4.799	- / -	4,595 / 4.799	2,844 / 3.654	1,096 / 2.408	1,316 / 2.547	1,379 / 2.539	Continuing	Continuing
Subtotal: M192 MWO Kits	- /1.238	295 / 1.131	603 / 1.239	4,595 / 4.799	- / -	4,595 / 4.799	2,844 / 3.654	1,096 / 2.408	1,316 / 2.547	1,379 / 2.539	Continuing	Continuing
Modification Item 8 of 8: M205 Tripod MWO												
B Kits												
Recurring												
M205 Tripod MWO	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	205 / 0.216	- 1 -	378 / 0.183	366 / 0.183	- /0.000	949 / 0.582
Engineering Support	- 1 -	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- / 0.041	- / 0.035	- / 0.036	- / 0.085	- /0.000	- / 0.19
Program Management	- 1 -	- / -	- / -	- 1 -	- 1 -	- 1 -	- / 0.052	- / 0.034	- / 0.056	- / 0.136	- /0.000	- / 0.27
Integrated Logistical Support	- 1 -	- / -	- / -	- 1 -	- 1 -	- 1 -	- / 0.030	- 1 -	- / 0.075	- / 0.075	- /0.000	- / 0.18
Modification Work Order Support	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 0.050	- / 0.040	- / 0.050	- / 0.125	- /0.000	- / 0.26
First Destination Transportation	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 0.010	- 1 -	- / 0.007	- / 0.007	- /0.000	- / 0.024
Subtotal: Recurring	- / -	- / -	- / -	- / -	- / -	- / -	205 / 0.399	- /0.109	378 / 0.407	366 / 0.611	- / -	949 / 1.526
Subtotal: M205 Tripod MWO	- / -	- / -	- / -	- /0.000	- / -	- /0.000	205 / 0.399	- /0.109	378 / 0.407	366 / 0.611	- / -	949 / 1.526
Subtotal: Procurement, All Modification Items	77,890 / 203.103	1,323 / 3.157	1,070 / 2.204	4,595 / 5.577	- / -	4,595 / 5.577	3,049 / 4.914	1,096 / 3.345	1,694 / 2.954	1,745 / 3.150	Continuing	Continuing
nstallation												
Modification Item 7 of 8: M192 MWO Kits	- 1 -	- / -	- / 0.015	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / -	- 1 -	- 1 -	- / 0.01
Modification Item 8 of 8: M205 Tripod MWO	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / 0.175	- /0.041	- / 0.204	- 1 -	- 1 -	- / 0.420
Subtotal: Installation	0 / 0.000	0/0.000	0 / 0.015	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.175	0 / 0.041	0 / 0.204	- / -	- / -	0 / 0.43
Total Total												
Total Cost (Procurement + Support + Installation)	203.103	3.157	2.219	5.577	-	5.577	5.089	3.386	3.158	3.150	Continuing	Continuing

Exhibit P-3a, Indivi	dual Modification: P	B 2019 Army				Date: February 2018	
Appropriation / Bud 2033A / 02 / 20	dget Activity / Budg	et Sub Activity:	P-1 Line Item Nu 9280GC0925 / Mo WTCV)	mber / Title: odifications Less Than \$	Modification Number / Title: GC0925 / Modifications Less Than \$5.0M		
ID Code (A=Service Ready, I	B=Not Service Ready) : A			MDAP/MAIS C	ode:		
Modification Item 1 of 8	: M150 Rifle Combat Optic	(RCO)					
Manufacturer Information	on						
Manufacturer Name: TRI	JICON, Inc			Manufacturer Location: V	Vixom, MI		
Administrative Leadtime ((in Months): 3			Production Leadtime (in I	Months): 4		
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates							
Delivery Dates							
Installation Information							
Method of Implementati	on (Organic): Installed by	Troops			Installation	Quantity: 0	

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Exhibit P-3a, Indivi	dual Modification: P	B 2019 Army				Date: February 2018	1
Appropriation / Bu 2033A / 02 / 20	dget Activity / Budge	et Sub Activity:	P-1 Line Item Nu 9280GC0925 / Mo WTCV)	imber / Title: odifications Less Than \$	Modification Number / Title: GC0925 / Modifications Less Than \$5.0M		
ID Code (A=Service Ready,	B=Not Service Ready):A			MDAP/MAIS C	ode:		
Modification Item 2 of 8	: Sniper Components and	Accessories		<u>. </u>			
Manufacturer Information	on						
Manufacturer Name: LEU	JPOLD & STEVENS, INC.			Manufacturer Location: B	eaverton, OR		
Administrative Leadtime	(in Months): 3			Production Leadtime (in I	Months): 4		
Dates	FY 2017	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	
Contract Dates							
Delivery Dates							
Installation Information							
Method of Implementati	ion (Organic): Installed by	Troops			Installation	Quantity: 0	

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Exhibit P-3a, Indivi	dual Modification: P	B 2019 Army				Date: February 2018	
Appropriation / Bu 2033A / 02 / 20	dget Activity / Budge	et Sub Activity:	P-1 Line Item Nu 9280GC0925 / M WTCV)	Imber / Title: odifications Less Than \$	Modification Number / Title: GC0925 / Modifications Less Than \$5.0M		
ID Code (A=Service Ready,	B=Not Service Ready):A			MDAP/MAIS C	ode:		
Modification Item 3 of 8	: M145 Machine Gun Optio	;					
Manufacturer Information	on						
Manufacturer Name: N/A				Manufacturer Location: N	/A		
Administrative Leadtime	(in Months): 6			Production Leadtime (in N	Months): 6		
Dates	FY 2017	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	
Contract Dates							
Delivery Dates							
Installation Information	ı						
Method of Implementati	ion (Organic): Installed by	Troops			Installation	Quantity: 0	
					,		

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Exhibit P-3a, Individ	dual Modification: P	B 2019 Army				Date: February 2018	
Appropriation / Buo 2033A / 02 / 20	dget Activity / Budg	et Sub Activity:	P-1 Line Item Nu 9280GC0925 / M WTCV)	Imber / Title: odifications Less Than \$	Modification Number / Title: GC0925 / Modifications Less Than \$5.0M		
ID Code (A=Service Ready, E	B=Not Service Ready): A		•	MDAP/MAIS C	ode:	·	
Modification Item 4 of 8:	Closed Mods			<u>. </u>			
Manufacturer Information	on						
Manufacturer Name: N/A				Manufacturer Location: N	I/A		
Administrative Leadtime (in Months):			Production Leadtime (in I	Months):		
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates							
Delivery Dates							
Installation Information							
Method of Implementation	on (Organic): Installed by	Troops			Installation	Quantity: 0	

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Exhibit P-3a, Individ	dual Modification: F	PB 2019 Army				Date: February 2018	
Appropriation / Bud 2033A / 02 / 20	dget Activity / Budg	et Sub Activity:	P-1 Line Item Nu 9280GC0925 / M WTCV)	Imber / Title: odifications Less Than \$	Modification Number / Title: GC0925 / Modifications Less Than \$5.0M		
ID Code (A=Service Ready, E	B=Not Service Ready) : A			MDAP/MAIS C	ode:		
Modification Item 5 of 8:	Tripods						
Manufacturer Information	on						
Manufacturer Name: Cap	co, Inc.			Manufacturer Location: G	Frand Junction, CO		
Administrative Leadtime (in Months): 6			Production Leadtime (in I	Months): 9		
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates							
Delivery Dates							
Installation Information							
Method of Implementation	on (Organic): Installed by	Troops			Installation	Quantity: 0	

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Exhibit P-3a, Indiv	idual Modification: P	B 2019 Army				Date: February 2018	3	
Appropriation / Bu 2033A / 02 / 20	dget Activity / Budge	et Sub Activity:	P-1 Line Item Nu 9280GC0925 / Mo WTCV)	mber / Title: odifications Less Than \$	\$5.0m (WOCV-	Modification Number / Title: GC0925 / Modifications Less Than \$5.0M		
ID Code (A=Service Ready,	B=Not Service Ready): A		•	MDAP/MAIS C	Code:			
Modification Item 6 of 8	3: M197 MWO Kits			<u>. </u>				
Manufacturer Informati	on							
Manufacturer Name: Imp	perial Tool & Machine / Savi	t Corp.		Manufacturer Location: (Columbia, NJ / Rockawa	ıy, NJ		
Administrative Leadtime	(in Months): 6			Production Leadtime (in	Months): 8			
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	
Contract Dates	Aug 2017	Mar 2018						
Delivery Dates	Apr 2018	Nov 2018						
Installation Information								
	ion (Organic): Installed by	Troops			Installation	Quantity: 0		
					*			

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LI 9280GC0925 - Modifications Less Than \$5.0m (WOCV-WTCV...

Exhibit P-3a, Indiv	vidual Modification: Pl	B 2019 Army				Date: February 2018	3		
Appropriation / Budget Activity / Budget Sub Activity: 2033A / 02 / 20			P-1 Line Item Nu 9280GC0925 / Mo WTCV)	mber / Title: odifications Less Than \$	Modification Number / Title: GC0925 / Modifications Less Than \$5.0N				
ID Code (A=Service Ready	, B=Not Service Ready): A			MDAP/MAIS (,				
Modification Item 7 of	8: M192 MWO Kits								
Manufacturer Informat	tion								
Manufacturer Name: Ca	apco, Inc.			Manufacturer Location: Grand Junction, CO					
Administrative Leadtime	e (in Months): 6			Production Leadtime (in	Months): 6				
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023		
Contract Dates	Contract Dates Jul 2017 Mar 2018			Mar 2020	Mar 2021	Mar 2022	Mar 2023		
Delivery Dates	Feb 2018	Dec 2018	Dec 2019	Oct 2020	Oct 2021	Oct 2022	Oct 2023		

Installation Information

Method of Implementation: Installed by Troops

	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	- 1 -	- 1 -	0 / 0.015	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	0 / 0.015
FY 2019	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2021	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2022	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2023	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	0 / 0.000	0 / 0.000	0 / 0.015	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	0 / 0.015

Installation Schedule

			FY 2	2017			FY 2	2018			FY 2	2019			FY 2	2020			FY 2	2021			FY 2	2022			FY 2	2023			
	PYS	Q1	Q2	Q3	Q4	тс	Tot																								
In	295	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	295
Out	295	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	295

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Exhibit P-3a, Individ	ual Modification: P	B 2019 Army				Date: February 2018	3
Appropriation / Bud 2033A / 02 / 20	get Activity / Budge	et Sub Activity:	P-1 Line Item Nu 9280GC0925 / M WTCV)	imber / Title: odifications Less Than \$	55.0m (WOCV-	Modification Numb GC0925 / Modification	er / Title: ons Less Than \$5.0M
ID Code (A=Service Ready, B=	Not Service Ready): A		•	MDAP/MAIS C	ode:		
Modification Item 8 of 8:	M205 Tripod MWO			<u>. </u>			
Manufacturer Information	1						
Manufacturer Name: N/A				Manufacturer Location: N	I/A		
Administrative Leadtime (ir	n Months):			Production Leadtime (in I	Months):		
Dates	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Contract Dates							
Delivery Dates							

Installation Information

Method of Implementation: Installed bt Troops

	· · · · · · · · · · · · · · · · · · ·											
	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Installation Cost	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)	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)
Prior Years	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	0 / 0.170	0 / 0.034	0 / 0.144	- 1 -	- 1 -	0 / 0.348
FY 2017	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	0 / 0.050	- 1 -	- 1 -	0 / 0.050
FY 2018	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	0 / 0.005	0 / 0.007	0 / 0.010	- 1 -	- 1 -	0 / 0.022
FY 2020	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2021	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2022	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2023	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	- 1 -	- 1 -	- 1 -	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.175	0 / 0.041	0 / 0.204	- 1 -	- 1 -	0 / 0.420

Installation Schedule

			FY 2	2017			FY 2	2018			FY 2	2019			FY 2	2020			FY 2	2021			FY 2	2022			FY 2	2023			
	PYS	Q1	Q2	Q3	Q4	TC	Tot																								
In	205	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	205
Out	205	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	205

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Exhibit P-40, Budget Line Item Justification: PB 2019 Army

Date: February 2018

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

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

1862GL3200 / Items Less Than \$5.0m (WOCV-WTCV)

Vehicles / BSA 30: Support Equipment & Facilities

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

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

	Prior			FY 2019	FY 2019	FY 2019					То	
Resource Summary	Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	130.984	2.331	5.075	3.174	1.397	4.571	1.337	2.777	2.880	2.988	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	130.984	2.331	5.075	3.174	1.397	4.571	1.337	2.777	2.880	2.988	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	130.984	2.331	5.075	3.174	1.397	4.571	1.337	2.777	2.880	2.988	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	e corresponding	budget requests	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	0.740	0.543	0.666	-	-	-	-	Continuing	Continuing

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/intelligent rails, weapon mounts/platforms, and adaptors and 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 and associated Basic Issue Items (BII), M500 Mossberg Shotguns, MP5KA Submachine Guns to include magazines, clamps, holsters, lanyards and cleaning kits. Funding will also purchase Non-Standard weapons to support the Regionally Aligned Forces (RAF) as well as world class Olympic Grade marksmanship weapons and accessories to support the Army Marksmanship Unit (AMU) and Army National Guard to include Biathlon Teams to maintain and procure the specialized target rifles, pistols and accessories: Air Rifles, 22 caliber Pistols and Rifles, Shooting glasses and scopes, Free Pistols, Shot Guns and bolt action rifles.

Secondar	y Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	2.331	5.075	3.174	1.397	4.571	1.337	2.777	2.880	2.988
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	2.331	5.075	3.174	1.397	4.571	1.337	2.777	2.880	2.988

Justification:

FY 2019 Base procurement dollars in the amount of \$3.174 million supports the Active Army by providing funding for M150 and M68 optics. The base funding also supports the Army Marksmanship Unit (AMU) and National Guard Biathlon Teams. The AMU competes worldwide on a regular basis. The man/weapon interface at this competitive level is important. Between competitions the AMU fires constantly to hone their skills and maintain their competitive edge. Weapons of all types are fired, and even with the extremely high level of maintenance provided, these weapons exceed their stated effective life projections faster. This requires the weapons to be coded out and replaced regularly. Base funding will also provide for the procurement and training of various Non-Standard Weapons to support the regionally engaged Active Army. These weapons are required to facilitate training of US Army units on host nation weapon systems prior to deployment in support of regionally aligned force missions. Starting in FY2019 the Army will procure Biathlon Rifles for the Army National Guard Biathlon Teams.

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Exhibit P-40, Budget Line Item Justification: PB 201	19 Army		Date: February 2018	
Appropriation / Budget Activity / Budget Sub Activi 2033A: Procurement of W&TCV, Army / BA 02: Weapo Vehicles / BSA 30: Support Equipment & Facilities		P-1 Line Item N 1862GL3200 / I	Number / Title: Items Less Than \$5.0m (WOCV-WTCV)	
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code E	Items: N/A	Other Related Program Elements: N/A	
Line Item MDAP/MAIS Code: N/A				
The FY2019 Overseas Contingency Operations (OCO) dollars in the Deterrence Initiative (EDI). Funding will support the procurement of		s COCOM requirement	for unit equipment sets to deter potential adversaries and support	ort the European
New Starts : Biathlon Rifles will be procured for the Army National G	Guard Biathlon Teams. Regionally	Aligned Forces (RAF) w	veapons will also be procured as Non-Standard Weapons.	
In accordance with Section 1815 of the FY 2008 National Defense A defense missions, domestic emergency responses, and providing m	Authorization Act (P.L. 110-181), th nilitary support to civil authorities.	is item is necessary for	use by the active and reserve components of the Armed Forces	s for homeland

LI 1862GL3200 - Items Less Than \$5.0m (WOCV-WTCV) Army

Exhibit P-40, Budget Line Item Justification: PB 2019 Army **Date:** February 2018

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

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

3270GC0050 / Production Base Support (WOCV-WTCV)

Vehicles / BSA 30: Support Equipment & Facilities

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

Line Item MDAP/MAIS Code: N/A

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

	Duisa			EV 0040	EV 0040	EV 0040					Т-	
Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	327.483	-	0.992	3.284	-	3.284	3.346	3.440	3.534	3.600	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	327.483	-	0.992	3.284	-	3.284	3.346	3.440	3.534	3.600	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	327.483	-	0.992	3.284	-	3.284	3.346	3.440	3.534	3.600	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	or informational p	ourposes only. Th	ne corresponding	budget request	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

This program provides funding to the Army Test and Evaluation Command (ATEC) to establish, modernize, expand or replace test facilities used in production testing of Weapons and Tracked Combat Vehicles and their components. It sustains Army production test capabilities through upgrade and replacement of instrumentation and equipment that is technologically and/or economically obsolete. Modernization of test instrumentation and equipment provides increased automation and efficiencies, improved data quality and quantity and cost avoidance to Army Program Managers. Programmed funding will be used to upgrade or replace production test instrumentation and equipment at Aberdeen Test Center (ATC), Aberdeen Proving Ground, MD; White Sands Test Center (WSTC), White Sands Missile Range, NM and Yuma Test Center (YTC), Yuma Proving Ground, AZ.

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 for 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 Rock Island Arsenal, IL; Watervliet Arsenal, NY; and General Dynamics-Armaments and Technical Products, Saco, ME. The Layaway of Industrial Facilities (LIF) and Maintenance of Laid-away Industrial Facilities (MLIF) funding supports unique and necessary equipment at Watervliet Arsenal, NY. This program also provides funding for the Arsenal Support Program Initiative.

Secondar	y Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	-	0.992	3.284	-	3.284	3.346	3.440	3.534	3.600
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	-	0.992	3.284	-	3.284	3.346	3.440	3.534	3.600

Justification:

FY 2019 Base procurement dollars in the amount of \$3.284M support the following: At ATC, replaces and upgrades video cameras, video recorders, digital video tracking systems and telemetry systems used to assess fire control system performance. At WSTC, provides badly needed upgrades to Directed Energy, High Power Electromagnetic Pulse and Lightning effects test simulators to provide a realistic threat

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Exhibit P-40, Budget Line Item Justification: PB 2	019 Army		Date: February 2018	
Appropriation / Budget Activity / Budget Sub Acti 2033A: Procurement of W&TCV, Army / BA 02: Weap Vehicles / BSA 30: Support Equipment & Facilities			Number / Title: / Production Base Support (WOCV-WTCV)	
ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code	B Items: N/A	Other Related Program Elements: N/A	
Line Item MDAP/MAIS Code: N/A				
is required to ensure complete and accurate test data is collected to Army Program Managers. At YTC, provides funding for the Ma the laboratory to retain the capabilities required to support testing	and safety and environmental hazar terial Analysis Laboratory to upgrade of advanced tactical vehicles and we e Authorization Act (P.L. 110-181), t	rds are minimized. Ben e analytical laboratory a eapon systems.	replaced is obsolete and has met or exceeded its economic life. This instruinefits of this project include increased test efficiencies and decreased costs analyzers, laboratory equipment, computing equipment, and software. This or use by the active and reserve components of the Armed Forces for home	and risks will permit
and promise	a., sapport of a matrix and a			

LI 3270GC0050 - Production Base Support (WOCV-WTCV) Army

Exhibit P-40, Budget Line Item Justification: PB 2019 Army

Date: February 2018

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

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

4010GC0076 / Small Arms Equipment (Soldier Enh Prog)

Vehicles / BSA 30: Support Equipment & Facilities

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

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

	Prior			FY 2019	FY 2019	FY 2019					То	
Resource Summary	Years	FY 2017	FY 2018	Base	oco	Total	FY 2020	FY 2021	FY 2022	FY 2023	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	111.698	3.155	1.573	1.640	-	1.640	1.673	1.706	1.738	1.738	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	111.698	3.155	1.573	1.640	-	1.640	1.673	1.706	1.738	1.738	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	111.698	3.155	1.573	1.640	-	1.640	1.673	1.706	1.738	1.738	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	e 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)	-	-	-	-	-	-	-	-	-	-	-	-

Description:

The Soldier Enhancement Program (SEP) was established in the Fiscal Year 1990 National Defense Authorization Act. The purpose of the SEP is to provide an impetus for increasing the combat effectiveness of our Army Infantryman/Soldiers through the procurement of lighter, more lethal weapons, and improved equipment including lighter, more comfortable loadbearing equipment, field gear, survivability items, communications equipment, navigational aids and training capabilities. SEP WTCV funding provides the means of procuring lighter, more lethal infantry weapons and various types of equipment designed to increase Soldiers' survivability and lethality.

Secondar	ry Distribution	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023
Army	Quantity	-	-	-	-	-	-	-	-	=
	Total Obligation Authority	3.155	1.573	1.640	-	1.640	1.673	1.706	1.738	1.738
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	3.155	1.573	1.640	-	1.640	1.673	1.706	1.738	1.738

Justification:

FY2019 Base procurement dollars in the amount of \$1.640 million support the procurement of approved COTS, GOTS and NDI hardware that include small arms, individual and crew served weapons, components, sights, and accessories for the purpose of Soldier 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."

UNCLASSIFIED