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

February 2015

Army

Justification Book of

Procurement of Ammunition, Army

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

PROCUREMENT OF AMMUNITION ARMY

Appropriation Language

For construction, procurement, production, modification, and modernization of ammunition, and accessories therefore; specialized equipment and training devices; expansion of public and private plants, including ammunition facilities, authorized by Sec 2854 of Title 10, United States Code, and land necessary therefore, for the foregoing purposes, and such lands and interest 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, Base $1,233,378 and OCO $192,040 to remain available for obligation until September 30, 2018.

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APPROPRIATION SUMMARY

APPROPRIATION	FY 2014	FY 2015	FY 2016	FY 2016 OCO	FY 2016 TOTAL	PAGE
	DOLLARS IN THOUSANDS					
Procurement of Ammunition, Army	1,598,967	1,156,382	1,233,378	192,041	1,425,419	3
TOTAL PROCUREMENT PROGRAM	**1,598,967**	**1,156,382**	**1,233,378**	**192,041**	**1,425,419**	

APPROPRIATION Procurement of Ammunition, Army

DOLLARS IN THOUSANDS

	ACTIVITY	FY 2014	FY 2015	FY 2016	FY 2016 OCO	FY 2016 TOTAL	PAGE
01	Ammunition	1,153,601	891,905	894,850	192,041	1,086,891	4
02	Ammunition production base support	445,366	264,477	338,528	0	338,528	7
	APPROPRIATION TOTALS	**1,598,967**	**1,156,382**	**1,233,378**	**192,041**	**1,425,419**	

APPROPRIATION **Procurement of Ammunition, Army** **ACTIVITY** 01 Ammunition

LINE NO	ITEM NOMENCLATURE	ID	FY 2014 QTY	FY 2014 COST	FY 2015 QTY	FY 2015 COST	FY 2016 QTY	FY 2016 COST	FY 2016 OCO QTY	FY 2016 OCO COST	FY 2016 TOTAL QTY	FY 2016 TOTAL COST
	Small/Medium Cal Ammunition											
1	CTG, 5.56MM, All Types (E00700)	A		73,254		34,943		43,489				43,489
2	CTG, 7.62MM, All Types (E02000)	A		53,571		12,418		40,715				40,715
3	CTG, Handgun, All Types (EA3000)	A		11,358		9,655		7,753				7,753
4	CTG, .50 Cal, All Types (E08000)	A		58,351		29,304		24,728		4,000		28,728
5	CTG, 25MM, All Types (E08200)	A		6,197		8,181		8,305				8,305
6	CTG, 30MM, ALL TYPES (ER8120)	A		110,033		87,667		34,330				34,330
7	CTG, 40MM, All Types (ER8001)	A		55,780		40,904		79,972				79,972
	SUB-ACTIVITY TOTAL			*368,544*		*223,072*		*239,292*		*4,000*		*243,292*
	Mortar Ammunition											
8	60MM Mortar, All Types (E89600)			51,629		46,742		42,898		11,700		54,598
9	81MM Mortar, All Types (E76000)			24,656		42,433		43,500		4,000		47,500
10	120MM Mortar, All Types (E25500)	B		60,780		39,365		64,372		7,000		71,372
	SUB-ACTIVITY TOTAL			*137,065*		*128,540*		*150,770*		*22,700*		*173,470*
	Tank Ammunition											
11	Cartridges, Tank, 105MM And 120MM, All Types (E22203)	A		121,550		101,900		105,541				105,541
	SUB-ACTIVITY TOTAL			*121,550*		*101,900*		*105,541*				*105,541*
	Artillery Ammunition											
12	Artillery Cartridges, 75MM & 105MM, All Types (E15101)	A		51,225		47,455		57,756		5,000		62,756
13	ARTILLERY PROJECTILE, 155MM, ALL TYPES (E89500)			47,902		62,023		77,995		10,000		87,995
14	Proj 155mm Extended Range M982 (E80100)	B		77,326		35,672		45,518				45,518
15	Artillery Propellants, Fuzes and Primers, All (E27501)	A		35,205		78,010		78,024		2,000		80,024
	SUB-ACTIVITY TOTAL			*211,658*		*223,160*		*259,293*		*17,000*		*276,293*
	Rockets											
16	Shoulder Launched Munitions, All Types (EA4000)	A		1,012		945		7,500				7,500
17	Rocket, Hydra 70, All Types (E37300)	A		165,476		94,191		33,653		136,341		169,994

APPROPRIATION **Procurement of Ammunition, Army** **ACTIVITY** 01 Ammunition

LINE NO	ITEM NOMENCLATURE	ID	FY 2014 QTY	FY 2014 COST	FY 2015 QTY	FY 2015 COST	FY 2016 QTY	FY 2016 COST	FY 2016 OCO QTY	FY 2016 OCO COST	FY 2016 TOTAL QTY	FY 2016 TOTAL COST
	SUB-ACTIVITY TOTAL			*166,488*		*95,136*		*41,153*		*136,341*		*177,494*
	Other Ammunition											
18	CAD/PAD, All Types (E61000)	A		5,614		5,430		5,639				5,639
19	Demolition Munitions, All Types (E55400)	A		28,074		25,899		9,751		4,000		13,751
20	Grenades, All Types (E34000)	B		36,242		23,751		19,993				19,993
21	Signals, All Types (E46900)	A		15,609		12,082		9,761		8,000		17,761
22	Simulators, All Types (E51200)	A		5,228		11,638		9,749				9,749
	SUB-ACTIVITY TOTAL			*90,767*		*78,800*		*54,893*		*12,000*		*66,893*
	Miscellaneous											
23	Ammo Components, All Types (EB0016)	A		11,700		3,594		3,521				3,521
24	Non-Lethal Ammunition, All Types (E91901)	A		7,366				1,700				1,700
25	Items Less Than $5 Million (AMMO) (EA0055)	A		12,423		8,337		6,181				6,181
26	Ammunition Peculiar Equipment (EA0575)	A		11,604		14,906		17,811				17,811
27	First Destination Transportation (AMMO) (EA0550)	A		14,328		14,349		14,695				14,695
28	Closeout Liabilities (EA8500)			108		111						
	SUB-ACTIVITY TOTAL			*57,529*		*41,297*		*43,908*				*43,908*
	ACTIVITY TOTAL			**1,153,601**		**891,905**		**894,850**		**192,041**		**1,086,891**

APPROPRIATION **Procurement of Ammunition, Army** **ACTIVITY** 02 Ammunition production base support

LINE NO	ITEM NOMENCLATURE	ID	FY 2014 QTY	FY 2014 COST	FY 2015 QTY	FY 2015 COST	FY 2016 QTY	FY 2016 COST	FY 2016 OCO QTY	FY 2016 OCO COST	FY 2016 TOTAL QTY	FY 2016 TOTAL COST
	Production Base Support											
29	Provision of Industrial Facilities (EP1000)			242,326		148,092		221,703				221,703
30	Conventional Munitions Demilitarization (EP1700)			199,604		113,881		113,250				113,250
31	ARMS Initiative (EP2500)			3,436		2,504		3,575				3,575
	SUB-ACTIVITY TOTAL			*445,366*		*264,477*		*338,528*				*338,528*
	ACTIVITY TOTAL			**445,366**		**264,477**		**338,528**				**338,528**
APPROPRIATION TOTAL				**1,598,967**		**1,156,382**		**1,233,378**		**192,041**		**1,425,419**

NOMENCLATURE INDEX

SSN	LINE	PAGE	NOMENCLATURE
E25500	10	4	120MM MORTAR, ALL TYPES (E25500)
E89600	8	4	60MM MORTAR, ALL TYPES (E89600)
E76000	9	4	81MM MORTAR, ALL TYPES (E76000)
EB0016	23	5	AMMO COMPONENTS, ALL TYPES (EB0016)
EA0575	26	5	AMMUNITION PECULIAR EQUIPMENT (EA0575)
EP2500	31	7	ARMS INITIATIVE (EP2500)
E15101	12	4	ARTILLERY CARTRIDGES, 75MM & 105MM, ALL TYPES (E15101)
E89500	13	4	ARTILLERY PROJECTILE, 155MM, ALL TYPES (E89500)
E27501	15	5	ARTILLERY PROPELLANTS, FUZES AND PRIMERS, ALL (E27501)
E61000	18	5	CAD/PAD, ALL TYPES (E61000)
E22203	11	4	CARTRIDGES, TANK, 105MM AND 120MM, ALL TYPES (E22203)
EA8500	28	6	CLOSEOUT LIABILITIES (EA8500)
EP1700	30	7	CONVENTIONAL MUNITIONS DEMILITARIZATION (EP1700)
E08000	4	4	CTG, .50 CAL, ALL TYPES (E08000)
E08200	5	4	CTG, 25MM, ALL TYPES (E08200)
ER8120	6	4	CTG, 30MM, ALL TYPES (ER8120)
ER8001	7	4	CTG, 40MM, ALL TYPES (ER8001)
E00700	1	4	CTG, 5.56MM, ALL TYPES (E00700)
E02000	2	4	CTG, 7.62MM, ALL TYPES (E02000)
EA3000	3	4	CTG, HANDGUN, ALL TYPES (EA3000)
E55400	19	5	DEMOLITION MUNITIONS, ALL TYPES (E55400)
EA0550	27	6	FIRST DESTINATION TRANSPORTATION (AMMO) (EA0550)
E34000	20	5	GRENADES, ALL TYPES (E34000)
EA0055	25	5	ITEMS LESS THAN $5 MILLION (AMMO) (EA0055)
E91901	24	5	NON-LETHAL AMMUNITION, ALL TYPES (E91901)
E80100	14	5	PROJ 155MM EXTENDED RANGE M982 (E80100)
EP1000	29	7	PROVISION OF INDUSTRIAL FACILITIES (EP1000)
E37300	17	5	ROCKET, HYDRA 70, ALL TYPES (E37300)
EA4000	16	5	SHOULDER LAUNCHED MUNITIONS, ALL TYPES (EA4000)
E46900	21	5	SIGNALS, ALL TYPES (E46900)
E51200	22	5	SIMULATORS, ALL TYPES (E51200)

SSN INDEX

SSN	LINE	PAGE	NOMENCLATURE
E00700	1	4	CTG, 5.56MM, ALL TYPES (E00700)
E02000	2	4	CTG, 7.62MM, ALL TYPES (E02000)
E08000	4	4	CTG, .50 CAL, ALL TYPES (E08000)
E08200	5	4	CTG, 25MM, ALL TYPES (E08200)
E15101	12	4	ARTILLERY CARTRIDGES, 75MM & 105MM, ALL TYPES (E15101)
E22203	11	4	CARTRIDGES, TANK, 105MM AND 120MM, ALL TYPES (E22203)
E25500	10	4	120MM MORTAR, ALL TYPES (E25500)
E27501	15	5	ARTILLERY PROPELLANTS, FUZES AND PRIMERS, ALL (E27501)
E34000	20	5	GRENADES, ALL TYPES (E34000)
E37300	17	5	ROCKET, HYDRA 70, ALL TYPES (E37300)
E46900	21	5	SIGNALS, ALL TYPES (E46900)
E51200	22	5	SIMULATORS, ALL TYPES (E51200)
E55400	19	5	DEMOLITION MUNITIONS, ALL TYPES (E55400)
E61000	18	5	CAD/PAD, ALL TYPES (E61000)
E76000	9	4	81MM MORTAR, ALL TYPES (E76000)
E80100	14	5	PROJ 155MM EXTENDED RANGE M982 (E80100)
E89500	13	4	ARTILLERY PROJECTILE, 155MM, ALL TYPES (E89500)
E89600	8	4	60MM MORTAR, ALL TYPES (E89600)
E91901	24	5	NON-LETHAL AMMUNITION, ALL TYPES (E91901)
EA0055	25	5	ITEMS LESS THAN $5 MILLION (AMMO) (EA0055)
EA0550	27	6	FIRST DESTINATION TRANSPORTATION (AMMO) (EA0550)
EA0575	26	5	AMMUNITION PECULIAR EQUIPMENT (EA0575)
EA3000	3	4	CTG, HANDGUN, ALL TYPES (EA3000)
EA4000	16	5	SHOULDER LAUNCHED MUNITIONS, ALL TYPES (EA4000)
EA8500	28	6	CLOSEOUT LIABILITIES (EA8500)
EB0016	23	5	AMMO COMPONENTS, ALL TYPES (EB0016)
EP1000	29	7	PROVISION OF INDUSTRIAL FACILITIES (EP1000)
EP1700	30	7	CONVENTIONAL MUNITIONS DEMILITARIZATION (EP1700)
EP2500	31	7	ARMS INITIATIVE (EP2500)
ER8001	7	4	CTG, 40MM, ALL TYPES (ER8001)
ER8120	6	4	CTG, 30MM, ALL TYPES (ER8120)

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Exhibit P-40s **1**

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

Appropriation 2034A: Procurement of Ammunition, Army

Line #	BA	BSA	Line Item Number	Line Item Title	Page
1	01	30	E00700	CTG, 5.56MM, All Types	1
2	01	30	E02000	CTG, 7.62MM, All Types	39
3	01	30	EA3000	CTG, Handgun, All Types	55
4	01	30	E08000	CTG, .50 Cal, All Types	71
5	01	30	E08200	CTG, 25MM, All Types	93
6	01	30	ER8120	CTG, 30MM, ALL TYPES	102
7	01	30	ER8001	CTG, 40MM, All Types	116
8	01	33	E89600	60MM Mortar, All Types	141
9	01	33	E76000	81MM Mortar, All Types	168
10	01	33	E25500	120MM Mortar, All Types	203
11	01	35	E22203	Cartridges, Tank, 105MM And 120MM, All Types	225
12	01	37	E15101	Artillery Cartridges, 75MM & 105MM, All Types	245
13	01	37	E89500	ARTILLERY PROJECTILE, 155MM, ALL TYPES	265
14	01	37	E80100	Proj 155mm Extended Range M982	301
15	01	37	E27501	Artillery Propellants, Fuzes and Primers, All	309
16	01	44	EA4000	Shoulder Launched Munitions, All Types	325

Appropriation 2034A: Procurement of Ammunition, Army

Line #	BA	BSA	Line Item Number	Line Item Title	Page
17	01	45	E37300	Rocket, Hydra 70, All Types	335
18	01	45	E61000	CAD/PAD, All Types	390
19	01	47	E55400	Demolition Munitions, All Types	392
20	01	47	E34000	Grenades, All Types	429
21	01	47	E46900	Signals, All Types	453
22	01	47	E51200	Simulators, All Types	474
23	01	50	EB0016	Ammo Components, All Types	482
24	01	50	E91901	Non-Lethal Ammunition, All Types	487
25	01	50	EA0055	Items Less Than $5 Million (AMMO)	498
26	01	50	EA0575	Ammunition Peculiar Equipment	509
27	01	50	EA0550	First Destination Transportation (AMMO)	511
28	01	50	EA8500	Closeout Liabilities	512
29	02	10	EP1000	Provision of Industrial Facilities	514
30	02	10	EP1700	Conventional Munitions Demilitarization	617
31	02	10	EP2500	ARMS Initiative	627

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Appropriation 2034A: Procurement of Ammunition, Army

Line #	BA	BSA	Line Item Number	Line Item Title	Page
10	01	33	E25500	120MM Mortar, All Types	203
8	01	33	E89600	60MM Mortar, All Types	141
9	01	33	E76000	81MM Mortar, All Types	168
23	01	50	EB0016	Ammo Components, All Types	482
26	01	50	EA0575	Ammunition Peculiar Equipment	509
32	02	10	EP2500	ARMS Initiative	627
12	01	37	E15101	Artillery Cartridges, 75MM & 105MM, All Types	245
13	01	37	E89500	Artillery Projectile, 155MM, All Types	265
15	01	37	E27501	Artillery Propellants, Fuzes and Primers, All	309
18	01	45	E61000	CAD/PAD, All Types	390
11	01	35	E22203	Cartridges, Tank, 105MM & 120MM, All Types	225
28	01	50	EA8500	Closeout Liabilities	512
31	02	10	EP1700	Conventional Munitions Demilitarization	617
4	01	30	E08000	CTG, .50 Cal, All Types	71
5	01	30	E08200	CTG, 25MM, All Types	93

6	01	30	ER8120	CTG, 30MM, All Types	102
7	01	30	ER8001	CTG, 40MM, All Types	116
1	01	30	E00700	CTG, 5.56MM, All Types	1
2	01	30	E02000	CTG, 7.62MM, All Types	39
3	01	30	EA3000	CTG, Handgun, All Types	55
19	01	47	E55400	Demolition Munitions, All Types	392
27	01	50	EA0550	First Destination Transportation (AMMO)	511
20	01	47	E34000	Grenades, All Types	429
25	01	50	EA0055	Items Less Than $5 Million (AMMO)	498
24	01	50	E91901	Non-Lethal Ammunition, All Types	487
14	01	37	E80100	Proj 155mm Extended Range M982	301
29	02	10	EP1000	Provision of Industrial Facilities	514
17	01	45	E37300	Rocket, Hydra 70, All Types	335
16	01	45	EA4000	Shoulder Launched Munitions, All Types	325
21	01	47	E46900	Signals, All Types	453
22	01	47	E51200	Simulators, All Types	474

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG, 5.56MM, All Types (E00700)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	2376.4	73.3	34.9	43.5		43.5	44.1	45.0	45.7	46.4		2709.3
Less PY Adv Proc												
Net Proc P1	2376.4	73.3	34.9	43.5		43.5	44.1	45.0	45.7	46.4		2709.3
Plus CY Adv Proc												
Total Proc Cost	2376.4	73.3	34.9	43.5		43.5	44.1	45.0	45.7	46.4		2709.3
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
This budget line includes 5.56MM ALL TYPES.

(E01000) 5.56mm High Pressure Test (HPT) round is used for proofing 5.56mm weapon barrels. The cartridge case is stannic stained (silver). This round is required for testing the 5.56mm M16 and M4 family of weapons during manufacturing, test or repair. This item is Code A, approved for service use.

(E01100) 5.56mm, M200 Blank Cartridge is used for training and ceremonial purposes without blank firing adapter (BFA) and in M16A2/A4 Series Rifles and M4 Carbine fitted with BFA. This item is Code A, approved for service use.

(E01101) 5.56mm Blank M200 Linked cartridge consists of a brass cartridge case with primer and propellant sealed with a rosette crimp. This cartridge is used in the M249 Squad Automatic Weapon (SAW) Machine Gun and it is designed to simulate firing during training exercises. The M27 metallic link is merely a scaled-down version of the highly successful 7.62mm M13 one-piece link. The cartridges are packed in various configurations 1) 200 round link belts, 4 belts per M2A1 or PA108 Can and 1600 rounds per wire bound. 2) 200 round SAW MAG, 2 MAGs per M2A1 and 800 rounds per wire bound. This item is Code A, approved for service use.

(E04601) 5.56mm, M855 Ball has a bullet with a conical steel insert and a lead antimony alloy cylindrical core in a copper alloy jacket. The cartridge is used in M16A2/A4 Rifles, M4 Carbine and M249 Machine Gun. This item is Code A, approved for service use.

(E04607) 5.56mm M855A1 Ball Cartridges and M856A1 Tracer Cartridges are linked in a 4-Ball/1-Tracer configuration with the M27 link for use in the M249 Machine Gun. The M855A1 Ball Cartridge has a steel penetrator and non-lead slug surrounded by a copper jacket. The M856A1 Tracer Cartridge is lead free and provides a visible red light signature through its trajectory. This item is Code A, approved for service use.

(E04608) 5.56mm M856A1 Tracer Bullet is lead free and provides a visible red light signature through its trajectory. The bullet is used in M16 and M4 Rifles/Carbines. This item is Code A, approved for service use.

(E95400) 5.56mm, M855A1 Ball Cartridge has a steel penetrator and a non-lead slug in a copper alloy jacket. The cartridge is used in M16A2/A4 Rifles and M4 Carbine. This item is Code A, approved for service use.

(E95700) 5.56mm, M855A1 Ball Cartridge has steel penetrator and a non-lead slug in a copper alloy jacket. The cartridge is intended for use in M16 A2/A4 Rifles and M4 Carbine. This cartridge is commercial pack. This item is Code A, approved for service use.

(E96110) 5.56mm, Marking Blue M1042 is used for force-on-force training engagements. The cartridge can be fired with the existing M4 Carbine and M16A2/A3/A4 Rifles with the use of a conversion bolt. The projectile leaves a mark upon impact (similar to paintball), thus enabling after action evaluation of training scenarios. However, it differs from paintball in that it is a full complete cartridge with projectile and cartridge case containing a propulsion system for a low velocity launch. This item is Code A, approved for service use.

(E96111) 5.56mm, Marking Red, M1042 is used for force-on-force training engagements. The cartridge can be fired with the existing M4 Carbine and M16A2/A3/A4 Rifles with the use of a conversion bolt. The projectile leaves a mark upon impact (similar to paintball), thus enabling after action evaluation of training scenarios. However, it differs from paintball in that it is a full complete cartridge with projectile and cartridge case containing a propulsion system for a low velocity launch. This item is Code A, approved for service use.

(E96120) 5.56mm, Marking Blue, M1071 is used for force-on-force training engagements. The cartridge can be fired with the existing M249 Squad Automatic Weapon with the use of the conversion kit. The projectile leaves a mark upon impact (similar to paintball), thus enabling after action evaluation of training scenarios. However, it differs from paintball in that it is a full complete cartridge with projectile and cartridge case containing a propulsion system for a low velocity launch. This item is Code A, approved for service use.

(E96121) 5.56mm, Marking Red, M1071 is used for force-on-force training engagements. The cartridge can be fired with the existing M249 Squad Automatic Weapon with the use of the conversion kit. The projectile leaves a mark upon impact (similar to paintball), thus enabling after action evaluation of training scenarios. However, it differs from paintball in that it is a full complete cartridge with projectile and cartridge case containing a propulsion system for a low velocity launch. This item is Code A, approved for service use.

(E96125) 5.56mm Short Range Training M1037 clipped round will be used in live fire training scenarios. The M1037 clipped round permits training in adjacent training areas due to its reduced Surface Danger Zone (SDZ) and can be fired with existing M4 weapons. This round is used for Military Operations/Urban Terrain (MOUT) operational training. This item is Code A, approved for service use.

(E96126) 5.56mm Short Range Training Ammunition (SRTA) M1037 linked round will be used in live fire training scenarios. The M1037 Linked round permits training in adjacent training areas due to its reduced Surface Danger Zone (SDZ) and can be fired with the existing M249 family of weapons. This item is Code A, approved for service use.

Justification:
FY 2016 Base Budget supports critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station, and the combined training centers. Test requirements support the development, fielding, safety, and quality assurance of Army munitions and equipment throughout their life-cycle.

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.

(E01000) 5.56MM High Pressure Test (HPT) round is a testing round used exclusively for acceptance testing of 5.56mm barrels. The procurement supports annual testing requirements and builds a depot level in accordance with the Army's procurement goals.

(E01100) 5.56mm, M200 Blank Cartridge is a training unique item not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 Base Procurement dollars in the amount of $4.632 million supports the procurement of 28.154 million of the M200 Blank Cartridges.

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature CTG, 5.56MM, All Types (E00700)	
Program Elements for Code B Items:	Code:	Other Related Program Elements:	

(E01101) 5.56mm, M200 Blank Linked F/SAW is a training unique item. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 Base Procurement dollars in the amount of $2.340 million supports the procurement of 10.101 million of the M200 Blank Linked Cartridges.

(E04601) 5.56mm, M855 Ball Cartridge is a training standard item used in training and combat. The procurement supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals.

(E04607) 5.56mm M855A1 Ball and M856A1 Tracer Cartridges are training standard items used in both training and combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals. FY 2016 Base Procurement dollars in the amount of $6.652 million supports the procurement of 16.054 million of the CTG 5.56MM M855A1 Ball and M856A1 Tracer Cartridges.

(E04608) 5.56mm M856A1 Tracer Bullet is lead free and is a training standard item used in training and combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals. FY 2016 Base Procurement dollars in the amount of $.860 million supports the procurement of 1.893 million of the CTG 5.56MM M856A1 Tracer Bullet.

(E95400) 5.56mm, M855A1 Ball Cartridge is a training standard item used in training and combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals. FY 2016 Base Procurement dollars in the amount of $9.002 million supports the procurement of 18.064 million of the CTG 5.56MM M855A1 Ball Cartridges.

(E95700) 5.56mm, M855A1 Ball Cartridge is a training unique item not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 Base Procurement dollars in the amount of $17.500 million supports the procurement of 56.724 million of the M855A1 Ball Cartridges.

(E96110/E96111) 5.56mm, Marking Blue/Marking Red, M1042 are training unique items not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 Base Procurement dollars in the amount $.183 million supports the procurement of .224 million of the Marking Red, M1042 Cartridges.

(E96120/E96121) 5.56mm, Marking Blue/Marking Red, M1071 are training unique items not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 Base Procurement dollars in the amount of $.042 million supports the procurement of .047 million of the Marking Blue M1071 Cartridges.

(E96125) 5.56mm Short Range Training Ammunition (SRTA) M1037 clipped rounds is training unique not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 Base Procurement dollars in the amount of $1.205 million supports the procurement of .902 million of the SRTA M1037 Cartridges.

(E96126) M1037 5.56mm Short Range Training Ammunition (SRTA) linked round is a training unique item not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 Base Procurement dollars in the amount of $1.100 million supports the procurement of .880 million of the SRTA M1037 Cartridges.

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG, 5.56MM, All Types (E00700)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$
Hardware Recurring																
E96121 CTG, 5.56MM MARKING LINKED, XM1071 (R	ab17	169000	219	0.77												
E96126 Ctg, 5.56mm Short Range TRNG Link	ab66							1100000	880	1.25				1100000	880	1.25
E01100 CTG 5.56MM BLANK M200	A080	12115K	81144	0.15	3123000	17032	0.18	4632000	28154	0.16				4632000	28154	0.16
E04601 CTG 5.56MM BALL M855 F/M16A2	a059	109000														
E01000 CTG 5.56MM TEST HIGH PRES M197	a070				414000	547	0.76									
E04607 CTG, 5.56MM 4 BALL/1 TR LINKED, LEAD	ab73	14337K	33589	0.43	4316000	10073	0.43	6625000	16054	0.41				6625000	16054	0.41
E95400 CTG 5.56MM, M855, 10 RD CLIP: M2A1 BO	ab57	34964K	44502	0.79	8603000	14639	0.59	9002000	18064	0.49				9002000	18064	0.49
E04608 CTG, 5.56MM TR SINGLE RD, LEAD FREE	ab74	2133000	5318	0.40	1149000	2463	0.47	860000	1893	0.45				860000	1893	0.45
E95700 CTG 5.56MM, M855, 10 RD CLIP: CM'L PK	ab58	3904866	5960	0.66	12660K	40311	0.31	17500K	56724	0.31				17500K	56724	0.31
E96110 CTG, 5.56MM MARKING, M1042 (BLUE)	ab09	5000000	6729	0.74	759000	972	0.78									
E96111 CTG, 5.56MM MARKING, XM1042 (RED)	AB10	490000	473	0.72	371000	475	0.78	183000	224	0.86				183000	224	0.86
E96125 CTG 5.56MM, Short Range TRNG Clip	Ab67				148000	90	1.64	1205000	902	1.33				1205000	902	1.33
E01101 CTG 5.56MM Blank M200 Linked	A075				3380000	14378	0.24	2340000	10101	0.23				2340000	10101	0.23
E96120 CTG, 5.56MM MARKING LINKED, XM1071 (B	ab16	32000	27	1.20	20000	31	60.65	42000	47	0.90				42000	47	0.90
Total:		**73254**			**34943**			**43489**						**43489**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG 5.56MM TEST HIGH PRES M197 (E01000)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	1035156		547376									1582532
Gross Cost	1.3		0.4									1.7
Less PY Adv Proc												
Net Proc P1	1.3		0.4									1.7
Plus CY Adv Proc												
Total Proc Cost	1.3		0.4									1.7
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0		0.0									0.0

Description:
5.56mm High Pressure Test (HPT) round is used for proofing 5.56mm weapon barrels. The cartridge case is stannic stained (silver). This round is required for testing the 5.56mm M16 and M4 family of weapons during manufacturing, test or repair. This item is Code A, approved for service use.

Justification:
(E01000) 5.56MM High Pressure Test (HPT) round is a testing round used exclusively for acceptance testing of 5.56mm barrels. The procurement supports annual testing requirements and builds a depot level in accordance with the Army's procurement goals.

Comments:
TYPE CLASSIFICATION DATE: 1975

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG 5.56MM BLANK M200 (E01100)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	4613609090	81144376	17031887	28154401		28154401	40091528	40719409	38767006	39591650		4899109347
Gross Cost	507.5	12.1	3.1	4.6		4.6	6.4	6.5	6.6	6.7		553.6
Less PY Adv Proc												
Net Proc P1	507.5	12.1	3.1	4.6		4.6	6.4	6.5	6.6	6.7		553.6
Plus CY Adv Proc												
Total Proc Cost	507.5	12.1	3.1	4.6		4.6	6.4	6.5	6.6	6.7		553.6
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
The 5.56mm, M200 Blank cartridge is used for training and ceremonial purposes without blank firing adapter (BFA) and in M16A2/A4 Series Rifles and M4 Carbine fitted with blank firing adapter (BFA). The cartridge case mouth is a rosette crimp closed and sealed with lacquer. The cartridge is a single-round carton packed. This item is Code A, approved for service use.

Justification:
(E01100) 5.56mm, M200 Blank Cartridge is a training unique item not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 Base Procurement dollars in the amount of $4.632 million supports the procurement of 28.154 million of the M200 Blank Cartridges.

Comments:
TYPE CLASSIFICATION DATE: Prior to 1977

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG 5.56MM BLANK M200 (E01100)	Weapon System Type:	MDAP:	DODIC: A080	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$
Hardware Recurring																
LOAD, ASSEMBLE, PACK (LAP)		10549K	81144	0.13	2384464	17032	0.14	3941616	28154	0.14				3941616	28154	0.14
BOX METAL M2A2		785010	72	10.87	200237	15	13.21	312962	25	12.49				312962	25	12.49
SUBTOTAL HARDWARE COST		**11334K**			**2584701**			**4254578**						**4254578**		
Support																
PRODUCTION ENGINEERING		693350			394333			376686						376686		
QUALITY ASSURANCE		8126			10951											
ACCEPTANCE TESTING		79631			133853											
SUBTOTAL PRODUCTION SUPPORT		**781107**			**539137**			**376686**						**376686**		
Total:		**12115**			**3123**			**4632**						**4632**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2015

Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature: CTG 5.56MM BLANK M200 (E01100)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY x1000	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
BOX METAL M2A1										
LOAD, ASSEMBLE, PACK (LAP)										
FY 2014	ALLIANT TECHSYSTEMS (LCAAP) INDEPENDENCE, MO	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 14	Oct 14	81144	0.13	Y		
FY 2015	ALLIANT TECHSYSTEMS (LCAAP) INDEPENDENCE, MO	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 15	Oct 15	17032	0.14	Y		
FY 2016	ALLIANT TECHSYSTEMS (LCAAP) INDEPENDENCE, MO	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 16	Oct 16	28154	0.14	Y		
BOX METAL M2A2										
FY 2014	BWAY CORPORATION ATLANTA, GA	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 14	May 14	72	10.87	Y		
FY 2015	BWAY CORPORATION ATLANTA, GA	C / FFP	ROCK ISLAND ARSENAL, IL	May 15	Jul 15	15	13.21	Y		
FY 2016	BWAY CORPORATION ATLANTA, GA	C / FFP	ROCK ISLAND ARSENAL, IL	May 16	Jul 16	25	12.49	Y		

REMARKS: FY 2014, FY 2015 AND FY 2016 LAP IS A DELIVERY ORDER TO THE EXISTING CONTRACT AWARDED IN FY 2012. FY 2014, BOX METAL M2A2 IS AN AVERAGE UNIT COST.

TYPE CLASSIFICATION DATE: Prior to 1977

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG 5.56MM BLANK M200 (E01100)

Date: February 2015

COST ELEMENTS						Fiscal Year 15												Fiscal Year 16												
									Calendar Year 15												Calendar Year 16									
MFR	FY	SERV	PROC QTY x1Mil	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Later
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 14	A	81.144	0.000	81.144	10.930	12.975	5.720	5.720	5.720	5.720	5.720	5.720	7.520	5.720	5.720	3.959													0.000
1	FY 15	A	17.032	0.000	17.032						A							1.419	1.419	1.419	1.419	1.419	1.419	1.419	1.419	1.419	1.419	1.419	1.419	0.000
1	FY 16	A	28.154	0.000	28.154																		A							28.154
1	FY 14	AF	6.968	0.000	6.968		1.097										5.872													0.000
1	FY 14	MC	19.894	9.065	10.829	3.459							3.500	3.870																0.000
1	FY 15	MC	5.935	0.000	5.935						A							0.495	0.495	0.495	0.495	0.495	0.495	0.495	0.495	0.495	0.495	0.495	0.495	0.000
1	FY 16	NSOF	3.762	0.000	3.762																		A							3.762
Total					153.825	14.389	14.072	5.720	5.720	5.720	5.720	5.720	9.220	11.390	5.720	5.720	9.830	1.914	1.914	1.914	1.914	1.914	1.914	1.914	1.914	1.914	1.914	1.914	1.914	31.916
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	ALLIANT TECHSYSTEMS (LCAAP), INDEPENDENCE, MO	0.002	13.700	41.000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	7	13
	Reorder	6	6	7	13
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG 5.56MM BLANK M200 (E01100)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY x1Mil	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 14	A	81.144	81.144																										0.000
1	FY 15	A	17.032	17.032																										0.000
1	FY 16	A	28.154	0.000	28.154	2.346	2.346	2.346	2.346	2.346	2.346	2.346	2.346	2.346	2.346	2.346	2.346													0.000
1	FY 14	AF	6.968	6.968																										0.000
1	FY 14	MC	19.894	19.894																										0.000
1	FY 15	MC	5.935	5.935																										0.000
1	FY 16	NSOF	3.762	0.000	3.762	0.314	0.314	0.314	0.314	0.314	0.314	0.314	0.314	0.314	0.314	0.314	0.314													0.000
Total					31.916	2.660	2.660	2.660	2.660	2.660	2.660	2.660	2.660	2.660	2.660	2.660	2.660													
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	ALLIANT TECHSYSTEMS (LCAAP), INDEPENDENCE, MO	0.002	13.700	41.000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	7	13
	Reorder	6	6	7	13
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG 5.56MM BLANK M200 LINKED F/SAW (E01101)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	776861538		14377823	10101146		10101146	10586757	10805344	10529275	10769502		844031385
Gross Cost	202.0		3.4	2.3		2.3	2.4	2.4	2.5	2.5		217.5
Less PY Adv Proc												
Net Proc P1	202.0		3.4	2.3		2.3	2.4	2.4	2.5	2.5		217.5
Plus CY Adv Proc												
Total Proc Cost	202.0		3.4	2.3		2.3	2.4	2.4	2.5	2.5		217.5
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
The 5.56mm, M200 blank cartridge is linked in belts with the M27 link and is used for training purposes in the M249 Machine Gun fitted with a blank firing adapter. The cartridge case mouth is Rosette crimp closed and sealed with lacquer. The 200-round cartridge belts are packed in magazines that attach to the machine gun. This item is Code A, approved for service use.

Justification:
(E01101) 5.56mm, M200 Blank Linked F/SAW is a training unique item. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 Base Procurement dollars in the amount of $2.340 million supports the procurement of 10.101 million of the M200 Blank Linked Cartridges.

Comments:
TYPE CLASSIFICATION DATE: 1983

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG 5.56MM BALL M855 F/M16A2 (E04601)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	2568189655											2568189655
Gross Cost	744.8	0.1										744.9
Less PY Adv Proc												
Net Proc P1	744.8	0.1										744.9
Plus CY Adv Proc												
Total Proc Cost	744.8	0.1										744.9
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0											0.0

Description:
The 5.56mm, M855 Ball cartridge has a bullet with a conical steel insert and a lead antimony alloy cylindrical core in a copper alloy jacket. This cartridge is identified by a green-colored bullet tip and is packed in 10-round clips in a military-type package. The cartridge is intended for use in M16A2/A4 as well as the M4 Carbine and M249 Machine Gun. This item is Code A, approved for service use.

Justification:
(E04601) 5.56mm, M855 Ball Cartridge is a training standard item used in training and combat. The procurement supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals.

Comments:
TYPE CLASSIFICATION DATE: 1982

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG, 5.56MM 4 BALL M855A1 EPR /1 TR M856A1 LINKED (E04607)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	71556097	33589342	10073478	16053557		16053557	17271835	18070266	18097421	18512021		203224017
Gross Cost	29.3	14.3	4.3	6.6		6.6	6.9	7.2	7.4	7.5		83.6
Less PY Adv Proc												
Net Proc P1	29.3	14.3	4.3	6.6		6.6	6.9	7.2	7.4	7.5		83.6
Plus CY Adv Proc												
Total Proc Cost	29.3	14.3	4.3	6.6		6.6	6.9	7.2	7.4	7.5		83.6
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
The 5.56mm M855A1 Ball cartridges and M856A1 Tracer cartridges are linked in a 4-Ball/1-Tracer configuration with the M27 link for use in the M249 Machine Gun. The cartridges will be linked in a 200-round belt and packed in a plastic ammunition magazine that attaches directly to the weapon. The M855A1 Ball cartridge has a steel penetrator and non-lead slug surrounded by a copper jacket. The M856A1 Tracer cartridge is lead free and provides a visible red light signature through its trajectory and is ballistically matched with the M855A1 trajectory. This item is Code A, approved for service use.

Justification:
(E04607) 5.56mm M855A1 Ball and M856A1 Tracer Cartridges are training standard items used in both training and combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals. FY 2016 Base Procurement dollars in the amount of $6.652 million supports the procurement of 16.054 million of the CTG 5.56MM M855A1 Ball and M856A1 Tracer Cartridges.

Comments:
TYPE CLASSIFICATION DATE: 1982

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG, 5.56MM 4 BALL M855A1 EPR /1 TR M856A1 LINKED (E04607)	Weapon System Type:	MDAP:	DODIC: AB73	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$
Hardware Recurring																
COMPLETE ROUND		11420K	33589	0.34	3827922	10073	0.38	5939816	16054	0.37				5939816	16054	0.37
SUBTOTAL HARDWARE COST		**11420K**			**3827922**			**5939816**						**5939816**		
Support																
PRODUCTION ENGINEERING		727948			427785			661528						661528		
QUALITY ASSURANCE		10384			10651			3654						3654		
ACCEPTANCE TESTING					48598			18727						18727		
SUBTOTAL PRODUCTION SUPPORT		**738332**			**487034**			**683909**						**683909**		
NON-RECURRING COSTS																
ENVIRONMENTAL INITIATIVES		2178831														
SUBTOTAL NON-RECURRING COSTS		**2178831**														
Total:		**14337**			**4316**			**6625**						**6625**		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:
Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature:
CTG, 5.56MM 4 BALL M855A1 EPR /1 TR M856A1 LINKED (E04607)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY x1000	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
COMPLETE ROUND										
FY 2014	ALLIANT TECHSYSTEMS (LCAAP) INDEPENDENCE, MO	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 14	Apr 15	33589	0.34	Y		
FY 2015	ALLIANT TECHSYSTEMS (LCAAP) INDEPENDENCE, MO	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 15	Apr 16	10073	0.38	Y		
FY 2016	ALLIANT TECHSYSTEMS (LCAAP) INDEPENDENCE, MO	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 16	Apr 17	16054	0.37	Y		

REMARKS: FY 2014, FY 2015 AND FY 2016 COMPLETE ROUND IS A DELIVERY ORDER TO THE EXISTING CONTRACT AWARDED IN FY 2012.

TYPE CLASSIFICATION DATE: 1982

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, 5.56MM 4 BALL M855A1 EPR /1 TR M856A1 LINKED (E04607)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY x1Mil	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Complete Round																														
1	FY 13	A	14.851	0.000	14.851																7.099	7.752								0.000
1	FY 14	A	33.589	0.000	33.589							1.529	3.085	3.085	3.085	3.085	3.085	3.085	3.085	3.085	2.000	2.000	3.381							0.000
1	FY 15	A	10.073	0.000	10.073						A													0.839	0.839	0.839	0.839	0.839	0.839	5.037
1	FY 16	A	16.054	0.000	16.054																		A							16.054
Total					74.568							1.529	3.085	3.085	3.085	3.085	3.085	3.085	3.085	3.085	9.099	9.752	3.381	0.839	0.839	0.839	0.839	0.839	0.839	21.090
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	ALLIANT TECHSYSTEMS (LCAAP), INDEPENDENCE, MO	0.002	5.143	9.772	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	12	6	13	19
	Reorder	6	6	13	19
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, 5.56MM 4 BALL M855A1 EPR /1 TR M856A1 LINKED (E04607)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY x1Mil	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Complete Round																														
1	FY 13	A	14.851	14.851																										0.000
1	FY 14	A	33.589	33.589																										0.000
1	FY 15	A	10.073	5.037	5.037	0.839	0.839	0.839	0.839	0.839	0.839																			0.000
1	FY 16	A	16.054	0.000	16.054							1.338	1.338	1.338	1.338	1.338	1.338	1.338	1.338	1.338	1.338	1.338	1.338							0.000
Total					21.090	0.839	0.839	0.839	0.839	0.839	0.839	1.338	1.338	1.338	1.338	1.338	1.338	1.338	1.338	1.338	1.338	1.338	1.338							
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	ALLIANT TECHSYSTEMS (LCAAP), INDEPENDENCE, MO	0.002	5.143	9.772	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	12	6	13	19
	Reorder	6	6	13	19
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG, 5.56MM TRACER M856A1 SINGLE ROUND (E04608)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	11396153	5317622	2463058	1893107		1893107	2011725	2055708	2023997	2069625		29230995
Gross Cost	5.9	2.1	1.1	0.9		0.9	0.9	0.9	0.9	0.9		13.7
Less PY Adv Proc												
Net Proc P1	5.9	2.1	1.1	0.9		0.9	0.9	0.9	0.9	0.9		13.7
Plus CY Adv Proc												
Total Proc Cost	5.9	2.1	1.1	0.9		0.9	0.9	0.9	0.9	0.9		13.7
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
The 5.56mm M856A1 Tracer bullet is lead free and provides a visible red light signature through its trajectory. The cartridges are packed in a 20 round cardboard carton and have an orange color tip that identifies the cartridge. It is intended for use in M16 and M4 series rifles/carbines. This item is Code A, approved for service use.

Justification:
(E04608) 5.56mm M856A1 Tracer Bullet is lead free and is a training standard item used in training and combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals. FY 2016 Base Procurement dollars in the amount of $.860 million supports the procurement of 1.893 million of the CTG 5.56MM M856A1 Tracer Bullet.

Comments:
TYPE CLASSIFICATION DATE: 1982

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG 5.56MM, BALL M855A1 EPR, CLIPPED MIL PACK (E95400)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	925120987	44501818	14639218	18063813		18063813	20038576	20331794	19715284	20324480		1082735970
Gross Cost	749.3	35.0	8.6	9.0		9.0	7.6	7.2	7.1	7.0		830.8
Less PY Adv Proc												
Net Proc P1	749.3	35.0	8.6	9.0		9.0	7.6	7.2	7.1	7.0		830.8
Plus CY Adv Proc												
Total Proc Cost	749.3	35.0	8.6	9.0		9.0	7.6	7.2	7.1	7.0		830.8
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
The 5.56mm, M855A1 Ball cartridge has a steel penetrator and a non-lead slug in a copper alloy jacket. This cartridge is military-packed in 10-round clips. The cartridge is intended for use in M16A2/A4 Series Rifles as well as M4 Carbine. This item is Code A, approved for service use.

Justification:
(E95400) 5.56mm, M855A1 Ball Cartridge is a training standard item used in training and combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals. FY 2016 Base Procurement dollars in the amount of $9.002 million supports the procurement of 18.064 million of the CTG 5.56MM M855A1 Ball Cartridges.

Comments:
TYPE CLASSIFICATION: 1982

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG 5.56MM, BALL M855A1 EPR, CLIPPED MIL PACK (E95400)	Weapon System Type:	MDAP:	DODIC: AB57	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$
Hardware Recurring																
LOAD, ASSEMBLE, PACK (LAP)		15131K	44502	0.34	5855687	14639	0.40	5599782	18064	0.31				5599782	18064	0.31
BOX METAL M2A2		580480	53	10.87	232060	18	13.21	270746	22	12.49				270746	22	12.49
SUBTOTAL HARDWARE COST		**15711K**			**6087747**			**5870528**						**5870528**		
Support																
PRODUCTION ENGINEERING		2538247			717572			638102						638102		
QUALITY ASSURANCE		13258			12717											
ACCEPTANCE TESTING		97125			154265											
SUBTOTAL PRODUCTION SUPPORT		**2648630**			**884553**			**638102**						**638102**		
NON-RECURRING COSTS																
ENVIRONMENTAL INITIATIVES		4528147			1630000			2493000						2493000		
MODERNIZATION		12077K														
SUBTOTAL NON-RECURRING COSTS		**16606K**			**1630000**			**2493000**						**2493000**		
Total:		**34964**			**8603**			**9002**						**9002**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2015

Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature: CTG 5.56MM, BALL M855A1 EPR, CLIPPED MIL PACK (E95400)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY x1000	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
LOAD, ASSEMBLE, PACK (LAP)						925121				
FY 2014	ALLIANT TECHSYSTEMS (LCAAP) INDEPENDENCE, MO	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 14	Apr 15	22251	0.34	Y		
FY 2014	OLIN CORP WINCHESTER DIVISION EAST ALTON, IL	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 14	Dec 14	22251	0.34	Y		
FY 2015	OLIN CORP WINCHESTER DIVISION EAST ALTON, IL	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 15	May 15	7320	0.40	Y		
FY 2015	ALLIANT TECHSYSTEMS (LCAAP) INDEPENDENCE, MO	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 15	Apr 16	7320	0.40	Y		
FY 2016	TO BE SELECTED TBS01	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 16	Mar 17	1806	0.31	Y		
FY 2016	ALLIANT TECHSYSTEMS (LCAAP) INDEPENDENCE, MO	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 16	Apr 17	16257	0.31	Y		
BOX METAL M2A2										
BOX METAL M2A1										
FY 2014	BWAY CORPORATION ATLANTA, GA	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 14	May 14	53	10.87	Y		
FY 2015	BWAY CORPORATION ATLANTA, GA	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 15	Apr 15	18	13.21	Y		
FY 2016	BWAY CORPORATION ATLANTA, GA	C / FFP	ROCK ISLAND ARSENAL, IL	May 16	Jul 16	22	12.49	Y		

REMARKS: FY 2014, FY 2015 AND FY 2016 LAP IS A DELIVERY ORDER TO THE EXISTING CONTRACT AWARDED IN FY 2012. FY 2014, FY 2015 AND FY 2016 LAP IS AN AVERAGE UNIT COST BETWEEN TWO CONTRACTORS. FY 2014, BOX METAL M2A2 IS AN AVERAGE UNIT COST. FY 2014 OLIN CORP WINCHESTER DOES NOT REQUIRE BOX, METAL M2A1 OR M2A2.

TYPE CLASSIFICATION DATE: 1982

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG 5.56MM, BALL M855A1 EPR, CLIPPED MIL PACK (E95400)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY x1Mil	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15													Fiscal Year 16										Later
									Calendar Year 15													Calendar Year 16							
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	425.682	404.349	21.333	6.705	14.628																							0.000
2	FY 13	A	81.596	72.274	9.322	4.516	4.806																							0.000
1	FY 14	A	22.251	0.000	22.251							5.862	5.862	5.862	4.665															0.000
2	FY 14	A	22.251	0.000	22.251			5.862	5.862	5.862	1.201	3.463																		0.000
1	FY 15	A	7.320	0.000	7.320						A													0.610	0.610	0.610	0.610	0.610	0.610	3.660
2	FY 15	A	7.320	0.000	7.320						A		0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610						0.000
1	FY 16	A	16.257	0.000	16.257																		A							16.257
3	FY 16	A	1.806	0.000	1.806																		A							1.806
1	FY 14	AF	24.927	0.000	24.927		0.489					10.290	9.005	5.143																0.000
1	FY 15	AF	7.493	0.000	7.493						A													0.624	0.624	0.624	0.624	0.624	0.624	3.746
2	FY 15	AF	7.493	0.000	7.493						A		0.624	0.624	0.624	0.624	0.624	0.624	0.624	0.624	0.624	0.624	0.624	0.624						0.000
1	FY 16	AF	13.065	0.000	13.065																		A							13.065
3	FY 16	AF	1.452	0.000	1.452																		A							1.452
Total					162.288	11.221	19.923	5.862	5.862	5.862	1.201	19.615	16.101	12.240	5.899	1.234	1.234	1.234	1.234	1.234	1.234	1.234	1.234	2.469	1.234	1.234	1.234	1.234	1.234	39.986
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	ALLIANT TECHSYSTEMS (LCAAP), INDEPENDENCE, MO	0.002	19.400	67.500	
2	OLIN CORP WINCHESTER DIVISION, EAST ALTON, IL	0.002	0.500	19.500	
3	TO BE SELECTED, TBS01	0.002	19.400	67.500	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	12	6	13	19
	Reorder	6	6	13	19
2	Initial	6	6	6	12
	Reorder	6	6	2	8
3	Initial	6	6	12	18
	Reorder	6	6	6	12
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG 5.56MM, BALL M855A1 EPR, CLIPPED MIL PACK (E95400)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY x1Mil	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18											Later
									Calendar Year 17												Calendar Year 18								
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																													
1	FY 13	A	425.682	425.682																									0.000
2	FY 13	A	81.596	81.596																									0.000
1	FY 14	A	22.251	22.251																									0.000
2	FY 14	A	22.251	22.251																									0.000
1	FY 15	A	7.320	3.660	3.660	0.610	0.610	0.610	0.610	0.610	0.610																		0.000
2	FY 15	A	7.320	7.320																									0.000
1	FY 16	A	16.257	0.000	16.257							1.355	1.355	1.355	1.355	1.355	1.355	1.355	1.355	1.355	1.355	1.355	1.355						0.000
3	FY 16	A	1.806	0.000	1.806						0.151	0.151	0.151	0.151	0.151	0.151	0.151	0.151	0.151	0.151	0.151	0.151							0.000
1	FY 14	AF	24.927	24.927																									0.000
1	FY 15	AF	7.493	3.746	3.746	0.624	0.624	0.624	0.624	0.624	0.624																		0.000
2	FY 15	AF	7.493	7.493																									0.000
1	FY 16	AF	13.065	0.000	13.065							1.089	1.089	1.089	1.089	1.089	1.089	1.089	1.089	1.089	1.089	1.089	1.089						0.000
3	FY 16	AF	1.452	0.000	1.452						0.121	0.121	0.121	0.121	0.121	0.121	0.121	0.121	0.121	0.121	0.121	0.121							0.000
Total					39.986	1.234	1.234	1.234	1.234	1.234	1.506	2.715	2.715	2.715	2.715	2.715	2.715	2.715	2.715	2.715	2.715	2.715	2.444						
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	ALLIANT TECHSYSTEMS (LCAAP), INDEPENDENCE, MO	0.002	19.400	67.500	
2	OLIN CORP WINCHESTER DIVISION, EAST ALTON, IL	0.002	0.500	19.500	
3	TO BE SELECTED, TBS01	0.002	19.400	67.500	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	12	6	13	19
	Reorder	6	6	13	19
2	Initial	6	6	6	12
	Reorder	6	6	2	8
3	Initial	6	6	12	18
	Reorder	6	6	6	12
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG, 5.56MM, BALL M855A1, CLIPPED BULK PACK (E95700)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	253172972	5960328	40311293	56724108		56724108	62172806	67100910	67200824	68782362		621425603
Gross Cost	93.7	3.9	12.7	17.5		17.5	17.9	19.0	19.4	19.8		203.8
Less PY Adv Proc												
Net Proc P1	93.7	3.9	12.7	17.5		17.5	17.9	19.0	19.4	19.8		203.8
Plus CY Adv Proc												
Total Proc Cost	93.7	3.9	12.7	17.5		17.5	17.9	19.0	19.4	19.8		203.8
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
The 5.56mm, M855A1 Ball cartridge has a steel penetrator and a non-lead slug in a copper alloy jacket. The cartridge is intended for use in M16 A2/A4 Series Rifles as well as M4 Carbine. This cartridge is clipped bulk pack. This item is Code A, approved for service use.

Justification:
(E95700) 5.56mm, M855A1 Ball Cartridge is a training unique item not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 Base Procurement dollars in the amount of $17.500 million supports the procurement of 56.724 million of the M855A1 Ball Cartridges.

Comments:
TYPE CLASSIFICATION DATE: 1982

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG, 5.56MM, BALL M855A1, CLIPPED BULK PACK (E95700)	Weapon System Type:	MDAP:	DODIC: AB58	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$
Hardware Recurring																
LOAD, ASSEMBLE, PACK (LAP)		1490082	5960	0.25	10481K	40311	0.26	15316K	56724	0.27				15316K	56724	0.27
BOX METAL M2A2		72568	7	10.87	596418	45	13.21	793515	64	12.49				793515	64	12.49
COMPLETE ROUND																
SUBTOTAL HARDWARE COST		**1562650**			**11077K**			**16109K**						**16109K**		
Support																
PRODUCTION ENGINEERING		2342350			1582646			1171095						1171095		
ACCEPTANCE TESTING								9503						9503		
SUBTOTAL PRODUCTION SUPPORT		**2342350**			**1582646**			**1180598**						**1180598**		
NON-RECURRING COSTS																
NATO CERTIFICATION								209378						209378		
SUBTOTAL NON-RECURRING COSTS								**209378**						**209378**		
Total:		**3905**			**12660**			**17500**						**17500**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2015

Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature: CTG, 5.56MM, BALL M855A1, CLIPPED BULK PACK (E95700)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY x1000	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
LOAD, ASSEMBLE, PACK (LAP)										
FY 2014	ALLIANT TECHSYSTEMS (LCAAP) INDEPENDENCE, MO	C / FFP	ROCK ISLAND ARSENAL, IL	Jun 14	Apr 15	5960	0.25	Y		
FY 2015	ALLIANT TECHSYSTEMS (LCAAP) INDEPENDENCE, MO	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 15	Apr 16	40311	0.26	Y		
FY 2016	ALLIANT TECHSYSTEMS (LCAAP) INDEPENDENCE, MO	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 16	Apr 17	56724	0.27	Y		
BOX METAL M2A2										
FY 2014	BWAY CORPORATION ATLANTA, GA	C / FFP	ROCK ISLAND ARSENAL, IL	Jun 14	Jan 15	7	10.87	Y		
FY 2015	BWAY CORPORATION ATLANTA, GA	C / FFP	ROCK ISLAND ARSENAL, IL	May 15	Jul 15	45	13.21	Y		
FY 2016	BWAY CORPORATION ATLANTA, GA	C / FFP	ROCK ISLAND ARSENAL, IL	May 16	Jul 16	64	12.49	Y		

REMARKS: FY 2014, FY 2015, AND FY 2016 COMPLETE ROUND IS A DELIVERY ORDER TO THE EXISTING CONTRACT AWARDED IN FY 2012. FY 2014, BOX METAL M2A2 IS AN AVERAGE UNIT COST.

TYPE CLASSIFICATION DATE: 1982

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, 5.56MM, BALL M855A1, CLIPPED BULK PACK (E95700)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY x1Mil	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 14	A	5.960	0.000	5.960							1.987	1.987	1.987																0.000
1	FY 15	A	40.311	0.000	40.311						A													3.359	3.359	3.359	3.359	3.359	3.359	20.156
1	FY 16	A	56.724	0.000	56.724																		A							56.724
Total					102.996							1.987	1.987	1.987										3.359	3.359	3.359	3.359	3.359	3.359	76.880
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	ALLIANT TECHSYSTEMS (LCAAP), INDEPENDENCE, MO	0.002	19.400	67.500	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	12	6	13	19
	Reorder	6	6	13	19
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, 5.56MM, BALL M855A1, CLIPPED BULK PACK (E95700)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY x1Mil	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 14	A	5.960	5.960																										0.000
1	FY 15	A	40.311	20.156	20.156	3.359	3.359	3.359	3.359	3.359	3.359																			0.000
1	FY 16	A	56.724	0.000	56.724							4.727	4.727	4.727	4.727	4.727	4.727	4.727	4.727	4.727	4.727	4.727	4.727							0.000
Total					76.880	3.359	3.359	3.359	3.359	3.359	3.359	4.727	4.727	4.727	4.727	4.727	4.727	4.727	4.727	4.727	4.727	4.727	4.727							
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	ALLIANT TECHSYSTEMS (LCAAP), INDEPENDENCE, MO	0.002	19.400	67.500	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	12	6	13	19
	Reorder	6	6	13	19
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG, 5.56MM MARKING, M1042 (BLUE) (E96110)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	30680000	6728792	971772				447517		454794			39282875
Gross Cost	20.1	5.0	0.8				0.4		0.4			26.6
Less PY Adv Proc												
Net Proc P1	20.1	5.0	0.8				0.4		0.4			26.6
Plus CY Adv Proc												
Total Proc Cost	20.1	5.0	0.8				0.4		0.4			26.6
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0				0.0		0.0			0.0

Description:
The 5.56mm, Marking, Blue, M1042 is used for force-on-force training engagements. The cartridge can be fired with existing M4 Carbine and M16A2/A3/A4 Series Rifles with the use of a conversion bolt. The projectile leaves a mark upon impact (similar to paintball), thus enabling after action evaluation of training scenarios. However, it differs from paintball in that it is a full complete cartridge with projectile and cartridge case containing a propulsion system for a low velocity launch. The M1042 is required to hit targets accurately out to 30 meters. The cartridge has been safety certified to be fired in close proximity at properly protected human subjects. This item is Code A, approved for service use.

Justification:
(E96110/E96111) 5.56mm, Marking Blue/Marking Red, M1042 are training unique items not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 Base Procurement dollars in the amount $.183 million supports the procurement of .224 million of the Marking Red, M1042 Cartridges.

Comments:
TYPE CLASSIFICATION DATE: MAY 2009

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG, 5.56MM MARKING, M1042 (BLUE) (E96110)	Weapon System Type:	MDAP:	DODIC: AB09	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$
Hardware Recurring																
Complete Round		4777442	6729	0.71	699676	972	0.72									
SUBTOTAL HARDWARE COST		**4777442**			**699676**											
Support																
Production Engineering		222558			59142											
SUBTOTAL PRODUCTION SUPPORT		**222558**			**59142**											
Total:		**5000**			**759**											

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:
Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature:
CTG, 5.56MM MARKING, M1042 (BLUE) (E96110)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY x1000	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Complete Round										
FY 2014	UTM LTD BURY ST EDMUNDS, UNITED KINGDOM	C / FFP	PICATINNY ARSENAL, NJ	Jun 14	Oct 14	6729	0.71	Y		
FY 2015	UTM LTD BURY ST EDMUNDS, UNITED KINGDOM	C / FFP	PICATINNY ARSENAL, NJ	Mar 15	Sep 15	972	0.72	Y		

REMARKS: FY 2014 AND FY 2015 COMPLETE ROUND IS A DELIVERY ORDER TO THE EXISTING CONTRACT AWARDED IN FY 2010.

TYPE CLASSIFICATION DATE: MAY 2009

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, 5.56MM MARKING, M1042 (BLUE) (E96110)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY x1000	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15													Fiscal Year 16											Later
									Calendar Year 15													Calendar Year 16								
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Complete Round																														
1	FY 14	A	6728.79	0.00	6728.79	1934.10	1934.10		397.21							2463.38														0.00
1	FY 15	A	971.77	0.00	971.77						A						80.98	80.98	80.98	80.98	80.98	80.98	80.98	80.98	80.98	80.98	80.98	80.98		0.00
1	FY 15	AF	557.80	0.00	557.80						A						46.48	46.48	46.48	46.48	46.48	46.48	46.48	46.48	46.48	46.48	46.48	46.49		0.00
2	FY 16	AF	892.05	0.00	892.05																								A	892.05
1	FY 14	MC	22.54	22.54																										0.00
1	FY 15	MC	18.13	0.00	18.13						A						18.13													0.00
2	FY 16	MC	20.39	0.00	20.39																		A						20.39	0.00
1	FY 14	NAV SEA	680.40	678.60	1.80																									0.00
Total					9190.74	1934.10	1934.10		397.21							2463.38	145.59	127.46	127.46	127.46	127.46	127.46	127.46	127.46	127.46	127.46	127.46	127.47	20.39	892.05
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	UTM LTD, BURY ST EDMUNDS, UNITED KINGDOM	175.00	2000.00	2500.00	
2	TO BE SELECTED, TBS01	1700.00	2000.00	2500.00	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	6	12
	Reorder	6	6	6	12
2	Initial	3	12	6	18
	Reorder	3	5	3	8
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, 5.56MM MARKING, M1042 (BLUE) (E96110)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY x1000	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Complete Round																														
1	FY 14	A	6728.79	6728.79																										0.00
1	FY 15	A	971.77	971.77																										0.00
1	FY 15	AF	557.80	557.80																										0.00
2	FY 16	AF	892.05	0.00	892.05						74.35	74.34	74.34	74.34	74.34	74.34	74.34	74.34	74.34	74.34	74.34	74.34								0.00
1	FY 14	MC	22.54	22.54																										0.00
1	FY 15	MC	18.13	18.13																										0.00
2	FY 16	MC	20.39	20.39																										0.00
1	FY 14	NAV SEA	680.40	680.40																										0.00
Total					892.05						74.35	74.34	74.34	74.34	74.34	74.34	74.34	74.34	74.34	74.34	74.34	74.34								
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	UTM LTD, BURY ST EDMUNDS, UNITED KINGDOM	175.00	2000.00	2500.00	
2	TO BE SELECTED, TBS01	1700.00	2000.00	2500.00	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	6	12
	Reorder	6	6	6	12
2	Initial	3	12	6	18
	Reorder	3	5	3	8
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG, 5.56MM MARKING, M1042 (RED) (E96111)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	12735227	472710	474933	223882		223882		219098		215137		14340987
Gross Cost	11.2	0.5	0.4	0.2		0.2		0.2		0.2		12.6
Less PY Adv Proc												
Net Proc P1	11.2	0.5	0.4	0.2		0.2		0.2		0.2		12.6
Plus CY Adv Proc												
Total Proc Cost	11.2	0.5	0.4	0.2		0.2		0.2		0.2		12.6
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0	0.0		0.0		0.0		0.0		0.0

Description:
The 5.56mm, Marking,Red, M1042 is used for force-on-force training engagements. The cartridge can be fired with existing M4 Carbine and M16A2/A3/A4 Series Rifles with the use of a conversion bolt. The projectile leaves a mark upon impact (similar to paintball), thus enabling after action evaluation of training scenarios. However, it differs from paintball in that it is a full complete cartridge with projectile and cartridge case containing a propulsion system for a low velocity launch. The M1042 is required to hit targets accurately out to 30 meters. The cartridge has been safety certified to be fired in close proximity at properly protected human subjects. This item is Code A, approved for service use.

Justification:
(E96110/E96111) 5.56mm, Marking Blue/Marking Red, M1042 are training unique items not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 Base Procurement dollars in the amount $.183 million supports the procurement of .224 million of the Marking Red, M1042 Cartridges.

Comments:
TYPE CLASSIFICATION DATE: MAY 2009

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG, 5.56MM MARKING LINKED, M1071 (BLUE) F/SAW (E96120)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	2308000	26768	30534	46628		46628		45734		44990		2502654
Gross Cost	3.5	0.0	0.0	0.0		0.0		0.0		0.0		3.6
Less PY Adv Proc												
Net Proc P1	3.5	0.0	0.0	0.0		0.0		0.0		0.0		3.6
Plus CY Adv Proc												
Total Proc Cost	3.5	0.0	0.0	0.0		0.0		0.0		0.0		3.6
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0	0.0		0.0		0.0		0.0		0.0

Description:
The 5.56mm, Marking, Blue, M1071, linked cartridge is used for force-on-force training engagements. The linked cartridge can be fired with the existing M249 Squad Automatic Weapon with the use of the M249 Squad Automatic Weapon Conversion Kit that consists of a blue-colored feed tray and bolt/bolt carrier assembly. The projectile leaves a mark upon impact (similar to paintball), thus enabling after action evaluation of training scenarios. However, it differs from paintball in that it is a full complete cartridge with projectile and cartridge case containing a propulsion system for a low velocity launch. The M1071 is required to hit targets accurately out to 30 meters. The cartridge has been safety certified to be fired in close proximity at properly protected human subjects. This item is Code A, approved for service use.

Justification:
(E96120/E96121) 5.56mm, Marking Blue/Marking Red, M1071 are training unique items not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 Base Procurement dollars in the amount of $.042 million supports the procurement of .047 million of the Marking Blue M1071 Cartridges.

Comments:
TYPE CLASSIFICATION DATE: MAY 2009

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG, 5.56MM MARKING LINKED, M1071 (RED) F/SAW (E96121)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	3414606	219341										3633947
Gross Cost	3.0	0.2										3.2
Less PY Adv Proc												
Net Proc P1	3.0	0.2										3.2
Plus CY Adv Proc												
Total Proc Cost	3.0	0.2										3.2
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0										0.0

Description:
The 5.56mm, Marking, Red, M1071, linked cartridge is used for force-on-force training engagements. The linked cartridge can be fired with the existing M249 Squad Automatic Weapon with the use of the M249 Squad Automatic Weapon Conversion Kit that consists of a blue-colored feed tray and bolt/bolt carrier assembly. The projectile leaves a mark upon impact (similar to paintball), thus enabling after action evaluation of training scenarios. However, it differs from paintball in that it is a full complete cartridge with projectile and cartridge case containing a propulsion system for a low velocity launch. The M1071 is required to hit targets accurately out to 30 meters. The cartridge has been safety certified to be fired in close proximity at properly protected human subjects. This item is Code A, approved for service use.

Justification:
(E96120/E96121) 5.56mm, Marking Blue/Marking Red, M1071 are training unique items not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 Base Procurement dollars in the amount of $.042 million supports the procurement of .047 million of the Marking Blue M1071 Cartridges.

Comments:
TYPE CLASSIFICATION DATE: MAY 2009

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: Ctg, 5.56mm, Short Range Training, M1037, sngl rd (E96125)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty			90310	902175		902175	517897	319712	318634	320794		2469522
Gross Cost			0.1	1.2		1.2	0.7	0.7	0.7	0.7		4.2
Less PY Adv Proc												
Net Proc P1			0.1	1.2		1.2	0.7	0.7	0.7	0.7		4.2
Plus CY Adv Proc												
Total Proc Cost			0.1	1.2		1.2	0.7	0.7	0.7	0.7		4.2
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C			0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
5.56mm Short Range Training M1037 clipped round will be used in live fire training scenarios. The M1037 clipped round permits training in adjacent training areas due to its reduced Surface Danger Zone (SDZ) and can be fired with existing M4 weapons. This round is used for Military Operations/Urban Terrain (MOUT) operational training. This item is Code A, approved for service use.

Justification:
(E96125) 5.56mm Short Range Training Ammunition (SRTA) M1037 clipped rounds is training unique not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 Base Procurement dollars in the amount of $1.205 million supports the procurement of .902 million of the SRTA M1037 Cartridges.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: Ctg, 5.56mm, Short Range Training, M1037 Linked (E96126)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	1018438			879533		879533	796175	312343	310849	312856		3630194
Gross Cost	4.7			1.1		1.1	1.0	0.7	0.7	0.8		9.0
Less PY Adv Proc												
Net Proc P1	4.7			1.1		1.1	1.0	0.7	0.7	0.8		9.0
Plus CY Adv Proc												
Total Proc Cost	4.7			1.1		1.1	1.0	0.7	0.7	0.8		9.0
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0			0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
The M1037 5.56mm Short Range Training Ammunition (SRTA) Linked round will be used in live fire training scenarios. The M1037 Linked round permits training in adjacent training areas due to its reduced Surface Danger Zone (SDZ) and can be fired with the existing M249 family of weapons. This round is used for Military Operations/Urban Terrain (MOUT) operational training. This item is Code A, approved for service use.

Justification:
(E96126) M1037 5.56mm Short Range Training Ammunition (SRTA) linked round is a training unique item not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 Base Procurement dollars in the amount of $1.100 million supports the procurement of .880 million of the SRTA M1037 Cartridges.

Comments:
TYPE CLASSIFICATION DATE: JULY 2012.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG, 7.62MM, All Types (E02000)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	118.4	53.6	12.4	40.7		40.7	56.2	67.2	69.2	70.9		488.7
Less PY Adv Proc												
Net Proc P1	118.4	53.6	12.4	40.7		40.7	56.2	67.2	69.2	70.9		488.7
Plus CY Adv Proc												
Total Proc Cost	118.4	53.6	12.4	40.7		40.7	56.2	67.2	69.2	70.9		488.7
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:

(E02011) 7.62mm M80A1 Enhanced Performance Round (EPR) Ball is linked in a 100 round belt with the M13 link for use in the M240 Machine Gun. The M80A1 Ball Cartridge has a steel penetrator and non-lead slug surrounded by a copper jacket. They are intended for use against personnel and non-armored targets. This Item is Code A, approved for service use.

(E02012) 7.62mm M80A1 Enhanced Performance Round (EPR) Ball Cartridges and M62A1 Tracer Cartridges are linked in a 100 round belt in a 4 Ball/1 Tracer configuration with the M13 link for use in the M240 Machine Gun. The M80A1 Ball Cartridge has a steel penetrator and a non-lead slug surrounded by a copper jacket. The M62A1 Tracer Cartridge provides a visible red light signature through its trajectory and is ballistically matched with the M80A1 trajectory. They are intended for use against personnel and non-armored targets. This Item is Code A, approved for service use.

(E02015) 7.62mm M82A1 Blank Bottlenose Cartridge has a bottlenose design with a paper wad closure and a red tip. The M82A1 is used in sniper training and salute ceremonies in M14 rifles when equipped with a firing adapter. This Item is Code A, approved for service use.

(E02500) 7.62mm Dummy M172 W/M13 linked cartridge is properly weighted in terms of mass and center of gravity and is physically contoured to represent a tactical M80 7.62mm ball round. The round is used for weapon manufacturing testing to conduct belt-pull tests for automatic weapons and for environmental conditioning tests of weapons, mounts and ammunition. The M172 linked cartridge is also used for developing new and/or improved mount systems for the vehicles that contain the M240 Series machine gun. This Item is Code A, approved for service use.

(E02501) 7.62mm, M63A1 Dummy, Drilled and Inert ammunition (DDI) is an inert dummy round used as an ammunition training aid and for weapon familiarization. The 7.62mm, M63A1 DDI ammunition is both nickel plated and fluted for easy recognition and to distinguish the dummy ammunition visually from tactical ammunition. This Item is Code A, approved for service use.

(E89100) 7.62mm M118 Long Range round is a match grade design intended for long range accuracy and is packed in a 20 round cardboard carton and intended for use in the M24, M40, M110, and M14 Rifles. It is intended for use against personnel and non-armored targets. This Item is Code A, approved for service use.

Justification:

FY 2016 Base Budget supports critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station, and the combined training centers.

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature CTG, 7.62MM, All Types (E02000)	
Program Elements for Code B Items:	Code:	Other Related Program Elements:	

Test requirements support the development, fielding, safety, and quality assurance of Army munitions and equipment throughout their life-cycle.

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.

(E02011) 7.62mm M80A1 Enhanced Performance Round (EPR) Lead Free Slug (LFS) Ball Cartridge is a training standard item used in training and combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals. FY 2016 Base Procurement dollars in the amount of $5.900 million supports the procurement of 6.483 million of the 7.62mm M80A1 1 Ball (EPR) (LFS) Cartridges.

(E02012) 7.62mm M80A1 Enhanced Performance Round (EPR) 4 Ball /1 Trace, Lead Free Slug (LFS) Cartridge /M62A1 LFS Tracer Cartridge is a training standard item used in training and combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals. FY 2016 Base Procurement dollars in the amount of $34.362 million supports the procurement of 28.624 million of the 7.62mm M80A1 4 Ball/1Trace (EPR) (LFS) Cartridges.

(E02015) 7.62mm M82A1 Blank Bottlenose Cartridge is a training unique item not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 Base Procurement dollars in the amount of $.234 million supports the procurement of .642 million of the M82A1 Blank Bottlenose Cartridges.

(E02500) 7.62mm Dummy M172 W/M13 linked cartridge is a training unique item not used in combat. The procurement supports annual training and builds a depot level in accordance with the Army's procurement goals.

(E89100) 7.62mm M118 Long Range Round is a training standard item used in training and combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals. FY 2016 Base Procurement dollars in the amount of $.219 million supports the procurement of .314 million of the 7.62mm Long Range Rounds.

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG, 7.62MM, All Types (E02000)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$
Hardware Recurring																
E02011 CTG, 7.62MM BALL LINKED, LEAD FREE	ab79	6470000	7659	0.84	3100000	3121	0.99	5900000	6483	0.91				5900000	6483	0.91
E02012 CTG, 7.62MM 4 BALL/1TR LINKED, LEAD F	ab86	46799K	33938	1.38	7656000	5367	1.43	34362K	28624	1.20				34362K	28624	1.20
E02015 CTG 7.62MM BOTTLENOSE BLANK, M82A	ab72	302000	464	0.65	805000	2248	0.36	234000	642	0.36				234000	642	0.36
E89100 CARTRIDGE 7.62MM M118 LONG RANGE	aa11				413000	589	0.70	219000	314	0.69				219000	314	0.69
E02500 CTG 7.62MM DUMMY M172 W/M13 LINK	a159				444000	419	1.06									
Total:		**53571**			**12418**			**40715**						**40715**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG, 7.62MM M80A1 BALL LINKED, LEAD FREE (E02011)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	10691000	7659020	3120761	6483025		6483025	7040893	7606439	8175821	8750099		59527058
Gross Cost	10.0	6.5	3.1	5.9		5.9	6.4	6.9	7.4	7.9		54.1
Less PY Adv Proc												
Net Proc P1	10.0	6.5	3.1	5.9		5.9	6.4	6.9	7.4	7.9		54.1
Plus CY Adv Proc												
Total Proc Cost	10.0	6.5	3.1	5.9		5.9	6.4	6.9	7.4	7.9		54.1
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
The 7.62mm M80A1 Enhanced Performance Round (EPR) Ball Cartridge is linked in a 100 round belt with the M13 link for use in the M240 Machine Gun Series. The M80A1 Ball Cartridge has a steel penetrator and non-lead slug surrounded by a copper jacket. They are intended for use against personnel and non-armored targets. This item is Code A, approved for service use.

Justification:
(E02011) 7.62mm M80A1 Enhanced Performance Round (EPR) Lead Free Slug (LFS) Ball Cartridge is a training standard item used in training and combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals. FY 2016 Base Procurement dollars in the amount of $5.900 million supports the procurement of 6.483 million of the 7.62mm M80A1 1 Ball (EPR) (LFS) Cartridges.

Comments:
TYPE CLASSIFICATION DATE: 1962

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG, 7.62MM M80A1 BALL LINKED, LEAD FREE (E02011)	Weapon System Type:	MDAP:	DODIC: AB79	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$
Hardware Recurring																
COMPLETE ROUND		5897445	7659	0.77	2621439	3121	0.84	5445741	6483	0.84				5445741	6483	0.84
SUBTOTAL HARDWARE COST		**5897445**			**2621439**			**5445741**						**5445741**		
Support																
PRODUCTION ENGINEERING		536287			443073			454387						454387		
QUALITY ASSURANCE		3564			3194											
ACCEPTANCE TESTING		33492			33492											
SUBTOTAL PRODUCTION SUPPORT		**573343**			**479759**			**454387**						**454387**		
Total:		**6470**			**3100**			**5900**						**5900**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2015

Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature: CTG, 7.62MM M80A1 BALL LINKED, LEAD FREE (E02011)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY x1000	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
COMPLETE ROUND										
FY 2014	ALLIANT TECHSYSTEMS (LCAAP) INDEPENDENCE, MO	C / FFP	ROCK ISLAND ARSENAL, IL	Sep 14	Jan 15	7659	0.77	Y		
FY 2015	ALLIANT TECHSYSTEMS (LCAAP) INDEPENDENCE, MO	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 15	Apr 16	3121	0.84	Y		
FY 2016	ALLIANT TECHSYSTEMS (LCAAP) INDEPENDENCE, MO	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 16	Apr 17	6483	0.84	Y		

REMARKS: FY 2014, FY 2015 AND FY 2016 COMPLETE ROUND IS A DELIVERY ORDER TO THE E XISTING CONTRACT AWARDED IN FY 2012.

TYPE CLASSIFICATION DATE: 1962

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, 7.62MM M80A1 BALL LINKED, LEAD FREE (E02011)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY x1000	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15													Fiscal Year 16										Later
									Calendar Year 15													Calendar Year 16							
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Complete Round																														
1	FY 14	A	7659.02	0.00	7659.02				500.00	500.00	1000.00	546.52								4612.50										0.00
1	FY 15	A	3120.76	0.00	3120.76						A													260.07	260.06	260.06	260.06	260.06	260.06	1560.38
1	FY 16	A	6483.03	0.00	6483.03																		A							6483.03
Total					17262.81				500.00	500.00	1000.00	546.52								4612.50				260.07	260.06	260.06	260.06	260.06	260.06	8043.40
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	ALLIANT TECHSYSTEMS (LCAAP), INDEPENDENCE, MO	0.80	5000.00	10000.00	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	13	19
	Reorder	6	6	13	19
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, 7.62MM M80A1 BALL LINKED, LEAD FREE (E02011)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY x1000	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Complete Round																														
1	FY 14	A	7659.02	7659.02																										0.00
1	FY 15	A	3120.76	1560.38	1560.38	260.06	260.06	260.06	260.06	260.06	260.06																			0.00
1	FY 16	A	6483.03	0.00	6483.03							540.25	540.25	540.25	540.25	540.25	540.25	540.25	540.25	540.25	540.25	540.25	540.25							0.00
Total					8043.40	260.06	260.06	260.06	260.06	260.06	260.06	540.25	540.25	540.25	540.25	540.25	540.25	540.25	540.25	540.25	540.25	540.25	540.25							
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	ALLIANT TECHSYSTEMS (LCAAP), INDEPENDENCE, MO	0.80	5000.00	10000.00	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	13	19
	Reorder	6	6	13	19
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG, 7.62MM 4 BALL/1TR LINKED, LEAD FREE (E02012)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	53014000	33937595	5366638	28623647		28623647	40651706	41355294	41377561	41416494		285742935
Gross Cost	70.8	46.8	7.7	34.4		34.4	48.1	49.1	50.0	51.0		357.8
Less PY Adv Proc												
Net Proc P1	70.8	46.8	7.7	34.4		34.4	48.1	49.1	50.0	51.0		357.8
Plus CY Adv Proc												
Total Proc Cost	70.8	46.8	7.7	34.4		34.4	48.1	49.1	50.0	51.0		357.8
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
The 7.62mm M80A1 Enhanced Performance Round (EPR) Ball cartridges and M62A1 Lead Free Slug Tracer cartridges are linked in a 100 round belt in a 4-Ball/1-Tracer configuration with the M13 link for use in the M240 Machine Gun Series. The M80A1 Ball cartridge has a steel penetrator and non-lead slug surrounded by a copper jacket. The M62A1 Lead Free Slug Tracer cartridge provides a visible red light signature through its trajectory and is ballistically matched with the M80A1 trajectory. They are intended for use against personnel and non-armored targets. In FY 2013 this item will become Code A, approved for service use.

Justification:
(E02012) 7.62mm M80A1 Enhanced Performance Round (EPR) 4 Ball /1 Trace, Lead Free Slug (LFS) Cartridge /M62A1 LFS Tracer Cartridge is a training standard item used in training and combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals. FY 2016 Base Procurement dollars in the amount of $34.362 million supports the procurement of 28.624 million of the 7.62mm M80A1 4 Ball/1Trace (EPR) (LFS) Cartridges.

Comments:
TYPE CLASSIFICATION DATE: 1957

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG, 7.62MM 4 BALL/1TR LINKED, LEAD FREE (E02012)	Weapon System Type:	MDAP:	DODIC: AB86	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$
Hardware Recurring																
COMPLETE ROUND		38349K	33938	1.13	6171634	5367	1.15	30341K	28624	1.06				30341K	28624	1.06
SUBTOTAL HARDWARE COST		**38349K**			**6171634**			**30341K**						**30341K**		
Support																
PRODUCTION ENGINEERING		2878225			839541			2325356						2325356		
QUALITY ASSURANCE					6387			21925						21925		
ACCEPTANCE TESTING					72467			50000						50000		
SUBTOTAL PRODUCTION SUPPORT		**2878225**			**918395**			**2397281**						**2397281**		
NON-RECURRING COSTS																
ENVIRONMENTAL INITIATIVES		5571777			566000			1497000						1497000		
NATO CERTIFICATION								127341						127341		
SUBTOTAL NON-RECURRING COSTS		**5571777**			**566000**			**1624341**						**1624341**		
Total:		**46799**			**7656**			**34362**						**34362**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2015

Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature: CTG, 7.62MM 4 BALL/1TR LINKED, LEAD FREE (E02012)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY x1000	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
COMPLETE ROUND										
FY 2014	OLIN CORP WINCHESTER DIVISION EAST ALTON, IL	C / FFP	PICATINNY ARSENAL, NJ	Jun 14	Sep 15	5430	1.13	Y		
FY 2014	ALLIANT TECHSYSTEMS (LCAAP) INDEPENDENCE, MO	C / FFP	ROCK ISLAND ARSENAL, IL	Sep 14	Apr 15	28508	1.13	Y		
FY 2015	ALLIANT TECHSYSTEMS (LCAAP) INDEPENDENCE, MO	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 15	Apr 16	5367	1.15	Y		
FY 2016	ALLIANT TECHSYSTEMS (LCAAP) INDEPENDENCE, MO	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 16	Apr 17	28624	1.06	Y		

REMARKS: FY 2014, FY 2015 AND FY 2016 COMPLETE ROUND IS A DELIVERY ORDER TO THE EXISTING CONTRACT AWARDED IN FY 2012.

TYPE CLASSIFICATION DATE: 1957

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, 7.62MM 4 BALL/1TR LINKED, LEAD FREE (E02012)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY x1Mil	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Complete Round																														
1	FY 13	A	1.118	0.000	1.118			1.118																						0.000
2	FY 13	A	3.000	0.254	2.746			1.246	1.500																					0.000
1	FY 14	A	5.430	0.000	5.430												1.000	1.000	1.000	1.000	1.000	0.430								0.000
2	FY 14	A	28.508	0.000	28.508							3.000	3.000	3.000	3.000	3.000	3.000	2.300	2.100	2.100	2.100	1.908								0.000
2	FY 15	A	5.367	0.000	5.367						A													2.000	2.000	1.367				0.000
2	FY 16	A	28.624	0.000	28.624																		A							28.624
Total					71.793			2.365	1.500			3.000	3.000	3.000	3.000	3.000	4.000	3.300	3.100	3.100	3.100	2.338		2.000	2.000	1.367				28.624
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	OLIN CORP WINCHESTER DIVISION, EAST ALTON, IL	0.500	1.500	3.000	
2	ALLIANT TECHSYSTEMS (LCAAP), INDEPENDENCE, MO	0.001	5.000	10.000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	13	19
	Reorder	6	6	13	19
2	Initial	6	6	13	19
	Reorder	6	6	13	19
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, 7.62MM 4 BALL/1TR LINKED, LEAD FREE (E02012)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY x1Mil	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Complete Round																														
1	FY 13	A	1.118	1.118																										0.000
2	FY 13	A	3.000	3.000																										0.000
1	FY 14	A	5.430	5.430																										0.000
2	FY 14	A	28.508	28.508																										0.000
2	FY 15	A	5.367	5.367																										0.000
2	FY 16	A	28.624	0.000	28.624							2.385	2.385	2.385	2.385	2.385	2.385	2.385	2.385	2.385	2.385	2.385	2.385							0.000
Total					28.624							2.385	2.385	2.385	2.385	2.385	2.385	2.385	2.385	2.385	2.385	2.385	2.385							
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	OLIN CORP WINCHESTER DIVISION, EAST ALTON, IL	0.500	1.500	3.000	
2	ALLIANT TECHSYSTEMS (LCAAP), INDEPENDENCE, MO	0.001	5.000	10.000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	13	19
	Reorder	6	6	13	19
2	Initial	6	6	13	19
	Reorder	6	6	13	19
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG, 7.62MM, BOTTLENOSE BLANK, M82A1 (E02015)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty		464404	2248130	642428		642428	664998	682210	696335	695142		6093647
Gross Cost		0.3	0.8	0.2		0.2	0.2	0.2	0.2	0.3		2.3
Less PY Adv Proc												
Net Proc P1		0.3	0.8	0.2		0.2	0.2	0.2	0.2	0.3		2.3
Plus CY Adv Proc												
Total Proc Cost		0.3	0.8	0.2		0.2	0.2	0.2	0.2	0.3		2.3
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
7.62mm M82A1 Blank "Bottlenose" cartridge has a bottlenose design with a paper wad closure with a red tip. The M82A1 is used in sniper training and salute ceremonies in M14 rifles when equipped with a firing adapter. This is Code A, approved for service use.

Justification:
(E02015) 7.62mm M82A1 Blank Bottlenose Cartridge is a training unique item not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 Base Procurement dollars in the amount of $.234 million supports the procurement of .642 million of the M82A1 Blank Bottlenose Cartridges.

Comments:
TYPE CLASSIFICATION DATE: 2012

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG 7.62MM DUMMY M172 W/M13 LINK (E02500)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	5000		418533									423533
Gross Cost	0.3		0.4									0.7
Less PY Adv Proc												
Net Proc P1	0.3		0.4									0.7
Plus CY Adv Proc												
Total Proc Cost	0.3		0.4									0.7
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0		0.0									0.0

Description:
The M172 Dummy round is an inert round that is used for weapon loading practice, testing the weapon mechanism, and for packaging drop testing. This item is Code A, approved for service use.

Justification:
(E02500) 7.62mm Dummy M172 W/M13 linked cartridge is a training unique item not used in combat. The procurement supports annual training and builds a depot level in accordance with the Army's procurement goals.

Comments:
TYPE CLASSIFICATION DATE: 1962

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CARTRIDGE 7.62MM M118 LONG RANGE (E89100)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	52259000		588829	313663		313663	323222	329986	824452	343300		54982452
Gross Cost	37.3		0.4	0.2		0.2	0.2	0.2	0.6	0.2		39.2
Less PY Adv Proc												
Net Proc P1	37.3		0.4	0.2		0.2	0.2	0.2	0.6	0.2		39.2
Plus CY Adv Proc												
Total Proc Cost	37.3		0.4	0.2		0.2	0.2	0.2	0.6	0.2		39.2
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
The 7.62mm M118 Long Range round is a match grade design intended for long range accuracy and is packed in a 20 round cardboard carton and intended for use in the M24, M40 and M110 and M14 Rifles. It is intended for use against personnel and non-armored targets. This is Code A, approved for service use.

Justification:
(E89100) 7.62mm M118 Long Range Round is a training standard item used in training and combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals. FY 2016 Base Procurement dollars in the amount of $.219 million supports the procurement of .314 million of the 7.62mm Long Range Rounds.

Comments:
TYPE CLASSIFICATION DATE: Prior to 1997

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG, Handgun, All Types (EA3000)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	106.8	11.4	9.7	7.8		7.8	11.1	11.8	12.2	11.6		182.2
Less PY Adv Proc												
Net Proc P1	106.8	11.4	9.7	7.8		7.8	11.1	11.8	12.2	11.6		182.2
Plus CY Adv Proc												
Total Proc Cost	106.8	11.4	9.7	7.8		7.8	11.1	11.8	12.2	11.6		182.2
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C						0.0						0.0

Description:
This budget line includes CTG, Handgun, ALL TYPES.

DESCRIPTION:

(E96105) CTG 9MM MARKING, M1041 (BLUE) is used for force on force training engagements. The cartridge can be fired with existing M9/M11 pistols with use of a conversion kit. The M9 kit consists of a replacement barrel only. The M11 kit consists of a replacement barrel and recoil spring guide. A blue enameled portion of the M9 and M11 barrels is visible through the ejection port of the weapons. The projectile leaves a mark upon impact (similar to paintball), enabling after action evaluation of training scenarios. It differs from paintball in that it is a full complete cartridge with projectile and cartridge case containing a propulsion system for a low velocity launch. The M1041 is required to hit targets accurately out to 12 meters. The cartridge has been safety certified to be fired in close proximity at properly protected human subjects. This item is Code A, approved for service use.

(E96107) CTG, 9MM MARKING, M1041 (RED) is used for force on force training engagements. The cartridge can be fired with existing M9/M11 pistols with use of a conversion kit. The M9 kit consists of a replacement barrel only. The M11 kit consists of a replacement barrel and recoil spring guide. A blue enameled portion of the M9 and M11 barrels is visible through the ejection port of the weapons. The projectile leaves a mark upon impact (similar to paintball), enabling after action evaluation of training scenarios. It differs from paintball in that it is a full complete cartridge with projectile and cartridge case containing a propulsion system for a low velocity launch. The M1041 is required to hit targets accurately out to 12 meters. The cartridge has been safety certified to be fired in close proximity at properly protected human subjects. This item is Code A, approved for service use.

(E05218) CTG MODULAR HANDGUN SYSTEM AMMUNITION consists of four new cartridges – Ball, Jacketed Hollow Point (JHP), Drilled Dummy Inert (DDI) and Blank. The Ball cartridge is intended for use against enemy personnel, for training, and for force protection. The JHP cartridge is required for use in situations where limited over-penetration of targets is necessary to reduce collateral damage. DDI cartridges are completely inert. They are plated and drilled for easy identification and used for training and weapon familiarization. Blank cartridges are used for K-9 training. These items are not yet type classified or approved for service use. The Modular Handgun System will also utilize three M1041 rounds - Blue, Red and Yellow through the use of a weapon adapter kit.

(E05217) CTG, 9MM SINGLE ROUND, Dummy Drill and Inert (DDI), M917A1 ammunition cartridge is an inert (no energetic) dummy round used as an ammunition training aid and for weapon familiarization. This item is Code A, approved for service use.

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature CTG, Handgun, All Types (EA3000)	
Program Elements for Code B Items:	Code:	Other Related Program Elements:	

(E05210) CTG 9MM BALL M882 (Combat Pack) cartridge contains a bullet comprised of a copper alloy jacket and a lead alloy core. The cartridge is identified by the plain bullet tip. The ammunition complies with NATO STANAG 4090 and is packed in military type packaging. It is used in M9 and M11 pistols. This item is Code A, approved for service use.

(E99900) CTG 9MM BALL M882: COMMERCIAL PACK cartridge contains a bullet comprised of a copper alloy jacket and a lead alloy core. The cartridge is identified by the plain bullet tip. It is packed in commercial type packaging and is not intended for OCONUS shipment. It is used in the M9 and M11 pistols. This item is Code A, approved for service use.

Justification:
FY 2016 Base Budget supports critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station, and the combined training centers. Test requirements support the development, fielding, safety, and quality assurance of Army munitions and equipment throughout their life-cycle.

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.

(E05210) CTG 9MM BALL, M882 (Combat Pack) is a training standard item used in both training and combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals. FY 2016 Base procurement dollars in the amount of $2.746 million supports the procurement of 12.797 million M882 Ball cartridges.

(E05217) CTG, 9MM SINGLE ROUND, (DDI), M917A1 is a training unique item not used in combat. The procurement supports annual training and builds a depot level in accordance with the Army's procurement goals.

(E05218) CTG MODULAR HANDGUN SYSTEM AMMUNITION is a training standard item used in both training and combat. The FY 2016 procurement supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 Base procurement dollars in the amount of $.952 million supports annual training and builds a depot level in accordance with the Army's procurement goals.

(E96105) CTG 9MM MARKING, M1041 (BLUE) is a training unique item not used in combat. The FY 2016 procurement supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 Base procurement dollars in the amount of $0.100 million supports the procurement of 0.151 million M1041 (Blue) cartridges.

(E96107) CTG, 9MM MARKING, M1041 (RED) is a training unique item not used in combat. The FY 2016 procurement supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 Base procurement dollars in the amount of $0.065 million supports the procurement of 0.097 million M1041 (Red) cartridges.

(E99900) CTG 9MM BALL M882 (COMMERCIAL PACK) is a training standard item packed commercially for training. The FY 2016 procurement supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 Base procurement dollars in the amount of $3.890 million supports the procurement of 20.760 million M882 Ball cartridges.

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG, Handgun, All Types (EA3000)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$
Hardware Recurring																
E05210 CTG 9MM BALL M882	a363	2738000	15069	0.18	2698000	13076	0.21	2746000	12797	0.21				2746000	12797	0.21
E05217 CTG, 9MM SINGLE ROUND, (DDI), M917A1	ab45	545000	260	2.10												
E96105 CTG, 9MM MARKING, XM1041 (BLUE)	ab13	324000	541	0.60	81000	132	0.62	100000	151	0.66				100000	151	0.66
E96107 CTG, 9MM MARKING, XM1041 (RED)	ab14	324000	541	0.60	129000	210	0.61	65000	97	0.67				65000	97	0.67
E99900 CTG 9MM Ball M882 Commercial Pack	aa49	7427000	49369	0.15	3593000	20666	0.17	3890000	20760	0.19				3890000	20760	0.19
E05218 CTG, Modular Handgun Ammo	MHG				3154000	6541	0.48	952000						952000		
Total:		**11358**			**9655**			**7753**						**7753**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG, 9MM BALL, M882 (Combat Pack) (E05210)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	283624000	15068808	13075583	12796736		12796736	12866142	12972830	13450298	8726850		372581247
Gross Cost	70.9	2.7	2.7	2.7		2.7	2.8	2.9	2.9	1.9		89.6
Less PY Adv Proc												
Net Proc P1	70.9	2.7	2.7	2.7		2.7	2.8	2.9	2.9	1.9		89.6
Plus CY Adv Proc												
Total Proc Cost	70.9	2.7	2.7	2.7		2.7	2.8	2.9	2.9	1.9		89.6
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
The 9mm, M882 Ball cartridge contains a bullet comprised of a copper alloy jacket and a lead alloy core. The cartridge is identified by the plain bullet tip. The ammunition complies with NATO STANAG 4090 and is packed in military type packaging. It is used in the M9 and M11 pistols. This item is Code A, approved for service use.

Justification:
(E05210) CTG 9MM BALL, M882 (Combat Pack) is a training standard item used in both training and combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals. FY 2016 Base procurement dollars in the amount of $2.746 million supports the procurement of 12.797 million M882 Ball cartridges.

Comments:
TYPE CLASSIFICATION DATE: 1985

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG, 9MM SINGLE ROUND, (DDI), M917A1 (E05217)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty		259720					78413					338133
Gross Cost		0.5					0.2					0.7
Less PY Adv Proc												
Net Proc P1		0.5					0.2					0.7
Plus CY Adv Proc												
Total Proc Cost		0.5					0.2					0.7
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C		0.0					0.0					0.0

Description:
CTG, 9MM SINGLE ROUND, Dummy Drill and Inert (DDI), M917A1 ammunition cartridge is an inert (no energetic) dummy round used as an ammunition training aid and for weapon familiarization. This item is Code A, approved for service use.

Justification:
(E05217) CTG, 9MM SINGLE ROUND, (DDI), M917A1 is a training unique item not used in combat. The procurement supports annual training and builds a depot level in accordance with the Army's procurement goals.

Comments:
TYPE CLASSIFICATION DATE: 1975

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG, MODULAR HANDGUN AMMO (E05218)

Program Elements for Code B Items:

Code: B

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty			6541419				10663000	11654788	12280242	12588235		53727684
Gross Cost			3.2	1.0		1.0	4.6	5.0	5.3	5.5		24.5
Less PY Adv Proc												
Net Proc P1			3.2	1.0		1.0	4.6	5.0	5.3	5.5		24.5
Plus CY Adv Proc												
Total Proc Cost			3.2	1.0		1.0	4.6	5.0	5.3	5.5		24.5
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C			0.0				0.0	0.0	0.0	0.0		0.0

Description:
(E05218) CTG MODULAR HANDGUN SYSTEM AMMUNITION consists of four new cartridges – Ball, Jacketed Hollow Point (JHP), Drilled Dummy Inert (DDI) and Blank. The Ball cartridge is intended for use against enemy personnel, for training, and for force protection. The JHP cartridge is required for use in situations where limited over-penetration of targets is necessary to reduce collateral damage. DDI cartridges are completely inert. They are plated and drilled for easy identification and used for training and weapon familiarization. Blank cartridges are used for K-9 training. These items are not yet type classified or approved for service use. The Modular Handgun System will also utilize three M1041 rounds - Blue, Red and Yellow through the use of a weapon adapter kit.

Justification:
(E05218) CTG MODULAR HANDGUN SYSTEM AMMUNITION is a training standard item used in both training and combat. The FY 2016 procurement supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 Base procurement dollars in the amount of $.952 million supports annual training and builds a depot level in accordance with the Army's procurement goals.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG, 9MM MARKING, M1041 (BLUE) (E96105)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	1961666	540812	131563	151252		151252	151810	150514	153235	150270		3391122
Gross Cost	1.2	0.3	0.1	0.1		0.1	0.1	0.1	0.1	0.1		2.1
Less PY Adv Proc												
Net Proc P1	1.2	0.3	0.1	0.1		0.1	0.1	0.1	0.1	0.1		2.1
Plus CY Adv Proc												
Total Proc Cost	1.2	0.3	0.1	0.1		0.1	0.1	0.1	0.1	0.1		2.1
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
CTG 9MM MARKING, M1041 (BLUE) is used for force on force training engagements. The cartridge can be fired with existing M9/M11 pistols with use of a conversion kit. The M9 kit consists of a replacement barrel only. The M11 kit consists of a replacement barrel and recoil spring guide. A blue enameled portion of the M9 and M11 barrels is visible through the ejection port of the weapons. The projectile leaves a mark upon impact (similar to paintball), enabling after action evaluation of training scenarios. It differs from paintball in that it is a full complete cartridge with projectile and cartridge case containing a propulsion system for a low velocity launch. The M1041 is required to hit targets accurately out to 12 meters. The cartridge has been safety certified to be fired in close proximity at properly protected human subjects. This item is Code A, approved for service use.

Justification:
(E96105) CTG 9MM MARKING, M1041 (BLUE) is a training unique item not used in combat. The FY 2016 procurement supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 Base procurement dollars in the amount of $0.100 million supports the procurement of 0.151 million M1041 (Blue) cartridges.

Comments:
TYPE CLASSIFICATION DATE: May 2009

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG, 9MM MARKING, M1041 (RED) (E96107)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	1079104	540744	210415	96522		96522	96433	95210	97904	95626		2311958
Gross Cost	0.7	0.3	0.1	0.1		0.1	0.1	0.1	0.1	0.1		1.5
Less PY Adv Proc												
Net Proc P1	0.7	0.3	0.1	0.1		0.1	0.1	0.1	0.1	0.1		1.5
Plus CY Adv Proc												
Total Proc Cost	0.7	0.3	0.1	0.1		0.1	0.1	0.1	0.1	0.1		1.5
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
CTG, 9MM MARKING, M1041 (RED) is used for force on force training engagements. The cartridge can be fired with existing M9/M11 pistols with use of a conversion kit. The M9 kit consists of a replacement barrel only. The M11 kit consists of a replacement barrel and recoil spring guide. A blue enameled portion of the M9 and M11 barrels is visible through the ejection port of the weapons. The projectile leaves a mark upon impact (similar to paintball), enabling after action evaluation of training scenarios. It differs from paintball in that it is a full complete cartridge with projectile and cartridge case containing a propulsion system for a low velocity launch. The M1041 is required to hit targets accurately out to 12 meters. The cartridge has been safety certified to be fired in close proximity at properly protected human subjects. This item is Code A, approved for service use.

Justification:
(E96107) CTG, 9MM MARKING, M1041 (RED) is a training unique item not used in combat. The FY 2016 procurement supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 Base procurement dollars in the amount of $0.065 million supports the procurement of 0.097 million M1041 (Red) cartridges.

Comments:
TYPE CLASSIFICATION DATE: May 2009

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG, 9MM Ball, M882 (Commercial Pack) (E99900)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	169740000	49369429	20666455	20760034		20760034	17370361	19431339	19520175	19523605		336381398
Gross Cost	33.9	7.4	3.6	3.9		3.9	3.4	3.7	3.8	3.9		63.7
Less PY Adv Proc												
Net Proc P1	33.9	7.4	3.6	3.9		3.9	3.4	3.7	3.8	3.9		63.7
Plus CY Adv Proc												
Total Proc Cost	33.9	7.4	3.6	3.9		3.9	3.4	3.7	3.8	3.9		63.7
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
The 9mm, M882 ball cartridge contains a bullet comprised of a copper alloy jacket and a lead alloy core. The cartridge is identified by the plain bullet tip. It is packed in commercial type packaging and is not intended for OCONUS shipment. It is used in the M9 and M11 pistols. This item is Code A, approved for service use.

Justification:
(E99900) CTG 9MM BALL M882 (COMMERCIAL PACK) is a training standard item packed commercially for training. The FY 2016 procurement supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 Base procurement dollars in the amount of $3.890 million supports the procurement of 20.760 million M882 Ball cartridges.

Comments:
TYPE CLASSIFICATION DATE: 1985

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG, 9MM Ball, M882 (Commercial Pack) (E99900)	Weapon System Type:	MDAP:	DODIC: AA49	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$
Hardware Recurring																
COMPLETE ROUND		6418026	49369	0.13	3099968	20666	0.15	3114005	20760	0.15				3114005	20760	0.15
SUBTOTAL HARDWARE COST		**6418026**			**3099968**			**3114005**						**3114005**		
Support																
Production Engineering		1008551			488810			772518						772518		
Quality Assurance					4382			3297						3297		
SUBTOTAL PRODUCTION SUPPORT		**1008551**			**493192**			**775815**						**775815**		
Total:		**7427**			**3593**			**3890**						**3890**		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:
Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature:
CTG, 9MM Ball, M882 (Commercial Pack) (E99900)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY x1000	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
COMPLETE ROUND						169740				
FY 2014	OLIN CORP WINCHESTER DIVISION EAST ALTON, IL	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 14	Oct 14	49369	0.13	Y		
FY 2015	OLIN CORP WINCHESTER DIVISION EAST ALTON, IL	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 15	Oct 15	20666	0.15	Y		
FY 2016	TO BE SELECTED TBS01	C / FFP	ROCK ISLAND ARSENAL, IL	Apr 16	Nov 16	20760	0.15	Y		

REMARKS: TYPE CLASSIFICATION DATE: 1985

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, 9MM Ball, M882 (Commercial Pack) (E99900)

Date: February 2015

COST ELEMENTS						Fiscal Year 15															Fiscal Year 16									
									Calendar Year 15												Calendar Year 16									
MFR	FY	SERV	PROC QTY x1Mil	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Later
Complete Round																														
1	FY 13	A	59.923	53.137	6.786	6.786																								0.000
1	FY 14	A	49.369	0.000	49.369	1.405	6.284	3.000	3.000	3.000	3.000	3.000	3.000	4.201	6.500	6.500	6.479													0.000
1	FY 15	A	20.666	0.000	20.666						A							1.722	1.722	1.722	1.722	1.722	1.722	1.722	1.722	1.722	1.722	1.722	1.722	0.000
2	FY 16	A	20.760	0.000	20.760																			A						20.760
Total					97.582	8.191	6.284	3.000	3.000	3.000	3.000	3.000	3.000	4.201	6.500	6.500	6.479	1.722	1.722	1.722	1.722	1.722	1.722	1.722	1.722	1.722	1.722	1.722	1.722	20.760
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	OLIN CORP WINCHESTER DIVISION, EAST ALTON, IL	0.002	2.500	10.000	
2	TO BE SELECTED, TBS01	0.002	2.500	10.000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	7	7	7	14
	Reorder	6	6	7	13
2	Initial	7	7	7	14
	Reorder	6	6	7	13
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, 9MM Ball, M882 (Commercial Pack) (E99900)

Date: February 2015

COST ELEMENTS						Fiscal Year 17												Fiscal Year 18												
									Calendar Year 17												Calendar Year 18									
MFR	FY	SERV	PROC QTY x1Mil	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Later
Complete Round																														
1	FY 13	A	59.923	59.923																										0.000
1	FY 14	A	49.369	49.369																										0.000
1	FY 15	A	20.666	20.666																										0.000
2	FY 16	A	20.760	0.000	20.760		1.730	1.730	1.730	1.730	1.730	1.730	1.730	1.730	1.730	1.730	1.730	1.730												0.000
Total					20.760		1.730	1.730	1.730	1.730	1.730	1.730	1.730	1.730	1.730	1.730	1.730	1.730												
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	OLIN CORP WINCHESTER DIVISION, EAST ALTON, IL	0.002	2.500	10.000	
2	TO BE SELECTED, TBS01	0.002	2.500	10.000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	7	7	7	14
	Reorder	6	6	7	13
2	Initial	7	7	7	14
	Reorder	6	6	7	13
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG, .50 Cal, All Types (E08000)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	1503.8	58.4	29.3	24.7	4.0	28.7	39.7	39.0	36.3	40.1		1775.2
Less PY Adv Proc												
Net Proc P1	1503.8	58.4	29.3	24.7	4.0	28.7	39.7	39.0	36.3	40.1		1775.2
Plus CY Adv Proc												
Total Proc Cost	1503.8	58.4	29.3	24.7	4.0	28.7	39.7	39.0	36.3	40.1		1775.2
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
This budget line includes .50 CAL ALL TYPES.

(E06700) The .50 Caliber M8, Armor Piercing Incendiary (API) Cartridge, packed single round, is used in the M2 Machine Gun and the M107 and M82A1 Long Range Sniper Rifles. This cartridge is identified with a gray bullet tip. This is used in .50 Caliber Sniper training, a cost effective training round over the more expensive MK211 Long Range Sniper ammunition and minimizes training range limitations. This item is Code A, approved for service use.

(E07100) The .50 Caliber Cartridge Ball M33 Link is linked in 100 round belts with the M9 link for use in the M2/M3 Machine Gun. This round is also used in function test firing of the M2/M3 Machine Gun. This item is Code A, approved for service use.

(E07200) The .50 Caliber Cartridge, Ball M33 and Cartridge, Tracer M17 linked 4 to 1 in a 100 round belt with the M9 link for use in M2/M3 Machine Gun against unarmored targets. The tracer cartridge permits observation of the bullet's trajectory to the point of impact. M17 has a brown bullet tip. M33 has a plain bullet tip. This item is Code A, approved for service use.

(E07302) The .50 Caliber Blank Cartridge, M1A1 linked in a 100 round belt with the M9 link for use in the M2/M3 Machine Gun. This round is a blank cartridge with a rosette crimp at the mouth used to simulate firing in training exercises in conjunction with the M19 Blank Firing Attachment (BFA). This item is Code A, approved for service use.

(E07900) The .50 Caliber High Pressure Test (HPT) Cartridge M1, is used in all .50 Caliber weapons for proof testing during manufacturing, test and repair. The cartridge has a stannic stained (silvered) case. This item is Code A, approved for service use.

(E72191) The .50 Caliber Dummy Linked Cartridge is an inert cartridge used for M2A1 training exercises including ammunition/weapon familiarization, setting headspace and adjusting timing. The new Dummy, Drilled, Inert (DDI) configuration is both nickel plated and fluted for easy recognition and to distinguish the dummy ammunition visually from tactical ammunition. The cartridges are linked in 100 round belts using the M9 link. This item is Code A, approved for service use.

(E72192) The .50 Caliber Dummy Single Round (DSR) is an inert cartridge used for M2A1 training exercises including ammunition/weapon familiarization, setting headspace and adjusting timing. The new Dummy, Drilled, Inert (DDI) configuration is both nickel plated and fluted for easy recognition and to distinguish the dummy ammunition visually from tactical ammunition. This item is Code A, approved for service use.

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature CTG, .50 Cal, All Types (E08000)	
Program Elements for Code B Items:	Code:	Other Related Program Elements:	

Justification:
FY 2016 Base Budget supports critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station, and the combined training centers. Test requirements support the development, fielding, safety, and quality assurance of Army munitions and equipment throughout their life-cycle.

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.

(E06700) .50 Caliber M8, Armor Piercing Incendiary (API) Cartridge is a training standard item used in training and combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals. FY 2016 Base procurement dollars in the amount of $.606 million supports the procurement of .228 million of the M8, Armor Piercing Incendiary (API) Cartridges.

(E07100) .50 Caliber Cartridge Ball M33 Link is a training standard item used in training and combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals. FY 2016 Base procurement dollars in the amount of $6.100 million supports the procurement of 2.754 million of the Ball M33 Link Cartridges.

(E07200) .50 Caliber Cartridge, Ball M33 and Cartridge, Tracer M17 linked is a training standard item used in training and combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals. FY 2016 Base procurement dollars in the amount of $15.823 million supports the procurement of 6.103 million .50 Caliber Cartridge, Ball M33 and Cartridge, Tracer M17 linked Cartridges. FY 2016 OCO procurement dollars in the amount of $4 million supports the procurement of 1.891 million .50 Caliber Cartridge, Ball M33 and Cartridge, Tracer M17 linked Cartridges. OCO funds are required to replenish munitions expended in combat operations in theater.

(E07302) .50 Caliber Blank Cartridge, M1A1 linked is a training unique item not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 Base procurement dollars in the amount of $2.199 million supports the procurement of 1.476 million .50 Caliber Blank Cartridge, M1A1 Cartridges.

(E07900) .50 Caliber High Pressure Test (HPT) Cartridge M1 is a testing unique item not used in combat. The procurement supports annual testing requirements and builds a depot level in accordance with the Army's procurement goals.

(E72191) .50 Caliber Dummy Linked Cartridge is a training unique item not used in combat. The procurement supports annual training and builds a depot level in accordance with the Army's procurement goals.

(E72192) .50 Caliber Dummy Single Round (DSR) is a training unique item not used in combat. The procurement supports annual training and builds a depot level in accordance with the Army's procurement goals.

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG, .50 Cal, All Types (E08000)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$
Hardware Recurring																
E06700 CTG CAL .50 API M8, SINGLE ROUND	a531	1060000	528	2.01				606000	228	2.65				606000	228	2.65
E07100 CTG CAL .50 BALL M33 LINK	a555	9570000	4732	2.02	4668000	1688	2.77	6100000	2754	2.21				6100000	2754	2.21
E07200 CTG CAL .50 4 BALL/1 TRACER W/M9 LINK	a557	45188K	20863	2.17	22340K	9779	2.28	15823K	6103	2.59	4000000	1891	2.11	19823K	7994	2.59
E07302 CTG CAL .50 BLANK M1A1 LKD W/M9 LINK	a598	2333000	1826	1.28	2085000	1379	1.51	2199000	1476	1.49				2199000	1476	1.49
E07900 CTG CAL .50 HIGH PRESSURE TEST M1, SI	a575	200000	67	2.99												
E72191 CTG, CAL. 50 DUMMY M2, LINKED	ab36				79000	29	2.75									
E72192 CTG, .50 CAL SINGLE ROUND, (DDI), M2A	ab48				132000	47	2.80									
Total:		**58351**			**29304**			**24728**			**4000**			**28728**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG CAL .50 API M8, SINGLE ROUND (E06700)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	628904	527730		228062		228062		325625		333124		2043445
Gross Cost	4.6	1.1		0.6		0.6		0.8		0.8		7.8
Less PY Adv Proc												
Net Proc P1	4.6	1.1		0.6		0.6		0.8		0.8		7.8
Plus CY Adv Proc												
Total Proc Cost	4.6	1.1		0.6		0.6		0.8		0.8		7.8
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0		0.0		0.0		0.0		0.0		0.0

P-40 Breakdown

Area		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Active	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	858.0	0.0	245.5	0.0	245.0	0.0	609.0	0.0	621.0
National Guard	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	170.0	0.0	48.5	0.0	48.0	0.0	120.0	0.0	123.0
Reserve	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	32.0	0.0	9.0	0.0	9.0	0.0	23.0	0.0	23.0
Total	Qty	0	0	0	0	0	0	0	0	0
	Gross Cost	1060	0	303	0	302	0	752	0	767

Description:
The .50 Caliber M8, Armor Piercing incendiary cartridge, packed single round, used in the M2 Machine Gun and the M107 and M82A1 Long Range Sniper Rifles. This cartridge is identified with a gray bullet tip. This is used in .50 Caliber Sniper training, a cost effective training round over the more expensive MK211 Long Range Sniper ammo and training range limitations. This item is Code A, approved for service use.

Justification:
(E06700) .50 Caliber M8, Armor Piercing Incendiary (API) Cartridge is a training standard item used in training and combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals. FY 2016 Base procurement dollars in the amount of $.606 million supports the procurement of .228 million of the M8, Armor Piercing Incendiary (API) Cartridges.

Comments:

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature CTG CAL .50 API M8, SINGLE ROUND (E06700)	
Program Elements for Code B Items:	Code: A	Other Related Program Elements:	
TYPE CLASSIFICATION DATE: Prior to 1960			

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG CAL .50 BALL M33 LINK (E07100)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	121410344	4732449	1687518	2754050		2754050	2835553	2881871	2924324	2973296		142199405
Gross Cost	246.5	9.6	4.7	6.1		6.1	6.2	6.3	6.5	6.6		292.4
Less PY Adv Proc												
Net Proc P1	246.5	9.6	4.7	6.1		6.1	6.2	6.3	6.5	6.6		292.4
Plus CY Adv Proc												
Total Proc Cost	246.5	9.6	4.7	6.1		6.1	6.2	6.3	6.5	6.6		292.4
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
This .50 Caliber item consists of Cartridge Ball M33 linked in 100-round belts with the M9 link for use in either Machine Gun M2 or M3. This round is also used in function test firing of the M2 and M3 Machine Guns. This item is Code A, approved for service use.

Justification:
(E07100) .50 Caliber Cartridge Ball M33 Link is a training standard item used in training and combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals. FY 2016 Base procurement dollars in the amount of $6.100 million supports the procurement of 2.754 million of the Ball M33 Link Cartridges.

Comments:
TYPE CLASSIFICATION DATE: 1951

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG CAL .50 BALL M33 LINK (E07100)	Weapon System Type:	MDAP:	DODIC: A555	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$
Hardware Recurring																
LOAD, ASSEMBLE, PACK (LAP)		8423759	4732	1.78	3999418	1688	2.37	5205155	2754	1.89				5205155	2754	1.89
BOX METAL M2A2		524706	48	10.87	227384	17	13.21	350857	28	12.49				350857	28	12.49
SUBTOTAL HARDWARE COST		**8948465**			**4226801**			**5556011**						**5556011**		
Support																
PRODUCTION ENGINEERING		591169			372850			536559						536559		
QUALITY ASSURANCE		3498			3390			2808						2808		
ACCEPTANCE TESTING		26685			66270			4460						4460		
SUBTOTAL PRODUCTION SUPPORT		**621352**			**442510**			**543827**						**543827**		
Total:		**9570**			**4668**			**6100**						**6100**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2015

Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature: CTG CAL .50 BALL M33 LINK (E07100)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY x1000	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
LOAD, ASSEMBLE, PACK (LAP)										
FY 2014	ALLIANT TECHSYSTEMS (LCAAP) INDEPENDENCE, MO	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 14	Oct 14	4275	1.78	Y		
FY 2014	OLIN CORP WINCHESTER DIVISION EAST ALTON, IL	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 14	Jan 15	458	1.78	Y		
FY 2015	OLIN CORP WINCHESTER DIVISION EAST ALTON, IL	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 15	Jul 15	1029	2.37	Y		
FY 2015	ALLIANT TECHSYSTEMS (LCAAP) INDEPENDENCE, MO	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 15	Oct 15	658	2.37	Y		
FY 2016	TO BE SELECTED TBS01	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 16	Mar 17	275	1.89	Y		
FY 2016	ALLIANT TECHSYSTEMS (LCAAP) INDEPENDENCE, MO	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 16	Oct 16	2479	1.89	Y		
BOX METAL M2A2										
FY 2014	BWAY CORPORATION ATLANTA, GA	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 14	May 14	48	10.87	Y		
FY 2015	BWAY CORPORATION ATLANTA, GA	C / FFP	ROCK ISLAND ARSENAL, IL	May 15	Jul 15	17	13.21	Y		
FY 2016	BWAY CORPORATION ATLANTA, GA	C / FFP	ROCK ISLAND ARSENAL, IL	May 16	Jul 16	28	12.49	Y		

REMARKS: FY 2014, FY 2015 AND FY 2016 LAP IS A DELIVERY ORDER TO THE EXISTING CON TRACT AWARDED IN FY 2012. FY 2014, FY 2015 AND FY 2016 LAP IS AN AVERAGE UNIT COST BETWEEN TWO CON TRACTORS. FY 2014, BOX METAL M2A2 IS AN AVERAGE UNIT COST.

TYPE CLASSIFICATION DATE: 1951

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG CAL .50 BALL M33 LINK (E07100)

Date:
February 2015

COST ELEMENTS						Fiscal Year 15												Fiscal Year 16												
									Calendar Year 15												Calendar Year 16									
MFR	FY	SERV	PROC QTY x1000	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Later
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	6747.80	5348.30	1399.50	912.00	264.50	223.00																						0.00
2	FY 13	A	11321.40	10814.40	507.00			507.00																						0.00
1	FY 14	A	457.63	0.00	457.63				457.63																					0.00
2	FY 14	A	4274.82	0.00	4274.82	25.20	386.33	386.33	386.33	386.33	386.33	386.33	386.33	386.33	386.33	386.33	386.33													0.00
1	FY 15	A	1029.39	0.00	1029.39						A				85.78	85.78	85.78	85.78	85.78	85.78	85.78	85.78	85.78	85.78	85.78	85.78				0.00
2	FY 15	A	658.13	0.00	658.13						A							54.85	54.84	54.84	54.84	54.84	54.84	54.84	54.84	54.84	54.84	54.84	54.84	0.00
2	FY 16	A	2478.65	0.00	2478.65																		A							2478.65
3	FY 16	A	275.41	0.00	275.40																		A							275.41
2	FY 13	AF	842.40	837.80	4.60			4.60																						0.00
1	FY 14	AF	749.95	0.00	749.95	62.50	62.50	62.50	62.50	62.50	62.50	62.50	62.50	62.50	62.50	62.50	62.50													0.00
2	FY 14	AF	797.62	0.00	797.62	797.62																								0.00
1	FY 15	AF	603.85	0.00	603.85						A				50.32	50.32	50.32	50.32	50.32	50.32	50.32	50.32	50.32	50.32	50.32	50.32				0.00
2	FY 15	AF	386.07	0.00	386.07						A							32.18	32.17	32.17	32.17	32.17	32.17	32.17	32.17	32.17	32.17	32.17	32.17	0.00
2	FY 16	AF	1269.80	0.00	1269.80																		A							1269.80
3	FY 16	AF	141.09	0.00	141.09																		A							141.09
2	FY 13	NAV SEA	1613.60	1587.80	25.80			25.80																						0.00
2	FY 14	NAV SEA	4579.80	0.00	4579.80	4248.95	330.85																							0.00
1	FY 15	NAV SEA	844.24	0.00	844.24						A				70.36	70.35	70.35	70.35	70.35	70.35	70.35	70.35	70.35	70.35	70.35	70.35				0.00
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	OLIN CORP WINCHESTER DIVISION, EAST ALTON, IL	0.20	1000.00	2500.00	
2	ALLIANT TECHSYSTEMS (LCAAP), INDEPENDENCE, MO	0.20	5990.00	20770.00	
3	TO BE SELECTED, TBS01	0.20	5990.00	20770.00	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
1	Initial	6	6	9	15	
	Reorder	6	6	4	10	
2	Initial	6	6	12	18	
	Reorder	6	6	7	13	
3	Initial	6	6	12	18	
	Reorder	6	6	6	12	
	Initial					
	Reorder					
	Initial					
	Reorder					

FY 15 / 16 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG CAL .50 BALL M33 LINK (E07100)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY x1000	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15													Fiscal Year 16												Later
									Calendar Year 15													Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
LOAD, ASSEMBLE, PACK (LAP)																															
2	FY 15	NAV SEA	539.76	0.00	539.76						A							44.98	44.98	44.98	44.98	44.98	44.98	44.98	44.98	44.98	44.98	44.98	44.98	44.98	0.00
2	FY 16	NAV SEA	898.56	0.00	898.56																		A								898.56
3	FY 16	NAV SEA	99.84	0.00	99.84																		A								99.84
2	FY 13	NSOF	1761.20	1757.20	4.00			4.00																							0.00
2	FY 16	NSOF	900.00	0.00	900.00																		A								900.00
3	FY 16	NSOF	100.00	0.00	100.00																		A								100.00
Total					23025.50	6046.27	1044.18	1213.22	906.45	448.83	448.83	448.83	448.83	448.83	655.29	655.28	655.28	338.46	338.45	338.45	338.45	338.45	338.45	338.45	338.45	338.45	132.00	132.00	132.00	6163.34
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	OLIN CORP WINCHESTER DIVISION, EAST ALTON, IL	0.20	1000.00	2500.00	
2	ALLIANT TECHSYSTEMS (LCAAP), INDEPENDENCE, MO	0.20	5990.00	20770.00	
3	TO BE SELECTED, TBS01	0.20	5990.00	20770.00	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	9	15
	Reorder	6	6	4	10
2	Initial	6	6	12	18
	Reorder	6	6	7	13
3	Initial	6	6	12	18
	Reorder	6	6	6	12
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG CAL .50 BALL M33 LINK (E07100)

Date:
February 2015

COST ELEMENTS						Fiscal Year 17												Fiscal Year 18												
									Calendar Year 17												Calendar Year 18									
MFR	FY	SERV	PROC QTY x1000	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Later
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	6747.80	6747.80																										0.00
2	FY 13	A	11321.40	11321.40																										0.00
1	FY 14	A	457.63	457.63																										0.00
2	FY 14	A	4274.82	4274.82																										0.00
1	FY 15	A	1029.39	1029.39																										0.00
2	FY 15	A	658.13	658.13																										0.00
2	FY 16	A	2478.65	0.00	2478.65	206.56	206.55	206.55	206.55	206.55	206.55	206.55	206.55	206.55	206.55	206.55	206.55													0.00
3	FY 16	A	275.41	0.00	275.40						22.96	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95	22.95								0.00
2	FY 13	AF	842.40	842.40																										0.00
1	FY 14	AF	749.95	749.95																										0.00
2	FY 14	AF	797.62	797.62																										0.00
1	FY 15	AF	603.85	603.85																										0.00
2	FY 15	AF	386.07	386.07																										0.00
2	FY 16	AF	1269.80	0.00	1269.80	105.82	105.82	105.82	105.82	105.82	105.82	105.82	105.82	105.82	105.82	105.82	105.82													0.00
3	FY 16	AF	141.09	0.00	141.09						11.76	11.76	11.76	11.76	11.76	11.76	11.76	11.76	11.76	11.76	11.76	11.76								0.00
2	FY 13	NAV SEA	1613.60	1613.60																										0.00
2	FY 14	NAV SEA	4579.80	4579.80																										0.00
1	FY 15	NAV SEA	844.24	844.24																										0.00
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	OLIN CORP WINCHESTER DIVISION, EAST ALTON, IL	0.20	1000.00	2500.00	
2	ALLIANT TECHSYSTEMS (LCAAP), INDEPENDENCE, MO	0.20	5990.00	20770.00	
3	TO BE SELECTED, TBS01	0.20	5990.00	20770.00	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
1	Initial	6	6	9	15	
	Reorder	6	6	4	10	
2	Initial	6	6	12	18	
	Reorder	6	6	7	13	
3	Initial	6	6	12	18	
	Reorder	6	6	6	12	
	Initial					
	Reorder					
	Initial					
	Reorder					

FY 17 / 18 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG CAL .50 BALL M33 LINK (E07100)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY x1000	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17														Fiscal Year 18									Later
									Calendar Year 17											Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																													
2	FY 15	NAV SEA	539.76	539.76																									0.00
2	FY 16	NAV SEA	898.56	0.00	898.56	74.88	74.88	74.88	74.88	74.88	74.88	74.88	74.88	74.88	74.88	74.88	74.88												0.00
3	FY 16	NAV SEA	99.84	0.00	99.84						8.32	8.32	8.32	8.32	8.32	8.32	8.32	8.32	8.32	8.32	8.32	8.32							0.00
2	FY 13	NSOF	1761.20	1761.20																									0.00
2	FY 16	NSOF	900.00	0.00	900.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00	75.00												0.00
3	FY 16	NSOF	100.00	0.00	100.00						8.34	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33							0.00
Total					6163.34	462.27	462.25	462.25	462.25	462.25	513.62	513.61	513.61	513.61	513.61	513.61	513.61	51.36	51.36	51.36	51.36	51.36							
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	OLIN CORP WINCHESTER DIVISION, EAST ALTON, IL	0.20	1000.00	2500.00	
2	ALLIANT TECHSYSTEMS (LCAAP), INDEPENDENCE, MO	0.20	5990.00	20770.00	
3	TO BE SELECTED, TBS01	0.20	5990.00	20770.00	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	9	15
	Reorder	6	6	4	10
2	Initial	6	6	12	18
	Reorder	6	6	7	13
3	Initial	6	6	12	18
	Reorder	6	6	6	12
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG CAL .50 4 BALL/1 TRACER W/M9 LINK (E07200)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	708479	20863360	9778541	6103171	1890931	7994102	13177549	12819296	11819441	11982620		89143388
Gross Cost	1140.7	45.2	22.3	15.8	4.0	19.8	31.0	29.6	27.4	27.8		1343.7
Less PY Adv Proc												
Net Proc P1	1140.7	45.2	22.3	15.8	4.0	19.8	31.0	29.6	27.4	27.8		1343.7
Plus CY Adv Proc												
Total Proc Cost	1140.7	45.2	22.3	15.8	4.0	19.8	31.0	29.6	27.4	27.8		1343.7
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0

Description:
The .50 Caliber Cartridge, Ball M33 and Cartridge, Tracer M17 linked 4-to-1 in a 100-round belt with the M9 link for use in either the M2 or M3 Machine Gun against unarmored targets. The tracer cartridge permits observation of the bullet's trajectory to the point of impact. M17 has a brown bullet tip. M33 has a plain bullet tip. This item is Code A, approved for service use.

Justification:
(E07200) .50 Caliber Cartridge, Ball M33 and Cartridge, Tracer M17 linked is a training standard item used in training and combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals. FY 2016 Base procurement dollars in the amount of $15.823 million supports the procurement of 6.103 million .50 Caliber Cartridge, Ball M33 and Cartridge, Tracer M17 linked Cartridges. FY 2016 OCO procurement dollars in the amount of $4 million supports the procurement of 1.891 million .50 Caliber Cartridge, Ball M33 and Cartridge, Tracer M17 linked Cartridges. OCO funds are required to replenish munitions expended in combat operations in theater.

Comments:
TYPE CLASSIFICATION DATE: 1968

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG CAL .50 4 BALL/1 TRACER W/M9 LINK (E07200)	Weapon System Type:	MDAP:	DODIC: A557	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$
Hardware Recurring																
LOAD, ASSEMBLE, PACK (LAP)		38389K	20863	1.84	17993K	9779	1.84	12084K	6103	1.98	3744043	1891	1.98	15828K	7994	1.98
BOX METAL M2A2		2313201	213	10.87	1317579	100	13.21	777527	62	12.49	240895	19	12.49	1018422	82	12.49
SUBTOTAL HARDWARE COST		**40702K**			**19310K**			**12862K**			**3984938**			**16847K**		
Support																
PRODUCTION ENGINEERING		3842662			1981528			1275075						1275075		
ACCEPTANCE TESTING		142494			258394			37964			15000			52964		
QUALITY ASSURANCE		10819			9798			5312						5312		
SUBTOTAL PRODUCTION SUPPORT		**3995975**			**2249720**			**1318351**			**15000**			**1333351**		
NON-RECURRING COSTS																
ENVIRONMENTAL INITIATIVES		104795			779000			1531000						1531000		
NATO CERTIFICATION		116029						112244						112244		
MODERNIZATION		269399														
SUBTOTAL NON-RECURRING COSTS		**490223**			**779000**			**1643244**						**1643244**		
Total:		**45188**			**22340**			**15823**			**4000**			**19822**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2015

Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature: CTG CAL .50 4 BALL/1 TRACER W/M9 LINK (E07200)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY x1000	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
LOAD, ASSEMBLE, PACK (LAP)						708				
FY 2014	OLIN CORP WINCHESTER DIVISION EAST ALTON, IL	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 14	Mar 15	8510	1.84	Y		
FY 2014	ALLIANT TECHSYSTEMS (LCAAP) INDEPENDENCE, MO	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 14	Jan 15	12353	1.84	Y		
FY 2015	ALLIANT TECHSYSTEMS (LCAAP) INDEPENDENCE, MO	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 15	Oct 15	9779	1.84	Y		
FY 2016	ALLIANT TECHSYSTEMS (LCAAP) INDEPENDENCE, MO	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 16	Oct 16	7195	1.98	Y		
FY 2016	TO BE SELECTED TBS01	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 16	Mar 17	799	1.98	Y		
BOX METAL M2A2										
FY 2014	BWAY CORPORATION ATLANTA, GA	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 14	May 14	213	10.87	Y		
FY 2015	BWAY CORPORATION ATLANTA, GA	C / FFP	ROCK ISLAND ARSENAL, IL	May 15	Jul 15	100	13.21	Y		
FY 2016	BWAY CORPORATION ATLANTA, GA	C / FFP	ROCK ISLAND ARSENAL, IL	May 16	Jul 16	82	12.49	Y		

REMARKS: FY 2014, FY 2015, AND FY 2016 LAP IS A DELIVERY ORDER TO THE EXISTING CONTRACT AWARDED IN FY 2012. FY 2014 AND FY 2016 LAP IS AN AVERAGE UNIT COST BETWEEN TWO CONTRACTORS. FY 2014, BOX METAL M2A2 IS AN AVERAGE UNIT COST. FY 2014 LAP IS A DELIVERY ORDER TO THE EXISTING CONTRACT AWARDED IN FY 2012. FY 2014, BOX METAL M2A2 IS AN AVERAGE UNIT COST.

TYPE CLASSIFICATION DATE: 1968

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG CAL .50 4 BALL/1 TRACER W/M9 LINK (E07200)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY x1Mil	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	67.276	52.495	14.781	0.718	2.047	0.806	2.500	2.500	2.500	2.500	1.210																	0.000
1	FY 14	A	12.353	0.000	12.353				1.029	1.029	1.029	1.029	1.029	1.029	1.029	1.029	1.029	1.029	1.029	1.029										0.000
2	FY 14	A	8.510	0.000	8.510						0.709	0.709	0.709	0.709	0.709	0.709	0.709	0.709	0.709	0.709	0.709	0.709								0.000
1	FY 15	A	9.779	0.000	9.779						A							0.815	0.815	0.815	0.815	0.815	0.815	0.815	0.815	0.815	0.815	0.815	0.815	0.000
1	FY 16	A	7.195	0.000	7.195																		A							7.195
3	FY 16	A	0.799	0.000	0.799																		A							0.799
1	FY 13	AF	3.462	2.516	0.946	0.602	0.330								0.014															0.000
1	FY 14	AF	2.804	0.000	2.804			1.431								1.372														0.000
1	FY 15	AF	1.005	0.000	1.005						A							0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.000
1	FY 16	AF	0.810	0.000	0.810																		A							0.810
3	FY 16	AF	0.090	0.000	0.090																		A							0.090
1	FY 13	CG	0.026	0.000	0.026		0.026																							0.000
1	FY 14	CG	0.100	0.000	0.100			0.100																						0.000
1	FY 15	CG	0.100	0.000	0.100						A							0.100												0.000
1	FY 16	CG	0.180	0.000	0.180																		A							0.180
3	FY 16	CG	0.020	0.000	0.020																		A							0.020
1	FY 13	NAV SEA	15.222	12.186	3.036	0.935	0.000							1.867	0.231		0.003													0.000
1	FY 14	NAV SEA	8.788	0.000	8.788			0.732	0.732	0.732	0.732	0.732	0.732	0.732	0.732	0.732	2.197													0.000
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	ALLIANT TECHSYSTEMS (LCAAP), INDEPENDENCE, MO	0.000	5.999	20.770	
2	OLIN CORP WINCHESTER DIVISION, EAST ALTON, IL	0.000	0.300	3.000	
3	TO BE SELECTED, TBS01	0.000	5.990	20.770	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
1	Initial	6	6	12	18	
	Reorder	6	6	7	13	
2	Initial	6	6	9	15	
	Reorder	6	6	4	10	
3	Initial	6	6	12	18	
	Reorder	6	6	6	12	
	Initial					
	Reorder					
	Initial					
	Reorder					

FY 15 / 16 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG CAL .50 4 BALL/1 TRACER W/M9 LINK (E07200)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY x1Mil	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 15	NAV SEA	5.778	0.000	5.778						A							0.737	0.458	0.458	0.458	0.458	0.458	0.458	0.458	0.458	0.458	0.458	0.458	0.000
1	FY 16	NAV SEA	3.603	0.000	3.603																		A							3.603
3	FY 16	NAV SEA	0.400	0.000	0.400																		A							0.400
1	FY 14	NSOF	1.303	0.000	1.303			0.163							1.140															0.000
1	FY 16	NSOF	0.630	0.000	0.630																		A							0.630
3	FY 16	NSOF	0.070	0.000	0.070																		A							0.070
Total					83.107	2.255	2.403	3.233	4.262	4.262	4.971	4.971	3.681	4.338	3.856	3.843	3.939	3.474	3.096	3.096	2.066	2.066	1.357	1.357	1.357	1.357	1.357	1.357	1.357	13.798
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	ALLIANT TECHSYSTEMS (LCAAP), INDEPENDENCE, MO	0.000	5.999	20.770	
2	OLIN CORP WINCHESTER DIVISION, EAST ALTON, IL	0.000	0.300	3.000	
3	TO BE SELECTED, TBS01	0.000	5.990	20.770	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	12	18
	Reorder	6	6	7	13
2	Initial	6	6	9	15
	Reorder	6	6	4	10
3	Initial	6	6	12	18
	Reorder	6	6	6	12
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG CAL .50 4 BALL/1 TRACER W/M9 LINK (E07200)

Date: February 2015

COST ELEMENTS						Fiscal Year 17												Fiscal Year 18												
									Calendar Year 17												Calendar Year 18									
MFR	FY	SERV	PROC QTY x1Mil	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Later
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	67.276	67.276																										0.000
1	FY 14	A	12.353	12.353																										0.000
2	FY 14	A	8.510	8.510																										0.000
1	FY 15	A	9.779	9.779																										0.000
1	FY 16	A	7.195	0.000	7.195	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.600													0.000
3	FY 16	A	0.799	0.000	0.799						0.240	0.051	0.051	0.051	0.051	0.051	0.051	0.051	0.051	0.051	0.051	0.051								0.000
1	FY 13	AF	3.462	3.462																										0.000
1	FY 14	AF	2.804	2.804																										0.000
1	FY 15	AF	1.005	1.005																										0.000
1	FY 16	AF	0.810	0.000	0.810	0.068	0.068	0.068	0.068	0.068	0.068	0.068	0.068	0.068	0.068	0.068	0.068													0.000
3	FY 16	AF	0.090	0.000	0.090						0.090																			0.000
1	FY 13	CG	0.026	0.026																										0.000
1	FY 14	CG	0.100	0.100																										0.000
1	FY 15	CG	0.100	0.100																										0.000
1	FY 16	CG	0.180	0.000	0.180	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015													0.000
3	FY 16	CG	0.020	0.000	0.020						0.020																			0.000
1	FY 13	NAV SEA	15.222	15.222																										0.000
1	FY 14	NAV SEA	8.788	8.788																										0.000
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	ALLIANT TECHSYSTEMS (LCAAP), INDEPENDENCE, MO	0.000	5.999	20.770	
2	OLIN CORP WINCHESTER DIVISION, EAST ALTON, IL	0.000	0.300	3.000	
3	TO BE SELECTED, TBS01	0.000	5.990	20.770	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
1	Initial	6	6	12	18	
	Reorder	6	6	7	13	
2	Initial	6	6	9	15	
	Reorder	6	6	4	10	
3	Initial	6	6	12	18	
	Reorder	6	6	6	12	
	Initial					
	Reorder					
	Initial					
	Reorder					

FY 17 / 18 BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG CAL .50 4 BALL/1 TRACER W/M9 LINK (E07200)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY x1Mil	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 15	NAV SEA	5.778	5.778																										0.000
1	FY 16	NAV SEA	3.603	0.000	3.603	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300													0.000
3	FY 16	NAV SEA	0.400	0.000	0.400						0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033								0.000
1	FY 14	NSOF	1.303	1.303																										0.000
1	FY 16	NSOF	0.630	0.000	0.630	0.053	0.053	0.053	0.053	0.053	0.053	0.053	0.053	0.053	0.053	0.053	0.053													0.000
3	FY 16	NSOF	0.070	0.000	0.070						0.070																			0.000
Total					13.798	1.035	1.035	1.035	1.035	1.035	1.488	1.119	1.119	1.119	1.119	1.119	1.119	0.084	0.084	0.084	0.084	0.084								
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	ALLIANT TECHSYSTEMS (LCAAP), INDEPENDENCE, MO	0.000	5.999	20.770	
2	OLIN CORP WINCHESTER DIVISION, EAST ALTON, IL	0.000	0.300	3.000	
3	TO BE SELECTED, TBS01	0.000	5.990	20.770	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	12	18
	Reorder	6	6	7	13
2	Initial	6	6	9	15
	Reorder	6	6	4	10
3	Initial	6	6	12	18
	Reorder	6	6	6	12
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG CAL .50 BLANK M1A1 LKD W/M9 LINK F/M (E07302)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	100984761	1826185	1378531	1475622		1475622	1539073	1586119	1636481	3041575		113468347
Gross Cost	106.0	2.3	2.1	2.2		2.2	2.3	2.3	2.4	4.5		124.1
Less PY Adv Proc												
Net Proc P1	106.0	2.3	2.1	2.2		2.2	2.3	2.3	2.4	4.5		124.1
Plus CY Adv Proc												
Total Proc Cost	106.0	2.3	2.1	2.2		2.2	2.3	2.3	2.4	4.5		124.1
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
The cartridge, M1A1 linked in 100-round belts with the M9 link for use in either the M2 or M3 Machine Gun. This round is a blank cartridge with a rosette crimp at the mouth used to simulate firing in training exercises in conjunction with the M19 Blank Firing Attachment (BFA). This item is Code A, approved for service use.

Justification:
(E07302) .50 Caliber Blank Cartridge, M1A1 linked is a training unique item not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 Base procurement dollars in the amount of $2.199 million supports the procurement of 1.476 million .50 Caliber Blank Cartridge, M1A1 Cartridges.

Comments:
TYPE CLASSIFICATION DATE: 1980

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG CAL .50 HIGH PRESSURE TEST M1, SINGLE RD (E07900)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	1174115	66800					59351			61234		1361500
Gross Cost	5.3	0.2					0.2			0.2		5.9
Less PY Adv Proc												
Net Proc P1	5.3	0.2					0.2			0.2		5.9
Plus CY Adv Proc												
Total Proc Cost	5.3	0.2					0.2			0.2		5.9
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0					0.0			0.0		0.0

Description:
Caliber .50 high pressure test cartridge, M1, used in all .50 Caliber weapons, used in proof testing weapons during manufacturing, test and repair. The cartridge has a stannic stained (silvered) case. This item is Code A, approved for service use.

Justification:
(E07900) .50 Caliber High Pressure Test (HPT) Cartridge M1 is a testing unique item not used in combat. The procurement supports annual testing requirements and builds a depot level in accordance with the Army's procurement goals.

Comments:
TYPE CLASSIFICATION DATE: Prior to 1960

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG, CAL. 50 DUMMY M2A1, LINKED (E72191)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	15998		28740							38642		83380
Gross Cost	0.5		0.1							0.1		0.7
Less PY Adv Proc												
Net Proc P1	0.5		0.1							0.1		0.7
Plus CY Adv Proc												
Total Proc Cost	0.5		0.1							0.1		0.7
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0		0.0							0.0		0.0

Description:
The .50 Caliber Dummy cartridge is an inert cartridge (no energetics) used for M2A1 training exercises including ammunition/weapon familiarization, setting headspace and adjusting timing. The new Dummy, Drill and Inert (DDI) configuration will consist of a fluted case that has been plated with a silver colorization to ensure that these cartridges will not be mistaken for combat cartridges. The cartridges are linked in 100 round belts using the M-9 link. This item is Code A, approved for service use.

Justification:
(E72191) .50 Caliber Dummy Linked Cartridge is a training unique item not used in combat. The procurement supports annual training and builds a depot level in accordance with the Army's procurement goals.

Comments:
TYPE CLASSIFICATION DATE: June 1963

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG, .50 CAL SINGLE ROUND, (DDI), M2A1 F/M2 & M107 (E72192)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	50989		47218							49272		147479
Gross Cost	0.2		0.1							0.1		0.5
Less PY Adv Proc												
Net Proc P1	0.2		0.1							0.1		0.5
Plus CY Adv Proc												
Total Proc Cost	0.2		0.1							0.1		0.5
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0		0.0							0.0		0.0

Description:
The M2A1, .50 Caliber Dummy Drill & Inert ammunition (DDI) is an inert (no energetic) dummy round used as an ammunition training aid and for weapon familiarization. The M2A1, DDI ammunition is both nickel plated and fluted for easy recognition and to distinguish the dummy ammunition visually from tactical ammunition. This item is Code A, approved for service use.

Justification:
(E72192) .50 Caliber Dummy Single Round (DSR) is a training unique item not used in combat. The procurement supports annual training and builds a depot level in accordance with the Army's procurement goals.

Comments:
TYPE CLASSIFICATION DATE: June 1963

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG, 25MM, All Types (E08200)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	443.1	6.2	8.2	8.3		8.3	8.7	11.2	14.7	15.0		515.3
Less PY Adv Proc												
Net Proc P1	443.1	6.2	8.2	8.3		8.3	8.7	11.2	14.7	15.0		515.3
Plus CY Adv Proc												
Total Proc Cost	443.1	6.2	8.2	8.3		8.3	8.7	11.2	14.7	15.0		515.3
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
This budget line includes 25MM ALL TYPES:

(E08203) The 25MM M793 Target Practice - Tracer Cartridge is a ballistically matched training round that simulates the M792 25mm High Explosive Incendiary - Tracer Cartridge and the MK210 High Explosive Incendiary - Tracer Cartridge. The M793 supports gunnery training for the Army's Bradley Fighting Vehicles, the United States Marine Corps Light Armored Vehicles, and the Navy's MK38 Deck Gun. The M793 is a percussion primed round. It is packed for the Army and USMC in linked belts of 30 cartridges per PA125 Container. It is packed for the Navy in linked belts of 55 cartridges in the CNU405 Container. The M28 metal link is used to belt M793 cartridges. This item is Code A, approved for service use.

(E08209) The 25MM M794 is an inert training device. It physically mimics 25mm M792, M793, MK210, PGU-23 and PGU-25 ammunition. It is used for training of proper handling and loading of ammunition and for non-firing system training and checkout of 25mm weapons prior to exposing soldiers to live ammunition. This item is Code A, approved for service use.

Justification:
FY 2016 Base Budget supports critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station, and the combined training centers. Test requirements support the development, fielding, safety, and quality assurance of Army munitions and equipment throughout their life-cycle.

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.

(E08203) CTG 25MM TP-T M793 - This is a training unique item not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 Base procurement dollars in the amount of $8.305 million supports .255 million M793 cartridges.

TYPE CLASSIFICATION DATE: 1979

(E08209) CTG 25MM DUMMY M794 - This is a training unique item not used in combat. The procurement supports annual training and builds a depot level in accordance with the Army's

procurement goals.

TYPE CLASSIFICATION DATE: 1979

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG, 25MM, All Types (E08200)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
E08203 CTG 25MM TP-T M793	A976	6197093	272280	22.76	6505607	194837	33.39	8305041	254569	32.62				8305041	254569	32.62
E08209 CTG 25MM DUMMY M794	A967				1675031	12081	138.65									
Total:		**6197**			**8181**			**8305**						**8305**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG 25MM TP-T M793 (E08203)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	30001	272280	194837	254569		254569	250789	240739	240745	240601		1724561
Gross Cost	434.2	6.2	6.5	8.3		8.3	8.5	8.6	8.8	9.0		490.1
Less PY Adv Proc												
Net Proc P1	434.2	6.2	6.5	8.3		8.3	8.5	8.6	8.8	9.0		490.1
Plus CY Adv Proc												
Total Proc Cost	434.2	6.2	6.5	8.3		8.3	8.5	8.6	8.8	9.0		490.1
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:

The 25MM M793 Target Practice - Tracer Cartridge is a ballistically matched training round that simulates the M792 25mm High Explosive Incendiary - Tracer Cartridge and the MK210 High Explosive Incendiary - Tracer Cartridge. The M793 supports gunnery training for the Army's Bradley Fighting Vehicles, the United States Marine Corps (USMC) Light Armored Vehicles, and the Navy's MK38 Deck Gun. The M793 is a percussion primed round. It is packed for the Army and USMC in linked belts of 30 cartridges per PA125 Container. It is packed for the Navy in linked belts of 55 cartridges in the CNU405 Container. The M28 metal link is used to belt M793 cartridges. This item is Code A, approved for service use.

Justification:

CTG 25MM TP-T M793 - This is a training unique item not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 Base procurement dollars in the amount of $8.305 million supports .255 million M793 cartridges.

TYPE CLASSIFICATION DATE: 1979

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG 25MM TP-T M793 (E08203)	Weapon System Type:	MDAP:	DODIC: A976	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
LOAD, ASSEMBLE, PACK (LAP)		5410204	272280	19.87	5165129	194837	26.51	6957218	254569	27.33				6957218	254569	27.33
CONTAINER PA125		253815	9328	27.21	442352	6675	66.27	603617	8721	69.21				603617	8721	69.21
SUBTOTAL HARDWARE COST		**5664018**			**5607481**			**7560951**						**7560951**		
Support																
PRODUCTION ENGINEERING		528372			598656			577996						577996		
QUALITY ASSURANCE		4601			4713			2681						2681		
SUBTOTAL PRODUCTION SUPPORT		**532973**			**603369**			**580677**						**580677**		
NON-RECURRING COSTS																
FIRST ARTICLE TEST					295064			163467						163467		
SUBTOTAL NON-RECURRING COSTS					**295064**			**163467**						**163467**		
Total:		**6197**			**6506**			**8305**						**8305**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2015

Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature: CTG 25MM TP-T M793 (E08203)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
LOAD, ASSEMBLE, PACK (LAP)						20418311				
FY 2014	ALLIANT TECHSYSTEMS INC. MESA, AZ	C / FFP	ROCK ISLAND ARSENAL, IL	Jul 14	Jan 15	272280	19.87	Y		
FY 2015	TO BE SELECTED TBS01	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 15	Mar 16	194837	26.51	Y		
FY 2016	TO BE SELECTED TBS01	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 16	Mar 17	254569	27.33	Y		
CONTAINER PA125						307276				
FY 2014	CONCO INC. LOUISVILLE, KY	C / FFP	ROCK ISLAND ARSENAL, IL	Jul 14	Sep 14	9328	27.21	Y		
FY 2015	CONCO INC. LOUISVILLE, KY	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 15	Nov 15	6675	66.27	Y		
FY 2016	CONCO INC. LOUISVILLE, KY	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 16	Nov 16	8721	69.21	Y		

REMARKS: This item is part of a combined 20mm, 25mm, 30mm contract FY 2013 - FY 2017. Quantity split is determined in year of execution between two contractors: General Dynamics Ordnance and Tactical Systems, Marion IL and Alliant Techsystems Operations, Plymouth MN. This is a training unique item not used in combat. The procurement supports annual training and builds a depot level in accordance with the Army's procurement goals. Type Classification Date: 1979

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG 25MM TP-T M793 (E08203)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	198681	163545	35136			35136																						0
2	FY 14	A	272280	0	272280				150000	150000																				0
3	FY 15	A	194837	0	194837						A												16241	16236	16236	16236	16236	16236	16236	81180
3	FY 16	A	254569	0	254569																		A							254569
1	FY 13	MC	194958	136121	58837			58837																						0
Total					815659			93973	150000	150000													16241	16236	16236	16236	16236	16236	16236	335749
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	ALLIANT TECHSYSTEMS INC., PLYMOUTH, MN	80000	100000	150000	
2	ALLIANT TECHSYSTEMS INC., MESA, AZ	20000	100000	150000	
3	TO BE SELECTED, TBS01	80000	100000	150000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	12	18
	Reorder	6	6	12	18
2	Initial	6	6	12	18
	Reorder	4	4	12	16
3	Initial	6	6	12	18
	Reorder	6	6	12	18
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS
LAP LINE FOR EACH CONTRACTOR SHARED WITH OTHER 25MM ITEMS. QUARTERLY DELIVERIES.

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG 25MM TP-T M793 (E08203)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	198681	198681																										0
2	FY 14	A	272280	272280																										0
3	FY 15	A	194837	113657	81180	16236	16236	16236	16236	16236																				0
3	FY 16	A	254569	0	254569						21215	21214	21214	21214	21214	21214	21214	21214	21214	21214	21214	21214								0
1	FY 13	MC	194958	194958																										0
Total					335749	16236	16236	16236	16236	16236	21215	21214	21214	21214	21214	21214	21214	21214	21214	21214	21214	21214								
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	ALLIANT TECHSYSTEMS INC., PLYMOUTH, MN	80000	100000	150000	
2	ALLIANT TECHSYSTEMS INC., MESA, AZ	20000	100000	150000	
3	TO BE SELECTED, TBS01	80000	100000	150000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	12	18
	Reorder	6	6	12	18
2	Initial	6	6	12	18
	Reorder	4	4	12	16
3	Initial	6	6	12	18
	Reorder	6	6	12	18
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS
LAP LINE FOR EACH CONTRACTOR SHARED WITH OTHER 25MM ITEMS. QUARTERLY DELIVERIES.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG 25MM DUMMY M794 (E08209)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	382		12081									12463
Gross Cost	9.0		1.7									10.6
Less PY Adv Proc												
Net Proc P1	9.0		1.7									10.6
Plus CY Adv Proc												
Total Proc Cost	9.0		1.7									10.6
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0		0.0									0.0

Description:
The 25MM M794 is an inert training device. It physically mimics 25mm M792, M793, MK210, PGU-23 and PGU-25 ammunition. It is used for training of proper handling and loading of ammunition and for non-firing system training and checkout of 25mm weapons prior to exposing soldiers to live ammunition. This item is Code A, approved for service use.

Justification:
CTG 25MM DUMMY M794 - This is a training unique item not used in combat. The procurement supports annual training and builds a depot level in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE: 1979

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG, 30MM, ALL TYPES (ER8120)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	1282.3	110.0	87.7	34.3		34.3	34.9	35.5	33.5	34.2		1652.4
Less PY Adv Proc												
Net Proc P1	1282.3	110.0	87.7	34.3		34.3	34.9	35.5	33.5	34.2		1652.4
Plus CY Adv Proc												
Total Proc Cost	1282.3	110.0	87.7	34.3		34.3	34.9	35.5	33.5	34.2		1652.4
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
This budget line includes 30MM ALL TYPES:

(E06000) The 30mm M848 is an inert training device. It physically mimics the M788 and M789 cartridges. It is used for training of proper handling and loading of ammunition and for non-firing system training and checkout of the 30mm M230 weapon prior to exposing soldiers to live ammunition. This item is Code A, approved for service use.

(E09900) The 30mm M789 High Explosive - Dual Purpose Cartridge is the only qualified combat cartridge for use in the Apache Helicopter's M230 Chain Gun. It is also used by SOCOM, fired from the MH-60 Blackhawk helicopter. The M789 cartridge consists of a projectile containing explosive, a shaped charge liner, a M759 point-detonating fuze, aluminum cartridge case, propellant and a PA520 electric primer. The shaped charge allows the M789 to defeat light armor, and the steel projectile body provides an anti-personnel capability. M789 cartridges are packed in Bulk Ammunition Strips (BAS), 110 cartridges per M592 container. This item is Code A, approved for service use

(E10100) The 30MM M788 30mm Target Practice cartridge is the only qualified training cartridge for use in the Apache and Blackhawk Helicopter's M230 Chain Gun. The M788 consists of an inert projectile, propellant utilizes a PA520 electric primer and a lightweight aluminum cartridge case. M788 cartridges are packed in Bulk Ammunition Strips (BAS), 110 cartridges per M592 container. This item is Code A, approved for service use.

Justification:
FY 2016 Base Budget supports critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station, and the combined training centers. Test requirements support the development, fielding, safety, and quality assurance of Army munitions and equipment throughout their life-cycle.

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.

(E06000) CTG 30MM DUMMY M848 - This is a training unique item not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 procurement dollars in the amount of $.637 million supports the procurement of .025 million M848 cartridges.

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature CTG, 30MM, ALL TYPES (ER8120)	
Program Elements for Code B Items:	Code:	Other Related Program Elements:	

TYPE CLASSIFICATION DATE: 1991

(E09900) CTG 30mm HEDP M789 Base - This is a training standard item used in both training and combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals. FY 2016 base procurement dollars in the amount of $10.033 million supports the procurement of .078 million M789 cartridges.

TYPE CLASSIFICATION DATE: 1962

(E10100) CTG 30mm TP M788 - This is a training unique item not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 procurement dollars in the amount of $23.660 million supports the procurement of 1.027 million M788 cartridges.

TYPE CLASSIFICATION DATE: 1982

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG, 30MM, ALL TYPES (ER8120)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$
Hardware Recurring																
E06000 CTG 30MM DUMMY M848	B133							637004	25	25.75				637004	25	25.75
E09900 CTG 30MM HEDP M789	b129	92619K	1129	82.04	65652K	618	106.22	10033K	78	129.34				10033K	78	129.34
E10100 CTG 30MM TP M788	b118	17414K	84	20.31	22015K	930	23.68	23657K	1027	23.03				23657K	1027	23.03
E06100 CTG 30MM HPT M883	B135															
Total:		**110033**			**87667**			**34327**						**34327**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG 30MM DUMMY M848 (E06000)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty				24738		24738						24738
Gross Cost	2.7			0.6		0.6						3.3
Less PY Adv Proc												
Net Proc P1	2.7			0.6		0.6						3.3
Plus CY Adv Proc												
Total Proc Cost	2.7			0.6		0.6						3.3
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C				0.0		0.0						0.0

Description:
(E06000) The 30mm M848 is an inert training device. It physically mimics the M788 and M789 cartridges. It is used for training of proper handling and loading of ammunition and for non-firing system training and checkout of the 30mm M230 weapon prior to exposing soldiers to live ammunition. This item is Code A, approved for service use.

Justification:
This is a training unique item not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 procurement dollars in the amount of $.637 million supports the procurement of .025 million M848 cartridges.

TYPE CLASSIFICATION DATE: 1991

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG 30MM HEDP M789 (E09900)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty		1128942	618058	77568		77568	86063	84847	59102	59492		2114072
Gross Cost	792.3	92.6	65.7	10.0		10.0	10.8	10.8	8.3	8.5		999.1
Less PY Adv Proc												
Net Proc P1	792.3	92.6	65.7	10.0		10.0	10.8	10.8	8.3	8.5		999.1
Plus CY Adv Proc												
Total Proc Cost	792.3	92.6	65.7	10.0		10.0	10.8	10.8	8.3	8.5		999.1
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
(E09900) The 30mm M789 High Explosive - Dual Purpose Cartridge is the only qualified combat cartridge for use in the Apache Helicopter's M230 Chain Gun. It is also used by SOCOM, fired from the MH-60 Blackhawk helicopter. The M789 cartridge consists of a projectile containing explosive, a shaped charge liner, a M759 point-detonating fuze, aluminum cartridge case, propellant and a PA520 electric primer. The shaped charge allows the M789 to defeat light armor, and the steel projectile body provides an anti-personnel capability. M789 cartridges are packed in Bulk Ammunition Strips (BAS), 110 cartridges per M592 container. This item is Code A, approved for service use.

Justification:
This is a training standard item used in both training and combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals. FY 2016 base procurement dollars in the amount of $10.033 million supports the procurement of .078 million M789 cartridges.

TYPE CLASSIFICATION DATE: 1962

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG 30MM HEDP M789 (E09900)	Weapon System Type:	MDAP:	DODIC: B129	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$
Hardware Recurring																
COMPLETE ROUND		87922K	1129	77.88	62381K	618	100.93	8168686	78	105.31				8168686	78	105.31
SUBTOTAL HARDWARE COST		**87922K**			**62381K**			**8168686**						**8168686**		
Support																
PRODUCTION ENGINEERING		2227504			2762775			1853463						1853463		
QUALITY ASSURANCE		15647			8013			10724						10724		
SUBTOTAL PRODUCTION SUPPORT		**2243151**			**2770788**			**1864187**						**1864187**		
FLASH TUBE QUALIFICATION		1801728			500000											
APACHE LIAISON SUPPORT FT RUCKER		300000														
REA REBORE/LINER RETENTION		350554														
SUBTOTAL NON-RECURRING COSTS		**2452282**			**500000**											
Total:		**92619**			**65652**			**10033**						**10033**		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:
Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature:
CTG 30MM HEDP M789 (E09900)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY x1000	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
COMPLETE ROUND										
FY 2014	ALLIANT TECHSYSTEMS INC. PLYMOUTH, MN	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 14	Feb 16	621	77.88	Y		
FY 2014	GENERAL DYNAMICS ORD & TAC MARION, IL	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 14	Oct 15	508	77.88	Y		
FY 2015	TO BE SELECTED TBS01	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 15	Mar 16	309	100.93	Y		
FY 2015	TO BE SELECTED TBS02	C / FFP	ROCK ISLAND ARSENAL	Mar 15	Mar 16	309	100.93	Y		
FY 2016	TO BE SELECTED TBS01	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 16	Mar 17	39	105.31	Y		
FY 2016	TO BE SELECTED TBS02	C / FFP	ROCK ISLAND ARSENAL	Mar 16	Mar 17	39	105.31	Y		

REMARKS: This item is part of a combined 20mm, 25mm, 30mm contract FY 2013 - FY 2017. Quantity split is determined in year of execution between two contractors: General Dynamics Ordnance and Tactical Systems, Marion IL and Alliant Techsystems Operations, Plymouth MN. This is a training standard item used in training and combat. FY 2016 procurement supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals. Type Classification Date: 1962

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG 30MM HEDP M789 (E09900)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
COMPLETE ROUND																														
1	FY 13	A	787955	621672	166283	65000	64912	33838										31	34	2468										0
2	FY 13	A	786754	519615	267139	17139		30000	30000	30000	30000	30000	30000	30000	30000	10000														0
1	FY 14	A	620918	0	620918																	51743	51743	51743	51743	51743	51743	51743	51743	206974
2	FY 14	A	508024	0	508024													42119	42355	42355	42355	42355	42355	42355	42355	42355	42355	42355	42355	0
3	FY 15	A	309029	0	309029						A												25757	25752	25752	25752	25752	25752	25752	128760
4	FY 15	A	309029	0	309029						A												25757	25752	25752	25752	25752	25752	25752	128760
3	FY 16	A	38784	0	38784																		A							38784
4	FY 16	A	38784	0	38784																		A							38784
Total					2257990	82139	64912	63838	30000	30000	30000	30000	30000	30000	30000	10000		42150	42389	44823	42355	94098	145612	145602	145602	145602	145602	145602	145602	542062
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	ALLIANT TECHSYSTEMS INC., PLYMOUTH, MN	68000	85000	150000	
2	GENERAL DYNAMICS ORD & TAC, MARION, IL	24000	30000	65000	
3	TO BE SELECTED, TBS02	24000	30000	50000	
4	TO BE SELECTED, TBS01	68000	85000	150000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	12	18
	Reorder	6	6	12	18
2	Initial	6	6	12	18
	Reorder	6	6	12	18
3	Initial	6	6	12	18
	Reorder	6	6	12	18
4	Initial	6	6	12	18
	Reorder	6	6	12	18
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG 30MM HEDP M789 (E09900)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
COMPLETE ROUND																														
1	FY 13	A	787955	787955																										0
2	FY 13	A	786754	786754																										0
1	FY 14	A	620918	413944	206974	51743	51743	51743	51745																					0
2	FY 14	A	508024	508024																										0
3	FY 15	A	309029	180269	128760	25752	25752	25752	25752	25752																				0
4	FY 15	A	309029	180269	128760	25752	25752	25752	25752	25752																				0
3	FY 16	A	38784	0	38784						3232	3232	3232	3232	3232	3232	3232	3232	3232	3232	3232	3232								0
4	FY 16	A	38784	0	38784						3232	3232	3232	3232	3232	3232	3232	3232	3232	3232	3232	3232								0
Total					542062	103247	103247	103247	103249	51504	6464	6464	6464	6464	6464	6464	6464	6464	6464	6464	6464	6464								
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	ALLIANT TECHSYSTEMS INC., PLYMOUTH, MN	68000	85000	150000	
2	GENERAL DYNAMICS ORD & TAC, MARION, IL	24000	30000	65000	
3	TO BE SELECTED, TBS02	24000	30000	50000	
4	TO BE SELECTED, TBS01	68000	85000	150000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	12	18
	Reorder	6	6	12	18
2	Initial	6	6	12	18
	Reorder	6	6	12	18
3	Initial	6	6	12	18
	Reorder	6	6	12	18
4	Initial	6	6	12	18
	Reorder	6	6	12	18
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG 30MM TP M788 (E10100)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty		857233	929584	1027226		1027226	1021892	977414	979270	954432		6747051
Gross Cost	303.1	17.4	22.0	23.7		23.7	24.2	24.7	25.2	25.7		465.8
Less PY Adv Proc												
Net Proc P1	303.1	17.4	22.0	23.7		23.7	24.2	24.7	25.2	25.7		465.8
Plus CY Adv Proc												
Total Proc Cost	303.1	17.4	22.0	23.7		23.7	24.2	24.7	25.2	25.7		465.8
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
(E10100) The 30MM M788 30mm Target Practice cartridge is the only qualified training cartridge for use in the Apache and Blackhawk Helicopter's M230 Chain Gun. The M788 consists of an inert projectile, propellant utilizes a PA520 electric primer and a lightweight aluminum cartridge case. M788 cartridges are packed in Bulk Ammunition Strips (BAS), 110 cartridges per M592 container. This item is Code A, approved for service use.

Justification:
(E10100) CTG 30mm TP M788 - This is a training unique item not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 procurement dollars in the amount of $23.660 million supports the procurement of 1.027 million M788 cartridges.

TYPE CLASSIFICATION DATE: 1982

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG 30MM TP M788 (E10100)	Weapon System Type:	MDAP:	DODIC: B118	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$
Hardware Recurring																
COMPLETE ROUND		15199K	857	17.73	19391K	930	20.86	21993K	1027	21.41				21993K	1027	21.41
SUBTOTAL HARDWARE COST		**15199K**			**19391K**			**21993K**						**21993K**		
Support																
PRODUCTION ENGINEERING		1907361			1617202			1653157						1653157		
QUALITY ASSURANCE		7655			6811			13699						13699		
SUBTOTAL PRODUCTION SUPPORT		**1915016**			**1624013**			**1666856**						**1666856**		
NON-RECURRING COSTS																
NON-RECURRING ENGINEERING		300000			1000000											
SUBTOTAL NON-RECURRING COSTS		**300000**			**1000000**											
Total:		**17414**			**22015**			**23660**						**23660**		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:
Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature:
CTG 30MM TP M788 (E10100)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY x1000	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
COMPLETE ROUND										
FY 2014	GENERAL DYNAMICS ORD & TAC MARION, IL	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 14	Nov 14	471	17.73	Y		
FY 2014	ALLIANT TECHSYSTEMS INC. PLYMOUTH, MN	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 14	Jan 15	386	17.73	Y		
FY 2015	TO BE SELECTED TBS01	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 15	Mar 16	465	20.86	Y		
FY 2015	TO BE SELECTED TBS02	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 15	Mar 16	465	20.86	Y		
FY 2016	TO BE SELECTED TBS01	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 16	Mar 17	514	21.41	Y		
FY 2016	TO BE SELECTED TBS02	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 16	Mar 17	514	21.41	Y		

REMARKS: This item is part of a combined 20mm, 25mm, 30mm contract FY 2013 - FY 2017. Quantity split is determined in year of execution between two contractors: General Dynamics Ordnance Tactical Systems, Marion IL and Alliant Techsystems Operations, Plymouth MN. This is a training unique item not used in combat. FY 2016 procurement supports annual training and builds a depot level in accordance with the Army's procurement goals. Type Classification Date: 1982

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG 30MM TP M788 (E10100)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15													Fiscal Year 16												Later
									Calendar Year 15													Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
COMPLETE ROUND																															
1	FY 13	A	1880069	1643142	236927	138475	97112	1340																							0
1	FY 14	A	471478	0	471478		22888	41357	41357	41357	41357	41357	35020	41357	41357	41357	41357	41357													0
3	FY 14	A	385755	0	385755				32149	32149	32146	32146	32146	32146	32146	32146	32146	32146	32146	32146											0
2	FY 15	A	464792	0	464792						A												38740	38732	38732	38732	38732	38732	38732	193660
4	FY 15	A	464792	0	464792						A												38740	38732	38732	38732	38732	38732	38732	193660
2	FY 16	A	513613	0	513613																		A							513613
4	FY 16	A	513613	0	513613																		A							513613
Total					3050970	138475	120000	42697	73506	73506	73503	73503	67166	73503	73503	73503	73503	73503	32146	32146			77480	77464	77464	77464	77464	77464	77464	1414546
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	GENERAL DYNAMICS ORD & TAC, MARION, IL	96000	120000	200000	
2	TO BE SELECTED, TBS02	96000	120000	200000	
3	ALLIANT TECHSYSTEMS INC., PLYMOUTH, MN	96000	120000	200000	
4	TO BE SELECTED, TBS01	96000	120000	200000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	12	18
	Reorder	6	6	12	18
2	Initial	6	6	12	18
	Reorder	6	6	12	18
3	Initial	6	6	12	18
	Reorder	6	6	12	18
4	Initial	6	6	12	18
	Reorder	6	6	12	18
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG 30MM TP M788 (E10100)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
COMPLETE ROUND																														
1	FY 13	A	1880069	1880069																										0
1	FY 14	A	471478	471478																										0
3	FY 14	A	385755	385755																										0
2	FY 15	A	464792	271132	193660	38732	38732	38732	38732	38732																				0
4	FY 15	A	464792	271132	193660	38732	38732	38732	38732	38732																				0
2	FY 16	A	513613	0	513613						42802	42801	42801	42801	42801	42801	42801	42801	42801	42801	42801	42801								0
4	FY 16	A	513613	0	513613						42802	42801	42801	42801	42801	42801	42801	42801	42801	42801	42801	42801								0
Total					1414546	77464	77464	77464	77464	77464	85604	85602	85602	85602	85602	85602	85602	85602	85602	85602	85602	85602								
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	GENERAL DYNAMICS ORD & TAC, MARION, IL	96000	120000	200000	
2	TO BE SELECTED, TBS02	96000	120000	200000	
3	ALLIANT TECHSYSTEMS INC., PLYMOUTH, MN	96000	120000	200000	
4	TO BE SELECTED, TBS01	96000	120000	200000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	12	18
	Reorder	6	6	12	18
2	Initial	6	6	12	18
	Reorder	6	6	12	18
3	Initial	6	6	12	18
	Reorder	6	6	12	18
4	Initial	6	6	12	18
	Reorder	6	6	12	18
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG, 40MM, All Types (ER8001)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	3402.8	55.8	40.9	80.0		80.0	115.5	122.0	114.1	105.3		4036.4
Less PY Adv Proc												
Net Proc P1	3402.8	55.8	40.9	80.0		80.0	115.5	122.0	114.1	105.3		4036.4
Plus CY Adv Proc												
Total Proc Cost	3402.8	55.8	40.9	80.0		80.0	115.5	122.0	114.1	105.3		4036.4
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
This budget line includes 40MM ALL TYPES:

(E11800) The 40mm M430A1 is a High-Explosive Dual Purpose cartridge (HEDP), and is fired from a MK19 Grenade Machine Gun at a max range of 2,200 meters. It is capable of penetrating three inches of steel armor and inflicting personnel casualties in the target area. This item is Code A, approved for service use.

(E12502) The 40mm M385A1 practice cartridge is a fixed round of ammunition consisting of a one-piece solid aluminum projectile body with copper rotating band and is fired from a MK19 Grenade Machine Gun at a max range of 2,200 meters. The cartridge is used as training ammunition. This item is Code A, approved for service use.

(E12601) The 40mm M433 is a High Explosive Dual Purpose impact type round designed to penetrate lightly armored targets and perform an anti-personnel mission, and is compatible with the M203, M320, and M79 Grenade Launchers. Upon impact, the detonator triggers the spitback shaped charge and produces a jet blast that detonates the high explosive bursting charge. Detonation of the bursting charge forms an armor-piercing jet of molten metal and fragmentation of the projectile body. This item is Code A, approved for service use.

(E74200) The 40mm Practice M781 is a training cartridge for the M203, M320, and M79 Grenade Launchers. It is a fixed round of ammunition consisting of zinc-alloy projectile body with a rotating band and cartridge case assembly. A hollow polystyrene ogive is filled with high visibility yellow-orange dye. A .38 caliber blank cartridge is press-fitted into the base of the cartridge case and provides gas pressure needed to propel projectile through the launcher barrel. This item is Code A, approved for service use.

(E74315) The 40mm Practice M918/M385A1 Mixed Belt cartridge configuration for the MK19 Grenade Machine Gun is a high velocity training projectile with realistic signature effects providing sufficient flash, smoke and sound upon impact to be seen/heard out to 1,200 meters. In addition to providing audible/visual signature for day or night firing, the mixed belt for MK19 Grenade Machine Gun will minimize hazards to troops in the training area. This item is Code A, approved for service use.

(E05611) The 40mm M918E1 High Velocity Day Night Thermal cartridge is a training cartridge for the Mk19 Grenade Machine Gun. This is a fixed round of ammunition consisting of a projectile assembly and cartridge case assembly. The projectile ogive is filled with a signature material that provides a signature upon impact that can be seen, day or night with unaided eye, thermal and night vision weapon sights. The cartridge does not contain any fuzing or explosives, eliminating unexploded ordnance issues on the training ranges due to non-functioning training ammunition. This item is code B, not approved for service use.

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature CTG, 40MM, All Types (ER8001)	
Program Elements for Code B Items:	Code:	Other Related Program Elements:	

(E05610) The 40mm M781E1 Low Velocity Day Night Thermal cartridge is a training cartridge for the M203, M320 and M79 Grenade Launchers. This is a fixed round of ammunition consisting of a projectile assembly and cartridge case assembly. The projectile ogive is filled with a signature material that provides a signature upon impact that can be seen, day or night with unaided eye, thermal and night vision weapon sights. The cartridge does not contain any fuzing or explosives, eliminating unexploded ordnance issues on the training ranges due to non-functioning training ammunition. This item is code B, not approved for service use.

(E71700) The 40mm Dummy M922 is an inert round. It physically mimics the M430A1 cartridge. It is used to check weapon function and for crew training. This cartridge is used as a drill round to train users in handling ammunition and loading the Mk19 series automatic grenade launcher. This item is Code A, approved for service use.

Justification:
FY 2016 Base Budget supports critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station, and the combined training centers. Test requirements support the development, fielding, safety, and quality assurance of Army munitions and equipment throughout their life-cycle.

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.

(E05610) CTG, 40MM, M781E1 LOW VELOCITY DAY NIGHT THERMAL - This is a training unique item not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals.

Type Classification Date: Pending

(E05611) CTG, 40MM, M918E1 HIGH VELOCITY DAY NIGHT THERMAL - This is a training unique item not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals.

Type Classification Date: Pending

(E11800) CTG 40MM HEDP M430A1 F/MK19 MG - This is a training standard item used in both training and combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals. The FY 2016 procurement dollars in the amount of $2.802 million supports the procurement of .027 million HEDP M430A1 cartridges.

TYPE CLASSIFICATION DATE: 1971

(E12502) CTG 40MM PRACTICE M385A1 - This is a training unique item not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals. The FY 2016 procurement dollars in the amount of $2.170 million supports the procurement of .105 million M385A1 cartridges.

TYPE CLASSIFICATION DATE: 1987

(E12601) CTG 40MM HEDP M433 - This is a training standard item used in both training and combat. The procurement supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals. The FY 2016 procurement dollars in the amount of $5.000 million supports the procurement of .060 million HEDP M433 cartridges.

TYPE CLASSIFICATION DATE: 1971

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature CTG, 40MM, All Types (ER8001)	
Program Elements for Code B Items:	Code:	Other Related Program Elements:	

(E74200) CTG 40MM PRACTICE M781 f/M203 Grenade Launcher - This is a training unique item not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE: 1978

(E74315) CTG 40MM PRAC, M918/M385A1 - This is a training unique item not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 procurement dollars in the amount of $70.000 million supports the procurement of 2.501 million M918/M385A1 cartridges.

TYPE CLASSIFICATION DATE: 1985

(E71700) CTG 40MM DUMMY M922 - This is a training unique item not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE: 1987

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG, 40MM, All Types (ER8001)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$
Hardware Recurring																
E11800 CTG 40MM HEDP M430 F/MK19 MG	B542				4928000	87	56.37	2802000	27	103.58				2802000	27	103.58
E12502 CTG 40MM PRACTICE M385A1	b576				2098000	86	24.28	2170000	105	20.66				2170000	105	20.66
E12601 CTG 40MM HEDP M433	b546							5000000	60	83.19				5000000	60	83.19
E74200 CTG 40MM PRACTICE M781	b519	8500000	2189	3.88	1232000	216	5.71									
E74315 CTG 40MM PRAC, M918/M385A1	ba30	47280K	1387	34.10	30181K	1060	28.47	70000K	2501	27.98				70000K	2501	27.98
E84500 CTG 40MM INFRARED ILLUM, M992	BA03															
E05611 CTG 40MM HI VEL DAY NIGHT THERMAL					986000	23	43.91									
E05610 CTG 40MM LO VEL DAY NIGHT THERMAL					986000	26	37.61									
E71700 CTG 40MM DUMMY M922	B472				493000	33	14.74									
Total:		**55780**			**40904**			**79972**						**79972**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG, 40MM TGT PRAC-DAY/NIGHT/THERMAL,LO VEL M781E1 (E05610)

Program Elements for Code B Items:

Code: B

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost			1.0				32.0	40.0	35.0	32.0		140.0
Less PY Adv Proc												
Net Proc P1			1.0				32.0	40.0	35.0	32.0		140.0
Plus CY Adv Proc												
Total Proc Cost			1.0				32.0	40.0	35.0	32.0		140.0
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
(E05610) The 40mm M781E1 Low Velocity Day Night Thermal cartridge is a training cartridge for the M203, M320 and M79 Grenade Launchers. This is a fixed round of ammunition consisting of a projectile assembly and cartridge case assembly. The projectile ogive is filled with a signature material that provides a signature upon impact that can be seen, day or night with unaided eye, thermal and night vision weapon sights. The cartridge does not contain any fuzing or explosives, eliminating unexploded ordnance issues on the training ranges due to non-functioning training ammunition. This item is code B, not approved for service use.

Justification:
(E05610) CTG, 40MM, LOW VELOCITY DAY NIGHT THERMAL F/M203 - This is a training unique item not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals.

Type Classification Date: Pending

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG, 40MM TGT PRAC-DAY NIGHT THERMAL,HI VEL M918E1 (E05611)

Program Elements for Code B Items:

Code: B

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty							2719853	2978823	2726206	2733561		11158443
Gross Cost			1.0				78.4	76.8	68.3	67.9		292.5
Less PY Adv Proc												
Net Proc P1			1.0				78.4	76.8	68.3	67.9		292.5
Plus CY Adv Proc												
Total Proc Cost			1.0				78.4	76.8	68.3	67.9		292.5
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C							0.0	0.0	0.0	0.0		0.0

Description:
(E05611) The 40mm M918E1 High Velocity Day Night Thermal cartridge is a training cartridge for the Mk19 Grenade Machine Gun. This is a fixed round of ammunition consisting of a projectile assembly and cartridge case assembly. The projectile ogive is filled with a signature material that provides a signature upon impact that can be seen, day or night with unaided eye, thermal and night vision weapon sights. The cartridge does not contain any fuzing or explosives, eliminating unexploded ordnance issues on the training ranges due to non-functioning training ammunition. This item is code B, not approved for service use.

Justification:
(E05611) CTG, 40MM, HIGH VELOCITY DAY NIGHT THERMAL - This is a training unique item not used in combat. The procurement request supports annual training and builds a depot level in accordance with the Army's procurement goals.

Type Classification Date: Pending

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG 40MM HEDP M430 series F/MK19 MG (E11800)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	56410000		87421	27051		27051	27478	27692	27812	28363		56635817
Gross Cost	715.2		4.9	2.8		2.8	2.9	2.9	3.0	3.0		734.7
Less PY Adv Proc												
Net Proc P1	715.2		4.9	2.8		2.8	2.9	2.9	3.0	3.0		734.7
Plus CY Adv Proc												
Total Proc Cost	715.2		4.9	2.8		2.8	2.9	2.9	3.0	3.0		734.7
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
(E11800) The 40mm M430A1 is a High-Explosive Dual-Purpose cartridge (HEDP), and is fired from a MK19 Grenade Machine Gun at a max range of 2,200 meters. It is capable of penetrating three inches of steel armor and inflicting personnel casualties in the target area. This item is Code A, approved for service use.

Justification:
(E11800) CTG 40MM HEDP M430A1 F/MK19 MG - This is a training standard item used in both training and combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals. The FY 2016 procurement dollars in the amount of $2.802 million supports the procurement of .027 million HEDP M430A1 cartridges.

TYPE CLASSIFICATION DATE: 1971

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG 40MM PRACTICE M385A1 (E12502)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	3228000		86386	105086		105086	99981	105392	98238	99981		3823064
Gross Cost	50.5		2.1	2.2		2.2	2.2	2.3	2.3	2.4		63.9
Less PY Adv Proc												
Net Proc P1	50.5		2.1	2.2		2.2	2.2	2.3	2.3	2.4		63.9
Plus CY Adv Proc												
Total Proc Cost	50.5		2.1	2.2		2.2	2.2	2.3	2.3	2.4		63.9
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
(E12502) The 40mm M385A1 practice cartridge is a fixed round of ammunition consisting of a one-piece solid aluminum projectile body with copper rotating band and is fired from a MK19 Grenade Machine Gun at a max range of 2,200 meters. The cartridge is used as training ammunition. This item is Code A, approved for service use.

Justification:
(E12502) CTG 40MM PRACTICE M385A1 - This is a training unique item not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals. The FY 2016 procurement dollars in the amount of $2.170 million supports the procurement of .105 million M385A1 cartridges.

TYPE CLASSIFICATION DATE: 1987

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG 40MM HEDP M433 (E12601)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	156790000			60100		60100			66612			156916712
Gross Cost	527.0			5.0		5.0			5.0			537.0
Less PY Adv Proc												
Net Proc P1	527.0			5.0		5.0			5.0			537.0
Plus CY Adv Proc												
Total Proc Cost	527.0			5.0		5.0			5.0			537.0
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0			0.0		0.0			0.0			0.0

Description:
(E12601) The 40mm M433 is a High Explosive dual purpose impact type round designed to penetrate lightly armored targets and perform an anti-personnel mission, and is compatible with the M203, M320, and M79 Grenade Launchers. Upon impact, the detonator triggers the spitback shaped charge and produces a jet blast that detonates the high explosive bursting charge. Detonation of the bursting charge forms an armor-piercing jet of molten metal and fragmentation of the projectile body. This item is Code A, approved for service use.

Justification:
(E12601) CTG 40MM HEDP M433 - This is a training standard item used in both training and combat. The procurement supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals. The FY 2016 procurement dollars in the amount of $5.000 million supports the procurement of .060 million HEDP M433 cartridges.

TYPE CLASSIFICATION DATE: 1971

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG 40MM HEDP M433 (E12601)	Weapon System Type:	MDAP:	DODIC: B546	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
COMPLETE ROUND								4081992	60100	67.92				4081992	60100	67.92
SUBTOTAL HARDWARE COST								**4081992**						**4081992**		
Support																
PRODUCTION ENGINEERING								723205						723205		
QUALITY ASSURANCE								11586						11586		
SUBTOTAL PRODUCTION SUPPORT								**734791**						**734791**		
NON-RECURRING COSTS																
FIRST ARTICLE TEST								182933						182933		
SUBTOTAL NON-RECURRING COSTS								**182933**						**182933**		
Total:								**5000**						**5000**		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Procurement of Ammunition, Army/ 1/ Ammunition		CTG 40MM HEDP M433 (E12601)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
COMPLETE ROUND						4859265				
FY 2016	TO BE SELECTED TBS01	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 16	Aug 17	60100	67.92	Y		

REMARKS: (E12601) CTG 40MM HEDP M433 - This is a training standard item used in both training and combat. The procurement supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals. The FY 2016 procurement dollars in the amount of $5.000 million supports the procurement of .060 million HEDP M433 cartridges.

TYPE CLASSIFICATION DATE: 1971

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG 40MM HEDP M433 (E12601)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
COMPLETE ROUND																														
1	FY 13	A	273240	158760	114480		41846	57586				1944		12816																288
2	FY 13	A	296856	118872	177984	9207	22834	16559	37296	37296	40968	1728	4104	4104																0
3	FY 16	A	60100	0	60100																		A							60100
1	FY 13	MC	1317096	721728	595368							32787	45000	15048	45000	45000	45000	17352	17352	17256	8496	33768	32283	23184	45000	36636	45000	45000	45000	1206
2	FY 13	MC	392544	356681	35863	35863																								0
1	FY 13	NAVSEA	65736	4400	61336		4024							8568												3753				44991
2	FY 13	NAVSEA	5688	0	5688		5688																							0
Total					1050819	45070	74392	74145	37296	37296	40968	36459	49104	40536	45000	45000	45000	17352	17352	17256	8496	33768	32283	23184	45000	40389	45000	45000	45000	106585
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	AMTEC CORPORATION, JANESVILLE, WI	20000	75000	187500	
2	DSE INC., TAMPA, FL	20000	75000	187500	
3	TO BE SELECTED, TBS01	200000	274000	685000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	19	25
	Reorder	6	6	17	23
2	Initial	6	6	19	25
	Reorder	6	6	17	23
3	Initial	6	6	19	25
	Reorder	6	6	17	23
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS
STATED CAPACITIES ARE BASED ON SHARED LINES ACROSS MULTIPLE 40MM LOW VELOCITY CONFIGURATIONS.

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG 40MM HEDP M433 (E12601)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
COMPLETE ROUND																														
1	FY 13	A	273240	272952	288	288																								0
2	FY 13	A	296856	296856																										0
3	FY 16	A	60100	0	60100											5012	5008	5008	5008	5008	5008	5008	5008	5008	5008	5008			0
1	FY 13	MC	1317096	1315890	1206	270						936																	0
2	FY 13	MC	392544	392544																									0
1	FY 13	NAV SEA	65736	20745	44991	44919						72																	0
2	FY 13	NAV SEA	5688	5688																									0
Total					106585	45477						1008				5012	5008	5008	5008	5008	5008	5008	5008	5008	5008	5008			
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	AMTEC CORPORATION, JANESVILLE, WI	20000	75000	187500	
2	DSE INC., TAMPA, FL	20000	75000	187500	
3	TO BE SELECTED, TBS01	200000	274000	685000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	19	25
	Reorder	6	6	17	23
2	Initial	6	6	19	25
	Reorder	6	6	17	23
3	Initial	6	6	19	25
	Reorder	6	6	17	23
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS
STATED CAPACITIES ARE BASED ON SHARED LINES ACROSS MULTIPLE 40MM LOW VELOCITY CONFIGURATIONS.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG 40MM DUMMY M922 (E71700)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	91000		33445						31493			155938
Gross Cost	1.2		0.5						0.5			2.2
Less PY Adv Proc												
Net Proc P1	1.2		0.5						0.5			2.2
Plus CY Adv Proc												
Total Proc Cost	1.2		0.5						0.5			2.2
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0		0.0						0.0			0.0

Description:
(E71700) The 40mm Dummy M922 is an inert round. It physically mimics the M430A1 cartridge. It is used to check weapon function and for crew training. This cartridge is used as a drill round to train users in handling ammunition and loading the Mk19 series automatic grenade launcher. This item is Code A, approved for service use.

Justification:
CTG 40MM DUMMY M922 - This is a training unique item not used in combat. The procurement request supports annual training and builds a depot level in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE: 1987

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG 40MM PRACTICE M781 f/M203 Gren Launcher (E74200)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	46701000	2188524	215577									49105101
Gross Cost	152.8	8.5	1.2									162.6
Less PY Adv Proc												
Net Proc P1	152.8	8.5	1.2									162.6
Plus CY Adv Proc												
Total Proc Cost	152.8	8.5	1.2									162.6
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0									0.0

Description:
(E74200) The 40mm Practice M781 is a training cartridge for the M203, M320, and M79 Grenade Launchers. It is a fixed round of ammunition consisting of zinc-alloy projectile body with a rotating band and cartridge case assembly. A hollow polystyrene ogive is filled with high visibility yellow-orange dye. A .38 caliber blank cartridge is press-fitted into the base of the cartridge case and provides gas pressure needed to propel projectile through the launcher barrel. This item is Code A, approved for service use.

Justification:
(E74200) CTG 40MM PRACTICE M781 f/M203 Grenade Launcher - This is a training unique item not used in combat. The procurement request supports annual training and builds a depot level in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE: 1978

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG 40MM PRACTICE M781 f/M203 Gren Launcher (E74200)	Weapon System Type:	MDAP:	DODIC: B519	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$
Hardware Recurring																
COMPLETE ROUND		8009998	2189	3.66	1011056	216	4.69									
SUBTOTAL HARDWARE COST		**8009998**			**1011056**											
Support																
Production Engineering		100002			200000											
Quality Assurance					5892											
SUBTOTAL PRODUCTION SUPPORT		**100002**			**205892**											
NON-RECURRING COSTS																
FIRST ARTICLE TEST					14634											
M320 FIRING TABLES		231000														
GFM DISPOSAL		159000														
SUBTOTAL NON-RECURRING COSTS		**390000**			**14634**											
Total:		**8500**			**1232**											

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:
Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature:
CTG 40MM PRACTICE M781 f/M203 Gren Launcher (E74200)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY x1000	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
COMPLETE ROUND						12229				
FY 2014	AMTEC CORPORATION JANESVILLE, WI	C / FFP	ROCK ISLAND ARSENAL, IL	Jun 14	Apr 15	2189	3.66	Y		
FY 2015	TO BE SELECTED TBS01	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 15	Apr 16	216	4.69	Y		

REMARKS: (E74200) CTG 40MM PRACTICE M781 f/M203 Grenade Launcher - This is a training unique item not used in combat. The procurement request supports annual training and builds a depot level in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE: 1978

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG 40MM PRACTICE M781 f/M203 Gren Launcher (E74200)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY x1000	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Complete Round																														
1	FY 14	A	2188.52	0.00	2188.52							114.99	188.50	188.50	188.50	188.50	188.50	188.50	188.50	188.50	188.50	188.50	188.50							0.00
2	FY 15	A	215.58	0.00	215.58						A													17.97	17.96	17.96	17.96	17.96	17.96	107.78
1	FY 13	AF	69.90	3.30	66.60			64.10				2.50																		0.00
1	FY 14	AF	71.01	0.00	71.01							71.01																		0.00
2	FY 15	AF	380.73	0.00	380.73						A													31.73	31.73	31.73	31.73	31.73	31.73	190.36
2	FY 16	NSOF	60.00	0.00	60.00																		A							60.00
Total					2982.44			64.10				188.50	188.50	188.50	188.50	188.50	188.50	188.50	188.50	188.50	188.50	188.50	188.50	49.71	49.69	49.69	49.69	49.69	49.69	358.15
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	AMTEC CORPORATION, JANESVILLE, WI	20.00	150.00	375.00	
2	TO BE SELECTED, TBS01	20.00	150.00	375.00	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	13	19
	Reorder	6	6	10	16
2	Initial	6	6	13	19
	Reorder	6	6	10	16
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG 40MM PRACTICE M781 f/M203 Gren Launcher (E74200)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY x1000	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Complete Round																														
1	FY 14	A	2188.52	2188.52																										0.00
2	FY 15	A	215.58	107.79	107.78	17.96	17.96	17.96	17.96	17.96	17.96																			0.00
1	FY 13	AF	69.90	69.90																										0.00
1	FY 14	AF	71.01	71.01																										0.00
2	FY 15	AF	380.73	190.37	190.36	31.73	31.73	31.73	31.73	31.73	31.73																			0.00
2	FY 16	NSOF	60.00	0.00	60.00				5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00										0.00
Total					358.15	49.69	49.69	49.69	54.69	54.69	54.69	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00										
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	AMTEC CORPORATION, JANESVILLE, WI	20.00	150.00	375.00	
2	TO BE SELECTED, TBS01	20.00	150.00	375.00	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	13	19
	Reorder	6	6	10	16
2	Initial	6	6	13	19
	Reorder	6	6	10	16
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG 40MM PRAC, M918/M385A1 (E74315)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	28417000	1386676	1060197	2501419		2501419						33365292
Gross Cost	760.4	47.3	30.2	70.0		70.0						907.9
Less PY Adv Proc												
Net Proc P1	760.4	47.3	30.2	70.0		70.0						907.9
Plus CY Adv Proc												
Total Proc Cost	760.4	47.3	30.2	70.0		70.0						907.9
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0	0.0		0.0						0.0

Description:
(E74315) The 40mm Practice M918/M385A1 Mixed Belt cartridge configuration for the MK19 Grenade Machine Gun is a high velocity training projectile with realistic signature effects providing sufficient flash, smoke and sound upon impact to be seen/heard out to 1,200 meters. In addition to providing audible/visual signature for day or night firing, the mixed belt for MK19 Grenade Machine Gun will minimize hazards to troops in the training area. This item is Code A, approved for service use.

Justification:
(E74315) CTG 40MM PRAC, M918/M385A1 - This is a training unique item not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 procurement dollars in the amount of $70.000 million supports the procurement of 2.501 million M918/M385A1 cartridges.

TYPE CLASSIFICATION DATE: 1985

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG 40MM PRAC, M918/M385A1 (E74315)	Weapon System Type:	MDAP:	DODIC: BA30	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$
Hardware Recurring																
LOAD, ASSEMBLE, PACK (LAP)		16113K	1387	11.62	14238K	1060	13.43	33944K	2501	13.57				33944K	2501	13.57
PROJ ASSY 40MM M918		15976K	982	16.27	11249K	743	15.13	29574K	1754	16.86				29574K	1754	16.86
PROJ BODY 40MM M385A1		1873656	448	4.18	1720399	343	5.02	3654795	809	4.52				3654795	809	4.52
SUBTOTAL HARDWARE COST		**33963K**			**27207K**			**67174K**						**67174K**		
Support																
PRODUCTION ENGINEERING		4059034			2837135			2800006						2800006		
QUALITY ASSURANCE		14307			7100			3550						3550		
SUBTOTAL PRODUCTION SUPPORT		**4073341**			**2844235**			**2803556**						**2803556**		
NON-RECURRING COSTS																
FIRST ARTICLE TEST FOR LAP					129510			23000						23000		
FIRST ARTICLE TEST FOR PROJECTILE		602986														
CLOSING CUP REDESIGN		631200														
REA BASELINE OPTIMIZATION		8010000														
SUBTOTAL NON-RECURRING COSTS		**9244185**			**129510**			**23000**						**23000**		
Total:		**47280**			**30181**			**70000**						**70000**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2015

Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature: CTG 40MM PRAC, M918/M385A1 (E74315)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY x1000	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
LOAD, ASSEMBLE, PACK (LAP)						23848				
FY 2014	AMTEC CORPORATION JANESVILLE, WI	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 14	Feb 16	1387	11.62	Y		
FY 2015	TO BE SELECTED TBS01	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 15	Nov 17	1060	13.43	Y		
FY 2016	TO BE SELECTED TBS01	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 16	Sep 18	2501	13.57	Y		
PROJ ASSY 40MM M918						20185				
FY 2014	GTI SYSTEMS, INC AUBURNDALE, FL	C / FFP	ROCK ISLAND ARSENAL, IL	Jul 14	Dec 15	982	16.27	Y		
FY 2015	GTI SYSTEMS, INC AUBURNDALE, FL	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 15	Sep 17	743	15.13	Y		
FY 2016	GTI SYSTEMS, INC AUBURNDALE, FL	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 16	Jul 18	1754	16.86	Y		
PROJ BODY 40MM M385A1						6623				
FY 2014	GTI SYSTEMS, INC AUBURNDALE, FL	C / FFP	ROCK ISLAND ARSENAL, IL	May 14	Dec 15	448	4.18	Y		
FY 2015	GTI SYSTEMS, INC AUBURNDALE, FL	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 15	Sep 17	343	5.02	Y		
FY 2016	GTI SYSTEMS, INC AUBURNDALE, FL	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 16	Jul 18	809	4.52	Y		

REMARKS: FY 2015 - FY 2016 M918 PROJECTILE ASSEMBLIES AND M385A1 PROJECTILE BODIES WILL BE AWARDED AS AN OPTION TO THE FY 2014 CONTRACT.

(E74315) CTG 40MM PRAC, M918/M385A1 - This is a training unique item not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 procurement dollars in the amount of $70.000 million supports the procurement of 2.501 million M918/M385A1 cartridges.

TYPE CLASSIFICATION DATE: 1985

FY 2015 M918 and M385 Projectiles will be part of the FY 2014 Projectile contracts.

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG 40MM PRAC, M918/M385A1 (E74315)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY x1000	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	10923.07	9264.32	1658.75	144.16	50.00		100.46	100.46	105.86				146.88	146.88	146.91	168.61	168.61	168.58	205.95									0.00
2	FY 13	A	8939.26	8399.84	539.42		141.22	3.78				54.23	164.10	164.06	12.03															0.00
1	FY 14	A	1386.68	0.00	1386.68																	231.11	231.11	231.11	231.11	231.11	231.12			0.00
3	FY 15	A	1060.20	0.00	1060.20						A																			1060.20
3	FY 16	A	2501.42	0.00	2501.42																		A							2501.42
Total					7146.47	144.16	191.22	3.78	100.46	100.46	105.86	54.23	164.10	164.06	158.91	146.88	146.91	168.61	168.61	168.58	205.95	231.11	231.11	231.11	231.11	231.11	231.12			3561.62
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	AMTEC CORPORATION, JANESVILLE, WI	20.00	320.00	800.00	
2	DSE INC., TAMPA, FL	20.00	320.00	800.00	
3	TO BE SELECTED, TBS01	20.00	320.00	800.00	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	32	38
	Reorder	6	6	30	36
2	Initial	6	6	19	25
	Reorder	6	6	17	23
3	Initial	6	6	32	38
	Reorder	6	6	30	36
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS
STATED CAPACITIES ARE SHARED ACROSS MULTIPLE 40MM HIGH VELOCITY CONFIGURATIONS AND BETWEEN MULTIPLE CONTRACTS.

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG 40MM PRAC, M918/M385A1 (E74315)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY x1000	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	10923.07	10923.07																										0.00
2	FY 13	A	8939.26	8939.26																										0.00
1	FY 14	A	1386.68	1386.68																										0.00
3	FY 15	A	1060.20	0.00	1060.20														88.36	88.35	88.35	88.35	88.35	88.35	88.35	88.35	88.35	88.35	88.35	88.35
3	FY 16	A	2501.42	0.00	2501.42																								208.46	2292.96
Total					3561.62														88.36	88.35	88.35	88.35	88.35	88.35	88.35	88.35	88.35	88.35	296.81	2381.31
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	AMTEC CORPORATION, JANESVILLE, WI	20.00	320.00	800.00	
2	DSE INC., TAMPA, FL	20.00	320.00	800.00	
3	TO BE SELECTED, TBS01	20.00	320.00	800.00	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	32	38
	Reorder	6	6	30	36
2	Initial	6	6	19	25
	Reorder	6	6	17	23
3	Initial	6	6	32	38
	Reorder	6	6	30	36
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS
STATED CAPACITIES ARE SHARED ACROSS MULTIPLE 40MM HIGH VELOCITY CONFIGURATIONS AND BETWEEN MULTIPLE CONTRACTS.

FY 19 / 20 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG 40MM PRAC, M918/M385A1 (E74315)

Date: February 2015

COST ELEMENTS						Fiscal Year 19												Fiscal Year 20												
MFR	FY	SERV	PROC QTY x1000	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT				Calendar Year 19												Calendar Year 20									Later
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	10923.07	10923.07																										0.00
2	FY 13	A	8939.26	8939.26																										0.00
1	FY 14	A	1386.68	1386.68																										0.00
3	FY 15	A	1060.20	971.85	88.35	88.35																								0.00
3	FY 16	A	2501.42	208.46	2292.96	208.45	208.45	208.45	208.45	208.45	208.45	208.45	208.45	208.45	208.45	208.45														0.00
Total					2381.31	296.80	208.45	208.45	208.45	208.45	208.45	208.45	208.45	208.45	208.45	208.45														
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	AMTEC CORPORATION, JANESVILLE, WI	20.00	320.00	800.00	
2	DSE INC., TAMPA, FL	20.00	320.00	800.00	
3	TO BE SELECTED, TBS01	20.00	320.00	800.00	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	32	38
	Reorder	6	6	30	36
2	Initial	6	6	19	25
	Reorder	6	6	17	23
3	Initial	6	6	32	38
	Reorder	6	6	30	36
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS
STATED CAPACITIES ARE SHARED ACROSS MULTIPLE 40MM HIGH VELOCITY CONFIGURATIONS AND BETWEEN MULTIPLE CONTRACTS.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
60MM Mortar, All Types (E89600)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	732.1	51.6	46.7	42.9	11.7	54.6	76.1	81.7	64.2	75.8		1182.9
Less PY Adv Proc												
Net Proc P1	732.1	51.6	46.7	42.9	11.7	54.6	76.1	81.7	64.2	75.8		1182.9
Plus CY Adv Proc												
Total Proc Cost	732.1	51.6	46.7	42.9	11.7	54.6	76.1	81.7	64.2	75.8		1182.9
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
(E89600)60MM Mortar, All Types
This line includes 60mm Mortar Ammunition, All Types.

The 60mm Mortar cartridges are designed for use with the M224A1 Lightweight Company Mortar System (LWCMS) in all light infantry battalions including Airborne, Air Assault and Ranger. The short minimum range of the M224 makes the 60mm mortar ammunition well suited for close protective fires against an assaulting enemy, for block-to-block fighting in cities, and combat over close terrain with restricted visibility.

(E72199)CTG, MORTAR 60MM HE EnFrag M1061 (IM) W/M734A1 MOF
The M1061, 60mm High Explosive Enhanced Fragmentation (EF) cartridge with multi-option fuze is used against personnel and a higher category of materiel target sets providing both fragmentation and blast effect. This round uses the insensitive main charge explosive PBNX-110. Lethality is maintained by an enhanced fragmentation warhead. The M1061 EF uses the highly reliable and countermeasure resistant M734A1 multi-option fuze. When the fuze is set in the proximity mode, it functions at a height over the target that is optimized for lethality.
The M1061 is Code A, approved for service use.

(E92900)CTG MORTAR 60MM HE M768 W/PD FUZE
The 60mm High Explosive Cartridges are Insensitive Munitions (IM) enhanced, HE rounds. The M786 High Explosive cartridge (Range 70 meter minimum to 3,400 meter maximum) is used with the new M783 dual safety, point detonating/delay fuze, tail fin assembly, and high fragmentation steel (HF-1) shell body loaded with approximately 2lbs. of an IM explosive. This round is used primarily in training because it is significantly less expensive than the M720A1, the preferred war fighting round. However, the M768 is lethal and can be used in combat.
This item is Code A, approved for service use.

(E92200)CTG Mortar 60MM FRPC M769 SERIES W/PRACTICE FUZE
The M769 is a low-cost, full range, practice round that will replace a percentage of the standard HE rounds used in 60mm mortar training. The M769 FRPC (Range 70 meter minimum to 3,500 meter maximum) has been designed to provide the user with realistic training at a fraction of the cost. It is identical in shape, size and weight to the M720/M720A1 HE cartridges. The flash, bang and smoke signature provided by the M775 fuze is channeled to exhaust holes in the rear of the cartridge through the use of a center vent tube.
This item is Code A, approved for service use.

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature 60MM Mortar, All Types (E89600)	
Program Elements for Code B Items:	Code:	Other Related Program Elements:	

(E98600)CTG, Mortar, 60MM WP SMOKE M722 SERIES W/PD FUZE
The M722A1 60mm Smoke cartridge is designed as a spotting/marking round. The steel projectile is bulk loaded with white phosphorous. When the fuze functions, it detonates the M85 burster, which ruptures the projectile and disperses the white phosphorus. The M722A1 WP Smoke ((Range 200 meter minimum to 3,200 meter maximum) replaced the M745 mechanical point-detonating fuze with the reliable, safe, and cost effective electronic M783 Point Detonating (PD) and Delay (DLY) fuze.
This item is Code A, approved for service use.

Justification:
FY 2016 Base Budget supports critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station, and the combined training centers. Test requirements support the development, fielding, safety, and quality assurance of Army munitions and equipment throughout their life-cycle.

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.

FY 2016 Base procurement dollars in the amount of $42.898 million supports production of 159,508 cartridges. FY16 OCO procurement dollars in the amount of $11.700 million supports production of 18,411 cartridges. Funds are required to replenish munitions expended in combat operations in theater.

E72199 - CTG, MORTAR 60MM HE ENFRAG XM1061(IM)W/M734A1 MOF
This is a war reserve item used in combat. Request builds a war reserve inventory in accordance with the Army's procurement goals.
TYPE CLASSIFICATION DATE: 2QFY13
FY 2016 OCO procurement dollars in the amount of $3.700 million supports production of 2,605 cartridges. Funds are required to replenish munitions expended in combat operations in theater.

E92200 - CTG Mortar 60MM FRPC M769 SERIES W/PRACTICE FUZE
This is a training unique item not used in combat. FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals.
TYPE CLASSIFICATION DATE: 2001
FY 2016 Base procurement dollars in the amount of $21.000 million supports production of 120,568 cartridges.

E92900 - CTG MORTAR 60MM HE M768 SERIES W/PD FUZE
This is a training standard item used in training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army procurement goals.
TYPE CLASSIFICATION DATE: 2001
FY 2016 Base procurement dollars in the amount of $21.898 million supports production of 38,940 cartridges.
FY 2016 OCO procurement dollars in the amount of $8.000 million supports production of 15,806 cartridges. Funds are required to replenish munitions expended in combat operations in theater.

E98600 - CTG, Mortar,60MM WP SMOKE M722 SERIES W/PD FUZE
This is a training standard item used in training and combat. Request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals.
TYPE CLASSIFICATION DATE: March 2004

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: 60MM Mortar, All Types (E89600)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
Qty in thousands unless otherwise noted																
E72199 CTG, MORTAR, 60MM HE EF M1061	ba42	9477000	5149	1840.48							3700000	2605	1420.34	3700000	2605	1420.34
E92200 CTG MORTAR, 60MM FRPC M769	ba15	17887K	121720	146.95	9394000	54752	171.57	21000K	120568	174.17				21000K	120568	174.17
E92900 CTG MORTAR,60MM HE M768 W/PD FUZE	ba45	24265K	60039	404.15	24337K	63824	381.31	21898K	38940	562.35	8000000	15806	506.13	29898K	54746	562.35
E98600 CTG MORTAR, 60MM WP SMOKE M722	ba14				13011K	24588	529.15									
Total:		**51629**			**46742**			**42898**			**11700**			**54598**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG, MORTAR 60MM HE EnFrag XM1061(IM)W/M734A1 MOF (E72199)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty		5149			2605	2605	10068	10136	10202	10203		48363
Gross Cost	10.0	9.5			3.7	3.7	15.2	15.6	16.0	16.3		86.2
Less PY Adv Proc												
Net Proc P1	10.0	9.5			3.7	3.7	15.2	15.6	16.0	16.3		86.2
Plus CY Adv Proc												
Total Proc Cost	10.0	9.5			3.7	3.7	15.2	15.6	16.0	16.3		86.2
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												0.0

Description:
The XM1061, 60mm High Explosive Enhanced Fragmentation (EF) cartridge with multi-option fuze is designed for use with the M224 Lightweight Company Mortar System (LWCMS) in all light infantry battalions including Airborne, Air Assault and Ranger. The round is used against personnel and a higher category of materiel target sets providing both fragmentation and blast effect. This round uses the insensitive main charge explosive PBXN-110. Lethality is maintained by an enhanced fragmentation warhead. The XM1061 EF uses the highly reliable and countermeasure resistant M734A1 multi-option fuze. When the fuze is set in the proximity mode, it functions at a height over the target that is optimized for lethality.
The XM1061 is Code A. Approved for use.

Justification:
This is a war reserve item used in combat. Request builds a war reserve inventory in accordance with the Army's procurement goals.

Comments:
TYPE CLASSIFICATION DATE: 2QFY13

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG, MORTAR 60MM HE EnFrag XM1061(IM)W/M734A1 MOF (E72199)	Weapon System Type:	MDAP:	DODIC: BA42	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
LOAD, ASSEMBLE, PACK (LAP)		4297510	5149	834.63							2345000	2605	900.13	2345000	2605	900.13
FUZE MOFM, M734A1		1316894	5303	248.33							897000	2683	334.33	897000	2683	334.33
M702 IGNITION CARTRIDGE		70265	5303	13.25							45000	2683	16.73	45000	2683	16.73
PROPELLANT CHARGE, M236		284904	21214	13.43							116000	10732	10.78	116000	10732	10.78
FIN ASSEMBLY M27		38129	5303	7.19							27000	2683	9.99	27000	2683	9.99
SUBTOTAL HARDWARE COST		**6007701**									**3429227**			**3429227**		
Support																
PRODUCTION ENGINEERING		2155387									150000			150000		
ACCEPTANCE TESTING		280000									120000			120000		
SUBTOTAL PRODUCTION SUPPORT		**2435387**									**270000**			**270000**		
NON-RECURRING COSTS																
FIRST ARTICLE TEST		12787														
PRODUCTION VERIFICATION TEST		1021000														
SUBTOTAL NON-RECURRING COSTS		**1033787**														
Total:		**9477**									**3700**			**3700**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2015

Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature: CTG, MORTAR 60MM HE EnFrag XM1061(IM)W/M734A1 MOF (E72199)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
LOAD, ASSEMBLE, PACK (LAP)										
FY 2014	ATK TACTICAL SYSTEMS COMPANY ROCKET CENTER, WV	C / FFP	PICATINNY ARSENAL, NJ	Feb 14	Feb 16	5149	834.63	Y		
FY 2016	TO BE SELECTED TBS01	C / FFP	PICATINNY ARSENAL, NJ	Feb 17	Feb 19	2605	900.13	Y		
FUZE MOFM, M734A1										
FY 2014	L-3 FUZING & ORDANCE SYSTEMS CINCINNATI, OH	C / FFP	PICATINNY ARSENAL, NJ	Dec 14	Aug 15	5303	248.33	Y		
FY 2016	TO BE SELECTED TBS02	C / FFP	PICATINNY ARSENAL, NJ	Mar 17	Nov 18	2683	334.33	Y		
M702 IGNITION CARTRIDGE										
FY 2014	NAMMO POCAL INC. SCRANTON, PA	C / IDIQ	ROCK ISLAND ARSENAL, IL	Mar 14	Sep 15	5303	13.25	Y		
FY 2016	TO BE SELECTED TBS03	C / IDIQ	ROCK ISLAND ARSENAL, IL	Mar 17	Sep 18	2683	16.73	Y		
PROPELLANT CHARGE, M236										
FY 2014	AMERICAN ORDNANCE LLC (IAAP) MIDDLETOWN, IA	C / IDIQ	ROCK ISLAND ARSENAL, IL	Jan 14	Sep 15	21214	13.43	Y		
FY 2016	TO BE SELECTED TBS04	C / IDIQ	ROCK ISLAND ARSENAL, IL	Mar 17	Sep 18	10732	10.78	Y		
FIN ASSEMBLY M27										
FY 2014	FLEXIBLE CONCEPTS INC. ELKHART, IN	C / IDIQ	ROCK ISLAND ARSENAL, IL	Mar 14	Sep 15	5303	7.19	Y		
FY 2016	TO BE SELECTED TBS05	C / IDIQ	ROCK ISLAND ARSENAL, IL	Mar 17	Sep 18	2683	9.99	Y		

REMARKS: Ignition Cartridges: IDIQ awarded (Jun 12) to multiple contractors. Requirementswill be competed among the following contractors: Pocal Industries, Scranton, PA; Day and Zimmerman, Camden AR and American Ordnance, Middletown, IA. M27 Fins: IDIQ awarded (Feb 11) to multiple contractors. Requirements will be competed among the following contractors: Gayston, Springboro, OH; Flexible Concepts, Elkhart, IN; Cerebrus, Morris Plains, NJ. M236 Propellant Charges: IDIQ awarded (Dec 12) to multiple contractors. Requirements will be competed among the following contractors: Day and Zimmerman, Camden, AR; American Ordnance, Middletown, IA; and General Dynamics, Marion, Il.

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, MORTAR 60MM HE EnFrag XM1061(IM)W/M734A1 MOF (E72199)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	5201	0	5201						1440	1599	1922																	0
2	FY 14	A	5149	0	5149																	5149								0
3	FY 16	A	2605	0	2605																									2605
1	FY 13	NSOF	973	0	973																									0
Total					13928						1440	1599	1922									5149								2605
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	ALLIANT TACTICAL PROPULSION &, ROCKET CITY, WV	10000	10000	30000	
2	ATK TACTICAL SYSTEMS COMPANY, ROCKET CENTER, WV	10000	10000	30000	
3	TO BE SELECTED, TBS01	10000	10000	30000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	6	24	30
2	Initial	6	6	24	30
	Reorder	6	6	24	30
3	Initial	6	6	24	30
	Reorder	6	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, MORTAR 60MM HE EnFrag XM1061(IM)W/M734A1 MOF (E72199)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	5201	5201																										0
2	FY 14	A	5149	5149																										0
3	FY 16	A	2605	0	2605					A																				2605
1	FY 13	NSOF	973	973																										0
Total					2605																									2605
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	ALLIANT TACTICAL PROPULSION &, ROCKET CITY, WV	10000	10000	30000	
2	ATK TACTICAL SYSTEMS COMPANY, ROCKET CENTER, WV	10000	10000	30000	
3	TO BE SELECTED, TBS01	10000	10000	30000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	6	24	30
2	Initial	6	6	24	30
	Reorder	6	6	24	30
3	Initial	6	6	24	30
	Reorder	6	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 19 / 20 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, MORTAR 60MM HE EnFrag XM1061(IM)W/M734A1 MOF (E72199)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 19												Fiscal Year 20												Later
									Calendar Year 19												Calendar Year 20									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	5201	5201																										0
2	FY 14	A	5149	5149																										0
3	FY 16	A	2605	0	2605																									0
1	FY 13	NSOF	973	973																										0
Total					2605																									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	ALLIANT TACTICAL PROPULSION &, ROCKET CITY, WV	10000	10000	30000	
2	ATK TACTICAL SYSTEMS COMPANY, ROCKET CENTER, WV	10000	10000	30000	
3	TO BE SELECTED, TBS01	10000	10000	30000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	6	24	30
2	Initial	6	6	24	30
	Reorder	6	6	24	30
3	Initial	6	6	24	30
	Reorder	6	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG Mortar 60MM FRPC M769 SERIES W/PRACTICE FUZE (E92200)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty		121720	54752	120568		120568	120677	120773	120870	120973		780333
Gross Cost	103.0	17.9	9.4	21.0		21.0	21.4	21.8	22.3	22.7		239.6
Less PY Adv Proc												
Net Proc P1	103.0	17.9	9.4	21.0		21.0	21.4	21.8	22.3	22.7		239.6
Plus CY Adv Proc												
Total Proc Cost	103.0	17.9	9.4	21.0		21.0	21.4	21.8	22.3	22.7		239.6
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												0.0

Description:
The M769 is a low-cost, full range, practice round that will replace a percentage of the standard HE rounds used in 60mm mortar training. The M769 FRPC (Range 70 meter minimum to 3,500 meter maximum) has been designed to provide the user with realistic training at a fraction of the cost. It is identical in shape, size and weight to the M720/M720A1 HE cartridges. The flash, bang and smoke signature provided by the M775 fuze is channeled to exhaust holes in the rear of the cartridge through the use of a center vent tube.
This item is Code A, approved for service use.

Justification:
This is a training unique item not used in combat. FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals.

Comments:
TYPE CLASSIFICATION DATE: 2001

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG Mortar 60MM FRPC M769 SERIES W/PRACTICE FUZE (E92200)	Weapon System Type:	MDAP:	DODIC: BA15	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
Load, Assemble, Pack (LAP)		2088715	121720	17.16	945567	54752	17.27	2285969	120568	18.96				2285969	120568	18.96
Fuze Practice, M775		2242905	125372	17.89	1070941	56395	18.99	2404222	124185	19.36				2404222	124185	19.36
Shell Body, 60MM FRPC		4311543	125372	34.39	2152597	56395	38.17	4834522	124185	38.93				4834522	124185	38.93
M702 Ignition Cartridge		1661179	125372	13.25	925442	56395	16.41	2077615	124185	16.73				2077615	124185	16.73
Propellant Charge, M235		4473264	501487	8.92	2332477	225578	10.34	5235629	496739	10.54				5235629	496739	10.54
Fin Assembly M27		901425	125372	7.19	552671	56395	9.80	1240608	124185	9.99				1240608	124185	9.99
SUBTOTAL HARDWARE COST		**15679K**			**7979695**			**18079K**						**18079K**		
Support																
Production Engineering		2037000			1033469			2100000						2100000		
Acceptance Testing		152000			380871			820000						820000		
SUBTOTAL PRODUCTION SUPPORT		**2189000**			**1414339**			**2920000**						**2920000**		
NON-RECURRING COSTS																
FIRST ARTICLE TEST		18824														
SUBTOTAL NON-RECURRING COSTS		**18824**														
Total:		**17887**			**9394**			**21000**						**21000**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2015

Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature: CTG Mortar 60MM FRPC M769 SERIES W/PRACTICE FUZE (E92200)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Load, Assemble, Pack (LAP)										
FY 2014	DAY & ZIMMERMANN LONE STAR CAMDEN, AR	C / IDIQ	PICATINNY ARSENAL, NJ	Jun 14	Jun 16	41453	17.16	Y		
FY 2014	NAMMO POCAL INC. SCRANTON, PA	C / IDIQ	ROCK ISLAND ARSENAL, IL	Jun 14	Jun 16	80267	17.16	Y		
FY 2015	TO BE SELECTED TBS01	C / IDIQ	ROCK ISLAND ARSENAL, IL	Mar 15	May 17	54752	17.27	Y		
FY 2016	TO BE SELECTED TBS01	C / IDIQ	ROCK ISLAND ARSENAL, IL	Mar 16	Mar 18	120568	18.96	Y		
Fuze Practice, M775										
FY 2014	NAMMO POCAL INC. SCRANTON, PA	C / IDIQ	PICATINNY ARSENAL, NJ	Jan 14	Jul 15	125372	17.89	Y		
FY 2015	NAMMO POCAL INC. SCRANTON, PA	C / IDIQ	PICATINNY ARSENAL, NJ	Feb 15	Aug 16	56395	18.99	Y		
FY 2016	NAMMO POCAL INC. SCRANTON, PA	C / IDIQ	PICATINNY ARSENAL, NJ	Feb 16	Aug 17	124185	19.36	Y		
Shell Body, 60MM FRPC										
FY 2014	MEDICO INDUSTRIES INC. WILKES BARRE, PA	C / IDIQ	PICATINNY ARSENAL, NJ	Feb 14	Dec 15	125372	34.39	Y		
FY 2015	TO BE SELECTED TBS02	C / IDIQ	PICATINNY ARSENAL, NJ	Feb 15	Aug 16	56395	38.17	Y		
FY 2016	TO BE SELECTED TBS02	C / IDIQ	PICATINNY ARSENAL, NJ	Feb 16	Aug 17	124185	38.93	Y		
M702 Ignition Cartridge										
FY 2014	NAMMO POCAL INC. SCRANTON, PA	C / IDIQ	ROCK ISLAND ARSENAL, IL	Mar 14	Sep 15	125372	13.25	Y		
FY 2015	TO BE SELECTED TBS03	C / IDIQ	ROCK ISLAND ARSENAL, IL	Feb 15	Aug 16	56395	16.41	Y		
FY 2016	TO BE SELECTED TBS03	C / IDIQ	ROCK ISLAND ARSENAL, IL	Feb 16	Aug 17	124185	16.73	Y		
Propellant Charge, M235										
FY 2014	AMERICAN ORDNANCE LLC (IAAP) MIDDLETOWN, IA	C / IDIQ	ROCK ISLAND ARSENAL, IL	Jul 14	Jan 16	501487	8.92	Y		
FY 2015	TO BE SELECTED TBS04	C / IDIQ	ROCK ISLAND ARSENAL, IL	Feb 15	Aug 16	225578	10.34	Y		
FY 2016	TO BE SELECTED TBS04	C / IDIQ	ROCK ISLAND ARSENAL, IL	Feb 16	Aug 17	496739	10.54	Y		
Fin Assembly M27										

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Procurement of Ammunition, Army/ 1/ Ammunition		CTG Mortar 60MM FRPC M769 SERIES W/PRACTICE FUZE (E92200)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
FY 2014	FLEXIBLE CONCEPTS INC. ELKHART, IN	C / IDIQ	ROCK ISLAND ARSENAL, IL	Mar 14	Sep 15	125372	7.19	Y		
FY 2015	TO BE SELECTED TBS05	C / IDIQ	ROCK ISLAND ARSENAL, IL	Feb 15	Aug 16	56395	9.80	Y		
FY 2016	TO BE SELECTED TBS05	C / IDIQ	ROCK ISLAND ARSENAL, IL	Feb 16	Aug 17	124185	9.99	Y		

REMARKS: FRPC LAP: IDIQ awarded (Feb 11) to multiple contractors. Requirements will be competed among the following contractors: Day and Zimmerman, Parsons, KS; Chemring Ordnance, Perry FL. M27 FINS: IDIQ awarded (Feb 11) to multiple contractors. Requirements will be competed among the following contractors: Gayston, Springboro, OH; Flexible Concepts, Elkhart, IN; Cerebrus, Morris Plains, NJ. Ignition Cartridges: IDIQ awarded (Jun 12) to multiple contractors. Requirements will be competed among the following contractors: Pocal Industries, Scranton, PA and American Ordnance, Middletown, IA.

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG Mortar 60MM FRPC M769 SERIES W/PRACTICE FUZE (E92200)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Load, Assemble, Pack (LAP)																														
1	FY 13	A	72000	12000	60000	12000	12000	12000	12000	12000																				0
1	FY 14	A	80267	0	80267																					6000	6000	6000	6000	56267
2	FY 14	A	41453	0	41453																					12000	12000	12000	5453	0
3	FY 15	A	54752	0	54752						A																			54752
3	FY 16	A	120568	0	120568																		A							120568
1	FY 14	MC	47637	0	47637																					6000	6000	6000	6000	23637
3	FY 15	MC	48284	0	48284						A																			48284
3	FY 16	MC	11005	0	11005																		A							11005
Total					463966	12000	12000	12000	12000	12000																24000	24000	24000	17453	314513
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	NAMMO POCAL INC., SCRANTON, PA	12000	12000	12000	
2	DAY & ZIMMERMANN LONE STAR, CAMDEN, AR	12000	12000	12000	
3	TO BE SELECTED, TBS01	10000	12000	24000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	6	24	30
2	Initial	6	6	24	30
	Reorder	6	6	24	30
3	Initial	6	6	24	30
	Reorder	6	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG Mortar 60MM FRPC M769 SERIES W/PRACTICE FUZE (E92200)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Load, Assemble, Pack (LAP)																														
1	FY 13	A	72000	72000																										0
1	FY 14	A	80267	24000	56267	6000	6000	6000	6363	6363	12000	7904																		0
2	FY 14	A	41453	41453																										0
3	FY 15	A	54752	0	54752								6000	6000	5613	6000	6000	6000	6000	6103	7036									0
3	FY 16	A	120568	0	120568																		6000	6995	12000	12000	12000	12000	12000	47573
1	FY 14	MC	47637	24000	23637	6000	6000	6000	5637																					0
3	FY 15	MC	48284	0	48284								6000	6000	6387	6000	6000	6000	6000	5897										0
3	FY 16	MC	11005	0	11005																		6000	5005						0
Total					314513	12000	12000	12000	12000	6363	12000	7904	12000	12000	12000	12000	12000	12000	12000	12000	7036		12000	12000	12000	12000	12000	12000	12000	47573
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	NAMMO POCAL INC., SCRANTON, PA	12000	12000	12000	
2	DAY & ZIMMERMANN LONE STAR, CAMDEN, AR	12000	12000	12000	
3	TO BE SELECTED, TBS01	10000	12000	24000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	6	24	30
2	Initial	6	6	24	30
	Reorder	6	6	24	30
3	Initial	6	6	24	30
	Reorder	6	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 19 / 20 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG Mortar 60MM FRPC M769 SERIES W/PRACTICE FUZE (E92200)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 19												Fiscal Year 20												Later
									Calendar Year 19												Calendar Year 20									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Load, Assemble, Pack (LAP)																														
1	FY 13	A	72000	72000																										0
1	FY 14	A	80267	80267																										0
2	FY 14	A	41453	41453																										0
3	FY 15	A	54752	54752																										0
3	FY 16	A	120568	72995	47573	12000	12000	12000	11573																					0
1	FY 14	MC	47637	47637																										0
3	FY 15	MC	48284	48284																										0
3	FY 16	MC	11005	11005																										0
Total					47573	12000	12000	12000	11573																					
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	NAMMO POCAL INC., SCRANTON, PA	12000	12000	12000	
2	DAY & ZIMMERMANN LONE STAR, CAMDEN, AR	12000	12000	12000	
3	TO BE SELECTED, TBS01	10000	12000	24000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	6	24	30
2	Initial	6	6	24	30
	Reorder	6	6	24	30
3	Initial	6	6	24	30
	Reorder	6	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG MORTAR 60MM HE M768 SERIES W/PD FUZE (E92900)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty		60039	63824	38940	15806	54746	54641	51103	43552	46124		374029
Gross Cost	137.6	24.3	24.3	21.9	8.0	29.9	31.3	29.9	26.0	28.1		331.5
Less PY Adv Proc												
Net Proc P1	137.6	24.3	24.3	21.9	8.0	29.9	31.3	29.9	26.0	28.1		331.5
Plus CY Adv Proc												
Total Proc Cost	137.6	24.3	24.3	21.9	8.0	29.9	31.3	29.9	26.0	28.1		331.5
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0

Description:
The 60mm High Explosive Cartridges are Insensitive Munitions (IM) enhanced, HE rounds. The M786 High Explosive cartridge (Range 70 meter minimum to 3,400 meter maximum) is used with the new M783 dual safety, point detonating/delay fuze, tail fin assembly, and high fragmentation steel (HF-1) shell body loaded with approximately 2lbs. of an IM explosive. This round is used primarily in training because it is significantly less expensive than the M720A1, the preferred war fighting round. However, the M768 is lethal and can be used in combat.
This item is Code A, approved for service use.

Justification:
This is a training standard item used in training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army procurement goals.

Comments:
TYPE CLASSIFICATION DATE: 2001

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG MORTAR 60MM HE M768 SERIES W/PD FUZE (E92900)	Weapon System Type:	MDAP:	DODIC: BA45	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
LOAD, ASSEMBLE, PACK (LAP)		3205482	60039	53.39	3510320	63824	55.00	2184534	38940	56.10	886717	15806	56.10	3071251	54746	56.10
SHELL BODY (HF1), 60MM HE		2312198	61840	37.39	2599320	65739	39.54	1617155	40108	40.32	656410	16280	40.32	2273564	56388	40.32
FIN ASSEMBLY M27		491628	61840	7.95	644242	65739	9.80	400679	40108	9.99	162637	16280	9.99	563316	56388	9.99
M702 IGNITION CARTRIDGE		819380	61840	13.25	1078777	65739	16.41	671007	40108	16.73	272364	16280	16.73	943371	56388	16.73
PROPELLANT CHARGE, M235		2206460	247361	8.92	2718955	262955	10.34	1690953	160432	10.54	686375	65121	10.54	2377329	225553	10.54
FUZE POINT DETONATOR M783		9788654	61840	158.29	10291K	65739	156.55	10027K	40108	250.00	4070000	16280	250.00	14097K	56388	250.00
PBXW-14 BULK EXPLOSIVE		279639	3482	80.31	302750	3702	81.78	194846	2336	83.41	79073	948	83.41	273918	3284	83.41
EXPLOSIVE FILL IMX-104		2235245	102066	21.90				2656487	116820	22.74	1078285	47418	22.74	3734772	164238	22.74
*EXPLOSIVE FILL IMX-104					2531328	108501	23.33									
SUBTOTAL HARDWARE COST		**21339K**			**23677K**			**19443K**			**7891861**			**27335K**		
Support																
PRODUCTION ENGINEERING		2627000			2127408			2192000			488			2192488		
ACCEPTANCE TESTING		300000			465000			263175			109000			372175		
SUBTOTAL PRODUCTION SUPPORT		**2927000**			**2592408**			**2455175**			**109488**			**2564664**		
NON-RECURRING COSTS																
FIRST ARTICLE TEST					600000											
*GOVERNMENT FURNISHED MATERIAL					- 2531328											
SUBTOTAL NON-RECURRING COSTS					**-1931328**											
Total:		**24265**			**24337**			**21898**			**8000**			**29898**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2015

Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature: CTG MORTAR 60MM HE M768 SERIES W/PD FUZE (E92900)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
LOAD, ASSEMBLE, PACK (LAP)										
FY 2014	GEN DYNAMICS ORD & TAC SYS - LE GARDEUR, CANADA	C / IDIQ	ROCK ISLAND ARSENAL, IL	Aug 14	Aug 16	60039	53.39	Y		
FY 2015	TO BE SELECTED TBS01	C / IDIQ	ROCK ISLAND ARSENAL, IL	Mar 15	Mar 17	63824	55.00	Y		
FY 2016	TO BE SELECTED TBS01	C / IDIQ	ROCK ISLAND ARSENAL, IL	Mar 16	Mar 18	54746	56.10	Y		
SHELL BODY (HF1), 60MM HE										
FY 2014	MEDICO INDUSTRIES INC. WILKES BARRE, PA	C / IDIQ	PICATINNY ARSENAL, NJ	Mar 14	Sep 15	61840	37.39	Y		
FY 2015	TO BE SELECTED TBS02	C / IDIQ	PICATINNY ARSENAL, NJ	Feb 15	Aug 16	65739	39.54	Y		
FY 2016	TO BE SELECTED TBS02	C / IDIQ	PICATINNY ARSENAL, NJ	Feb 16	Aug 17	56388	40.32	Y		
FIN ASSEMBLY M27										
FY 2014	GAYSTON CORPORATION SPRINGBORO, OH	C / IDIQ	ROCK ISLAND ARSENAL, IL	Mar 14	Sep 15	61840	7.95	Y		
FY 2015	TO BE SELECTED TBS03	C / IDIQ	ROCK ISLAND ARSENAL, IL	Feb 15	Aug 16	65739	9.80	Y		
FY 2016	TO BE SELECTED TBS03	C / IDIQ	ROCK ISLAND ARSENAL, IL	Feb 16	Aug 17	56388	9.99	Y		
M702 IGNITION CARTRIDGE										
FY 2014	NAMMO POCAL INC. SCRANTON, PA	C / IDIQ	ROCK ISLAND ARSENAL, IL	Mar 14	Sep 15	61840	13.25	Y		
FY 2015	TO BE SELECTED TBS04	C / IDIQ	ROCK ISLAND ARSENAL, IL	Feb 15	Aug 16	65739	16.41	Y		
FY 2016	TO BE SELECTED TBS04	C / IDIQ	ROCK ISLAND ARSENAL, IL	Feb 16	Aug 17	56388	16.73	Y		
PROPELLANT CHARGE, M235										
FY 2014	AMERICAN ORDNANCE LLC (IAAP) MIDDLETOWN, IA	C / IDIQ	ROCK ISLAND ARSENAL, IL	Jul 14	Jan 16	247361	8.92	Y		
FY 2015	TO BE SELECTED TBS05	C / IDIQ	ROCK ISLAND ARSENAL, IL	Feb 15	Aug 16	262955	10.34	Y		
FY 2016	TO BE SELECTED TBS05	C / IDIQ	ROCK ISLAND ARSENAL, IL	Feb 16	Aug 17	225553	10.54	Y		
FUZE POINT DETONATOR M783										
FY 2014	L-3 FUZING & ORDANCE SYSTEMS CINCINNATI, OH	C / FFP	PICATINNY ARSENAL, NJ	Jan 14	Jul 15	61840	158.29	Y		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:
Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature:
CTG MORTAR 60MM HE M768 SERIES W/PD FUZE (E92900)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
FY 2015	TO BE SELECTED TBS06	C / FFP	PICATINNY ARSENAL, NJ	Feb 15	Aug 16	65739	156.55	Y		
FY 2016	TO BE SELECTED TBS06	C / FFP	PICATINNY ARSENAL, NJ	Feb 16	Aug 17	56388	250.00	Y		
PBXW-14 BULK EXPLOSIVE										
FY 2014	BAE SYSTEMS ORDNANCE SYSTEMS KINGSPORT, TN	C / FFP	ROCK ISLAND ARSENAL, IL	Jul 14	Mar 16	3482	80.31	Y		
FY 2015	BAE SYSTEMS ORDNANCE SYSTEMS KINGSPORT, TN	C / FFP	ROCK ISLAND ARSENAL, IL	Feb 15	Oct 16	3702	81.78	Y		
FY 2016	BAE SYSTEMS ORDNANCE SYSTEMS KINGSPORT, TN	C / FFP	ROCK ISLAND ARSENAL, IL	Feb 16	Oct 17	3284	83.41	Y		
EXPLOSIVE FILL IMX-104										
FY 2014	BAE SYSTEMS ORDNANCE SYSTEMS KINGSPORT, TN	C / FFP	ROCK ISLAND ARSENAL, IL	Jul 14	Mar 16	102066	21.90	Y		
FY 2016	BAE SYSTEMS ORDNANCE SYSTEMS KINGSPORT, TN	C / FFP	ROCK ISLAND ARSENAL, IL	Feb 16	Oct 17	164238	22.74	Y		
***EXPLOSIVE FILL IMX-104**										
FY 2015	GOVERNMENT FURNISHED MATERIAL STOCK ISSUE,	GFM	ROCK ISLAND ARSENAL, IL	Oct 14	Oct 14	108501	23.33			

REMARKS: Ignition Cartridges: IDIQ awarded (Jun 12) to multiple contractors. Requirements will be competed among the following contractors: Pocal Industries, Scranton, PA; American Ordnance, Middletown, IA; and DZI Lonestar LLC., Texarkana, TX. HE LAP: IDIQ awarded (Aug 11) to multiple contractors. Requirements will be competed among the following contractors: Day and Zimmerman, Camden, AR; Day and Zimmerman, Parsons, KS; General Dynamics, LeGardeur, Canada; American Ordnance, Middletown, IA. HE Shell Bodies: IDIQ awarded (Aug 11) to multiple contractors. Requirements will be competed among the following contractors: Medico Industries, Wilkes Barre, PA; Modern Industries, Erie, PA; T&A Screw Products, Terryville, CT. M220 Propellant Charges: IDIQ awarded (Dec 12) to multiple contractors. Requirements will be competed among the following contractors: Day and Zimmerman, Camden, AR; American Ordnance, Middletown, IA; and General Dynamics, Marion IL. Fins: IDIQ awarded (Jul 12) to multiple contractors. Requirements will be competed among the following contractors: Gayston Corp., Springboro, OH and T&A Screw Products, Terryville, CT.

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG MORTAR 60MM HE M768 SERIES W/PD FUZE (E92900)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 14	A	60039	0	60039																							12000	12000	36039
2	FY 15	A	63824	0	63824						A																			63824
2	FY 16	A	54746	0	54746																		A							54746
Total					178609																							12000	12000	154609
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	GEN DYNAMICS ORD & TAC SYS -, LE GARDEUR, CANADA	6000	12000	30000	
2	TO BE SELECTED, TBS01	6000	12000	30000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	6	24	30
2	Initial	6	6	24	30
	Reorder	6	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG MORTAR 60MM HE M768 SERIES W/PD FUZE (E92900)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 14	A	60039	24000	36039	12000	12000	12039																						0
2	FY 15	A	63824	0	63824						12000	12000	12000	6000	6000	6000	9824													0
2	FY 16	A	54746	0	54746																		12000	12000	12000	18746				0
Total					154609	12000	12000	12039			12000	12000	12000	6000	6000	6000	9824						12000	12000	12000	18746				
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	GEN DYNAMICS ORD & TAC SYS -, LE GARDEUR, CANADA	6000	12000	30000	
2	TO BE SELECTED, TBS01	6000	12000	30000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	6	24	30
2	Initial	6	6	24	30
	Reorder	6	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
Ctg, Mortar,60MM WP SMOKE M722 SERIES W/PD FUZE (E98600)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty			24588									24588
Gross Cost	19.0		13.0									32.0
Less PY Adv Proc												
Net Proc P1	19.0		13.0									32.0
Plus CY Adv Proc												
Total Proc Cost	19.0		13.0									32.0
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												0.0

P-40 Breakdown

Area		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Active	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	0.0	10539.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
National Guard	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	0.0	2082.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reserve	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	0.0	390.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	Qty	0	0	0	0	0	0	0	0	0
	Gross Cost	0	13011	0	0	0	0	0	0	0

Description:
The M722A1 60mm Smoke cartridge is designed as a spotting/marking round. The steel projectile is bulk loaded with white phosphorous. When the fuze functions, it detonates the M85 burster, which ruptures the projectile and disperses the white phosphorus. The M722A1 WP Smoke ((Range 200 meter minimum to 3,200 meter maximum) replaced the M745 mechanical point-detonating fuze with the reliable, safe, and cost effective electronic M783 Point Detonating (PD) and Delay (DLY) fuze.
This item is Code A, approved for service use.

Justification:
This is a training standard item used in training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals.

Comments:
TYPE CLASSIFICATION DATE: March 2004

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: Ctg, Mortar,60MM WP SMOKE M722 SERIES W/PD FUZE (E98600)	Weapon System Type:	MDAP:	DODIC: BA14	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
LOAD, ASSEMBLE, PACK (LAP)					2638292	24588	107.30									
FUZE POINT DETONATOR M783					3964785	25326	156.55									
SHELL BODY, 60MM SMOKE					996072	25326	39.33									
M702 IGNITION CARTRIDGE					415600	25326	16.41									
CHG PROP 60MM M204					2150663	101303	21.23									
FIN ASSEMBLY M27					248195	25326	9.80									
FIBER CONTAINER PA 189, 60MM SMK					102570	25326	4.05									
METAL CONTAINER PA191, 60MM					133842	3074	43.54									
BURSTER HOUSING M216, 60MM SMK					394832	25326	15.59									
BURSTER ASSEMBLY, M85					444978	25326	17.57									
SUBTOTAL HARDWARE COST					**11490K**											
Support																
PRODUCTION ENGINEERING					1140000											
ACCEPTANCE TESTING					200000											
SUBTOTAL PRODUCTION SUPPORT					**1340000**											
NON-RECURRING COSTS																
FIRST ARTICLE TEST					180000											
SUBTOTAL NON-RECURRING COSTS					**180000**											
Total:					**13011**											

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2015

Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature: Ctg, Mortar,60MM WP SMOKE M722 SERIES W/PD FUZE (E98600)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
LOAD, ASSEMBLE, PACK (LAP)										
FY 2015	PINE BLUFF ARSENAL PINE BLUFF, AR	C / FFP	ROCK ISLAND ARSENAL, IL	Feb 15	Feb 17	24588	107.30	Y		
FUZE POINT DETONATOR M783										
FY 2015	L-3 FUZING & ORDANCE SYSTEMS CINCINNATI, OH	C / FFP	PICATINNY ARSENAL, NJ	Feb 15	Oct 16	25326	156.55	Y		
SHELL BODY, 60MM SMOKE										
FY 2015	TO BE SELECTED TBS01	C / FFP	PICATINNY ARSENAL, NJ	Apr 15	Oct 16	25326	39.33	Y		
M702 IGNITION CARTRIDGE										
FY 2015	TO BE SELECTED TBS02	C / IDIQ	ROCK ISLAND ARSENAL, IL	Apr 15	Oct 16	25326	16.41	Y		
CHG PROP 60MM M204										
FY 2015	TO BE SELECTED TBS03	C / IDIQ	PICATINNY ARSENAL, NJ	Apr 15	Oct 16	101303	21.23	Y		
FIN ASSEMBLY M27										
FY 2015	TO BE SELECTED TBS04	C / IDIQ	ROCK ISLAND ARSENAL, IL	Apr 15	Oct 16	25326	9.80	Y		
FIBER CONTAINER PA 189, 60MM SMK										
FY 2015	UNITED AMMUNITION CONTAINER WYNNEWOOD, PA	C / IDIQ	PICATINNY ARSENAL, NJ	Apr 15	Oct 16	25326	4.05	Y		
METAL CONTAINER PA191, 60MM										
FY 2015	BWAY CORPORATION ATLANTA, GA	C / IDIQ	PICATINNY ARSENAL, NJ	Apr 15	Oct 16	3074	43.54	Y		
BURSTER HOUSING M216, 60MM SMK										
FY 2015	CRANE ARMY AMMO ACTIVITY CRANE, IN	C / FFP	ROCK ISLAND ARSENAL, IL	Feb 15	Aug 16	25326	15.59	Y		
BURSTER ASSEMBLY, M85										
FY 2015	CRANE ARMY AMMO ACTIVITY CRANE, IN	C / FFP	ROCK ISLAND ARSENAL, IL	Feb 15	Aug 16	25326	17.57	Y		

REMARKS: M27 Fins: IDIQ awarded (Feb 11) to multiple contractors. Requirements will be competed among the following contractors: Gayston, Springboro, OH; Flexible Concepts, Elkhart, IN; Cerebrus, Morris Plains, NJ. Ignition Cartridges: IDIQ awarded (June 12) to multiple contractors. Requirements will be competed among the following contractors: Pocal Industries, Scranton, PA; Day and Zimmerman, Camden, AR and American Ordnance, Middleton, IA. M204 Propellant Charges: IDIQ awarded (Dec 12) to multiple contractors. Requirements will be competed among the following contractors: Day and Zimmerman, Camden, AR; American Ordnance, Middletown, IA and General Dynamics, Marion, Il.

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
Ctg, Mortar,60MM WP SMOKE M722 SERIES W/PD FUZE (E98600)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	15680	0	15680							15680																		0
1	FY 15	A	24588	0	24588					A																				24588
Total					40268							15680																		24588
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	PINE BLUFF ARSENAL, PINE BLUFF, AR	20000	20000	32000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	4	24	28
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS
PRODUCTION LINE SHARED WITH OTHER 60 & 81MM SMOKE & ILLUM ITEMS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
Ctg, Mortar,60MM WP SMOKE M722 SERIES W/PD FUZE (E98600)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	15680	15680																										0
1	FY 15	A	24588	0	24588																									0
Total					24588																									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	PINE BLUFF ARSENAL, PINE BLUFF, AR	20000	20000	32000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	4	24	28
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS
PRODUCTION LINE SHARED WITH OTHER 60 & 81MM SMOKE & ILLUM ITEMS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
81MM Mortar, All Types (E76000)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	612.0	24.7	42.4	43.5	4.0	47.5	41.6	37.4	37.8	48.4		891.8
Less PY Adv Proc												
Net Proc P1	612.0	24.7	42.4	43.5	4.0	47.5	41.6	37.4	37.8	48.4		891.8
Plus CY Adv Proc												
Total Proc Cost	612.0	24.7	42.4	43.5	4.0	47.5	41.6	37.4	37.8	48.4		891.8
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
This budget line includes 81mm Mortar Ammunition, All Types.
The 81mm Mortar cartridges are designed for use with the M252 Mortar Weapon System used by the Stryker Brigade Combat Teams as well as light infantry battalions including Airborne, Air Assault and Ranger.

(E18403)CTG, MORTAR, 81MM HE M821 W/MOFM
The 81mm High Explosive Cartridges are Insensitive Munitions (IM) enhanced, HE rounds. The 81mm HE Cartridges consist of a fuze, a threaded plastic fuze adapter, a HF-1 steel projectile body loaded with approximately 3lbs. of IMX-104 explosive, a plastic obturating ring, a M24 Fin, the M220 Propelling Charges, and a M299 Ignition Cartridge. The M821A2 HE (Range 70 meter minimum to 5,859 meter maximum) also incorporates the highly reliable and countermeasure resistant M734A1 multi-option fuze. When the fuze is set in the proximity mode, it functions at a height over the target that is optimized for lethality.
IM features of this cartridge reduce the vulnerability to unplanned stimuli, e.g. fire/heat, shock and impact, while maintaining or exceeding the same level of effectiveness in combat.
These items are Code A, approved for service use.

(E18404)CTG, MORTAR, 81MM HE M889 SERIES W/PD FUZE
The 81mm High Explosive Cartridges are Insensitive Munitions (IM) enhanced, HE rounds. The 81mm HE Cartridges consist of a fuze, a threaded plastic fuze adapter, a HF-1 steel projectile body loaded with approximately 3lbs. of IMX-104 explosive, a plastic obturating ring, a M24 Fin, the M220 Propelling Charges, and a M299 Ignition Cartridge. The M889A2 HE (Range 70 meter minimum to 5,859 meter maximum) is used with the new M783 dual safety, point detonating/delay fuze. This round is used primarily in training because it is significantly less expensive than the M821A2, the preferred war fighting round. However, the M889A2 is lethal and can be used in combat.
IM features of this cartridge reduce the vulnerability to unplanned stimuli, e.g. fire/heat, shock and impact, while maintaining or exceeding the same level of effectiveness in combat.
These items are Code A, approved for service use.

(E69600)CTG, MORTAR, 81MM FRPC M879 SERIES W/PRACTICE FUZE
The M879 is a low-cost, full range, practice round that will replace a percentage of the standard HE rounds used in 81mm mortar training. The M879 FRPC (Range 70 meter minimum to 5,800 meter maximum) has been designed to provide the user with realistic training at a fraction of the cost. It is identical in shape, size and weight to the M889A2/M821A2 HE cartridges. The flash, bang and smoke signature provided by the M751 fuze is channeled to exhaust holes in the rear of the cartridge through the use of a center vent tube.
This item is Code A, approved for service use.

(E76100)CTG, MORTAR, 81MM VL ILLUM M853 SERIES W/MTSQ FUZE
The M853A1 cartridge is a fin stabilized, mortar cartridge that consists of a M772 Mechanical Time Super Quick (MTSQ) fuze, a thin wall aluminum body tube and aluminum tail cone that contains the payload (parachute and canister), and a fin assembly that contains the ignition cartridge and propelling charges. The payload is base ejected and upon ignition produces visible light illumination. This visible light illumination allows for monitoring of enemy activities and adjustment of fire at greater observation distances during night operations. It also provides a means for day/night signaling. It is particularly useful in combined operations with allies who may not have night vision devices (NVDs). This round illuminates to the full range of the HE round, which allows adjustment of fire at any distance out to the maximum range. The M853A1 (Range 300 meter minimum and 5,050 maximum) is range-matched to the 81mm High Explosive (HE) and smoke cartridges.
This item is Code A, approved for service use.

(E76200)CTG, MORTAR, 81MM RP SMOKE M819 SERIES W/MTSQ FUZE
The M819 Cartridge is a fin stabilized thin wall steel body tube containing 28 palletized red phosphorous (RP) wedges; it uses the highly reliable M772 Mechanical Time Super Quick (MTSQ) fuze. After a set time delay, the RP wedges are ejected and dispersed on the target to quickly produce an obscuring smoke screen. A full screen can be developed with 3 rounds as opposed to 15 rounds with the M375 series WP cartridge that is used to create smoke screens to cover movement of troops and/or disrupt visibility of enemy forces.
This cartridge was modified to include Gas Absorbent Modules (GAMS) that absorb the phosphine gas emitted by the RP to keep the round stable. The M819 (Range 300 meter minimum and 4,900 maximum) is range-matched to the 81mm High Explosive (HE) and Illum cartridges.
This item is code A, approved for service use.

Justification:
FY 2016 Base Budget supports critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station, and the combined training centers. Test requirements support the development, fielding, safety, and quality assurance of Army munitions and equipment throughout their life-cycle.

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.

FY 2016 Base procurement dollars in the amount of $43.500 million supports production of 90,078 cartridges. FY16 OCO procurement dollars in the amount of $4.000 million supports production of 5,858 cartridges. Funds are required to replenish munitions expended in combat operations in theater.

E18403 - CTG, MORTAR, 81MM HE M821 SERIES W/MOFM
This is a training standard item used in training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals.
TYPE CLASSIFICATION DATE: June 1996
FY 2016 Base procurement dollars in the amount of $13.122 million supports production of 17,298 cartridges.
FY 2016 OCO procurement dollars in the amount of $4.000 million supports production of 5,858 cartridges. Funds are required to replenish munitions expended in combat operations in theater.

E18404 - CTG, MORTAR 81MM HE M889 SERIES W/PD FUZE

This is a training standard item used in training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals.
TYPE CLASSIFICATION DATE: July 2009
FY 2016 Base procurement dollars in the amount of $5.734 million supports production of 8,610 cartridges.

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature 81MM Mortar, All Types (E76000)	
Program Elements for Code B Items:	Code:	Other Related Program Elements:	

E69600 - CTG, MORTAR, 81MM FRPC M879 SERIES W/PRACTICE FUZE
This is a training standard item used in training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals.
TYPE CLASSIFICATION DATE: August 1986
FY 2016 Base procurement dollars in the amount of $10.000 million supports production of 44,567 cartridges.

E76100 - CTG, MORTAR, 81MM VL ILLUM M853 SERIES W/MTSQ FUZE
This is a training standard item used in training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army procurement goals.
TYPE CLASSIFICATION DATE: December 1986
FY 2016 Base procurement dollars in the amount of $8.600 million supports production of 11,224 cartridges.

E76200 - CTG, MORTAR, 81MM RP SMOKE M819 SERIES W/MTSQ FUZE
This is a training standard item used in training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army procurement goals.
TYPE CLASSIFICATION DATE: December 1986
FY 2016 Base procurement dollars in the amount of $6.044 million supports production of 8,379 cartridges.

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: 81MM Mortar, All Types (E76000)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
Qty in thousands unless otherwise noted																
E18403 CTG, MORTAR, 81MM HE M821	ca61				9216000	14337	642.78	13122K	17298	758.58	4000000	5858	682.82	17122K	23156	758.58
E18404 CTG, MORTAR 81MM HE M889	ca63	8292000	16543	501.23	4449000	9437	471.43	5734000	8610	665.96				5734000	8610	665.96
E69600 CTG, MORTAR, 81MM FRPC M879	c875	4743000	23609	200.90	7091000	32020	221.45	10000K	44567	224.38				10000K	44567	224.38
E76100 CTG, MORTAR, 81MM VL ILLUM M853	c871				12937K	17870	723.93	8600000	11224	766.21				8600000	11224	766.21
E76200 CTG, MORTAR, 81MM RP SMOKE M819	c870	11621K	18230	637.47	8740000	12358	707.19	6044000	8379	721.32				6044000	8379	721.32
Total:		**24656**			**42433**			**43500**			**4000**			**47500**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG, MORTAR, 81MM HE M821 SERIES W/MOFM (E18403)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty			14337	17298	5858	23156	20027	20160	19002	19031		115713
Gross Cost	274.6		9.2	13.1	4.0	17.1	15.5	15.9	15.3	15.6		363.3
Less PY Adv Proc												
Net Proc P1	274.6		9.2	13.1	4.0	17.1	15.5	15.9	15.3	15.6		363.3
Plus CY Adv Proc												
Total Proc Cost	274.6		9.2	13.1	4.0	17.1	15.5	15.9	15.3	15.6		363.3
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0

Description:
The 81mm High Explosive Cartridges are Insensitive Munitions (IM) enhanced, HE rounds. The 81mm HE Cartridges consist of a fuze, a threaded plastic fuze adapter, a HF-1 steel projectile body loaded with approximately 3lbs. of IMX-104 explosive, a plastic obturating ring, a M24 Fin, the M220 Propelling Charges, and a M299 Ignition Cartridge. The M821A2 HE (Range 70 meter minimum to 5,859 meter maximum) also incorporates the highly reliable and countermeasure resistant M734A1 multi-option fuze. When the fuze is set in the proximity mode, it functions at a height over the target that is optimized for lethality.
IM features of this cartridge reduce the vulnerability to unplanned stimuli, e.g. fire/heat, shock and impact, while maintaining or exceeding the same level of effectiveness in combat.
These items are Code A, approved for service use.

Justification:
This is a training standard item used in training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals.

Comments:
TYPE CLASSIFICATION DATE: June 1996

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG, MORTAR, 81MM HE M821 SERIES W/MOFM (E18403)	Weapon System Type:	MDAP:	DODIC: CA61	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
LOAD, ASSEMBLE, PACK (LAP)					1162301	14337	81.07	1430199	17298	82.68	484339	5858	82.68	1914538	23156	82.68
FUZE MOFM, M734A1					4840623	14767	327.80	5956423	17817	334.33	2017347	6035	334.33	7973771	23852	334.33
SHELL BODY, 81MM HE					745586	14767	50.49	917346	17816	51.49	310691	6034	51.49	1228037	23850	51.49
IGN CTG M299					251334	14767	17.02	309286	17816	17.36	104750	6034	17.36	414036	23850	17.36
CHG PROP 81MM M220					749573	59068	12.69	922195	71267	12.94	312307	24134	12.94	1234502	95401	12.94
FIN MORTAR CTG M24 F/81MM					233466	14767	15.81	287194	17816	16.12	97268	6034	16.12	384462	23850	16.12
PBXW-14 BULK EXPLOSIVE					136000	1663	81.78	173076	2072	83.41	58637	703	83.41	231713	2775	83.41
EXPLOSIVE FILL IMX-104								1651357	72651	22.73	559249	24604	22.73	2210606	97255	22.73
*EXPLOSIVE FILL IMX-104					1087061	46595	23.33									
SUBTOTAL HARDWARE COST					**9205944**			**11647K**			**3944910**			**15592K**		
Support																
PRODUCTION ENGINEERING					922059			1311499			500			1311999		
ACCEPTANCE TESTING					125000			164500			54499			218999		
SUBTOTAL PRODUCTION SUPPORT					**1047059**			**1475999**			**54999**			**1530998**		
NON-RECURRING COSTS																
FIRST ARTICLE TEST					50000											
*GOVERNMENT FURNISHED MATERIAL					- 1087067											
SUBTOTAL NON-RECURRING COSTS					**-1037067**											
Total:					**9216**			**13121**			**3999**			**17124**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2015

Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature: CTG, MORTAR, 81MM HE M821 SERIES W/MOFM (E18403)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
LOAD, ASSEMBLE, PACK (LAP)										
FY 2015	TO BE SELECTED TBS01	C / IDIQ	ROCK ISLAND ARSENAL, IL	Mar 15	Mar 17	14337	81.07	Y		
FY 2016	TO BE SELECTED TBS01	C / IDIQ	ROCK ISLAND ARSENAL, IL	Mar 16	Mar 18	23156	82.68	Y		
FUZE MOFM, M734A1										
FY 2015	TO BE SELECTED TBS02	C / FFP	PICATINNY ARSENAL, NJ	Apr 15	Dec 16	14767	327.80	Y		
FY 2016	TO BE SELECTED TBS02	C / FFP	PICATINNY ARSENAL, NJ	Feb 16	Oct 17	23852	334.33	Y		
SHELL BODY, 81MM HE										
FY 2015	TO BE SELECTED TBS03	C / IDIQ	PICATINNY ARSENAL, NJ	Apr 15	Oct 16	14767	50.49	Y		
FY 2016	TO BE SELECTED TBS03	C / IDIQ	PICATINNY ARSENAL, NJ	Feb 16	Aug 17	23850	51.49	Y		
IGN CTG M299										
FY 2015	TO BE SELECTED TBS04	C / IDIQ	ROCK ISLAND ARSENAL, IL	Apr 15	Oct 16	14767	17.02	Y		
FY 2016	TO BE SELECTED TBS04	C / IDIQ	ROCK ISLAND ARSENAL, IL	Feb 16	Aug 17	23850	17.36	Y		
CHG PROP 81MM M220										
FY 2015	TO BE SELECTED TBS05	C / IDIQ	ROCK ISLAND ARSENAL, IL	Apr 15	Oct 16	59068	12.69	Y		
FY 2016	TO BE SELECTED TBS05	C / IDIQ	ROCK ISLAND ARSENAL, IL	Feb 16	Aug 17	95401	12.94	Y		
FIN MORTAR CTG M24 F/81MM										
FY 2015	TO BE SELECTED TBS06	C / IDIQ	PICATINNY ARSENAL, NJ	Apr 15	Oct 16	14767	15.81	Y		
FY 2016	TO BE SELECTED TBS06	C / IDIQ	PICATINNY ARSENAL, NJ	Feb 16	Aug 17	23850	16.12	Y		
PBXW-14 BULK EXPLOSIVE										
FY 2015	BAE SYSTEMS ORDNANCE SYSTEMS KINGSPORT, TN	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 15	Nov 16	1663	81.78	Y		
FY 2016	BAE SYSTEMS ORDNANCE SYSTEMS KINGSPORT, TN	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 16	Nov 17	2775	83.41	Y		
EXPLOSIVE FILL IMX-104										
FY 2016	BAE SYSTEMS ORDNANCE SYSTEMS KINGSPORT, TN	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 16	Nov 17	97255	22.73	Y		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Procurement of Ammunition, Army/ 1/ Ammunition		CTG, MORTAR, 81MM HE M821 SERIES W/MOFM (E18403)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
***EXPLOSIVE FILL IMX-104**										
FY 2015	GOVERNMENT FURNISHED MATERIAL STOCK ISSUE,	GFM	ROCK ISLAND ARSENAL, IL	Oct 14	Oct 14	46595	23.33			

REMARKS: Ignition Cartridges: IDIQ awarded (Jun 12) to multiple contractors. Requirements will be competed among the following contractors: Pocal Industries, Scranton, PA; DZI Lonestar LLC., Texarkana, TX and American Ordnance, Middletown, IA. HE LAP: IDIQ awarded (Aug 11) to multiple contractors. Requirements will be competed among the following contractors: Day and Zimmerman, Camden, AR; Day and Zimmerman, Parsons, KS; General Dynamics, LeGardeur, Canada; American Ordnance, Middletown, IA. HE Shell Bodies: IDIQ awarded (Aug 11) to multiple contractors. Requirements will be competed among the following contractors: Medico Industries, Wilkes Barre, PA; Modern Industries, Erie, PA; T&A Screw Products, Terryville, CT. Propellant Charges: IDIQ awarded (Dec 12) to multiple contractors. Requirements will be competed among the following contractors: General Dynamics, Marion, IL; Day and Zimmerman, Camden, AR and American Ordnance, Middletown, IA. Fins: IDIQ awarded (Sep 11) to multiple contractors. Requirements will be competed among the following contractors: Flexible Concepts Inc. Elkhart, IN and Gayston Corp., Springboro, OH.

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, MORTAR, 81MM HE M821 SERIES W/MOFM (E18403)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15														Fiscal Year 16										Later
									Calendar Year 15														Calendar Year 16							
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
2	FY 15	A	14337	0	14337						A																			14337
2	FY 16	A	23156	0	23156																		A							23156
1	FY 13	MC	124668	117522	7146														7146											0
Total					44639														7146											37493
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	CANADIAN COMMERCIAL CORP, OTTAWA, CANADA	12000	12000	36000	
2	TO BE SELECTED, TBS01	6000	12000	30000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	6	24	30
2	Initial	6	6	24	30
	Reorder	6	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, MORTAR, 81MM HE M821 SERIES W/MOFM (E18403)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
2	FY 15	A	14337	0	14337						14337																			0
2	FY 16	A	23156	0	23156																		12000	11156						0
1	FY 13	MC	124668	124668																										0
Total					37493						14337												12000	11156						
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	CANADIAN COMMERCIAL CORP, OTTAWA, CANADA	12000	12000	36000	
2	TO BE SELECTED, TBS01	6000	12000	30000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	6	24	30
2	Initial	6	6	24	30
	Reorder	6	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG, MORTAR 81MM HE M889 SERIES W/PD FUZE (E18404)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty		16543	9437	8610		8610	10192					44782
Gross Cost	83.4	8.3	4.4	5.7		5.7	6.9					108.8
Less PY Adv Proc												
Net Proc P1	83.4	8.3	4.4	5.7		5.7	6.9					108.8
Plus CY Adv Proc												
Total Proc Cost	83.4	8.3	4.4	5.7		5.7	6.9					108.8
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												0.0

Description:
The CTG Mortar 81mm High Explosive (HE) M889A2 with Point Detonating (PD) fuze is designed for use with the M252 Mortar Weapon System used by the new Stryker Brigade Combat Teams as well as light infantry battalions including Airborne, Air Assault and Ranger. This round uses the new M783 dual safety, PD delay fuze. The tail assembly and propulsion system are common to all other 81mm HE and training rounds. This round is used primarily in training since it includes the less expensive PD Fuze than the M821A1 that uses the MOFM fuze, the preferred warfighting round. However, the M889A1 is highly lethal and can be used in combat. This item is Code A, approved for service use.

Justification:
This is a training standard item used in training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals.

Comments:
TYPE CLASSIFICATION DATE: July 2009

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG, MORTAR 81MM HE M889 SERIES W/PD FUZE (E18404)	Weapon System Type:	MDAP:	DODIC: CA63	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
LOAD, ASSEMBLE, PACK (LAP)		1174057	16543	70.97	765058	9437	81.07	711875	8610	82.68				711875	8610	82.68
FUZE POINT DETONATOR M783		2697103	17039	158.29	1521666	9720	156.55	2217000	8868	250.00				2217000	8868	250.00
SHELL BODY, 81MM HE		828607	17039	48.63	490763	9720	50.49	456613	8868	51.49				456613	8868	51.49
IGN CTG M299		244510	17039	14.35	165434	9720	17.02	153948	8868	17.36				153948	8868	17.36
CHG PROP 81MM M220		715649	68157	10.50	493387	38880	12.69	459021	35473	12.94				459021	35473	12.94
FIN MORTAR CTG M24 F/81MM		254733	17039	14.95	153673	9720	15.81	142952	8868	16.12				142952	8868	16.12
PBXW-14 BULK EXPLOSIVE		154115	1919	80.31	89549	1095	81.78	86163	1033	83.41				86163	1033	83.41
EXPLOSIVE FILL IMX-104		1177454	53765	21.90				822324	36162	22.74				822324	36162	22.74
*EXPLOSIVE FILL IMX-104					715531	30670	23.33									
SUBTOTAL HARDWARE COST		**7246226**			**4395061**			**5049896**						**5049896**		
Support																
PRODUCTION ENGINEERING		866850			489463			573687						573687		
ACCEPTANCE TESTING		127860			110000			110000						110000		
SUBTOTAL PRODUCTION SUPPORT		**994710**			**599463**			**683687**						**683687**		
NON-RECURRING COSTS																
FIRST ARTICLE TEST		50000			170000											
*GOVERNMENT FURNISHED MATERIAL					- 715537											
SUBTOTAL NON-RECURRING COSTS		**50000**			**-545537**											
Total:		**8292**			**4449**			**5734**						**5734**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2015

Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature: CTG, MORTAR 81MM HE M889 SERIES W/PD FUZE (E18404)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
LOAD, ASSEMBLE, PACK (LAP)										
FY 2014	GEN DYNAMICS ORD & TAC SYS - LE GARDEUR, CANADA	C / IDIQ	ROCK ISLAND ARSENAL, IL	Aug 14	Aug 16	16543	70.97	Y		
FY 2015	TO BE SELECTED TBS01	C / IDIQ	ROCK ISLAND ARSENAL, IL	Mar 15	Mar 17	9437	81.07	Y		
FY 2016	TO BE SELECTED TBS01	C / IDIQ	ROCK ISLAND ARSENAL, IL	Mar 16	Mar 18	8610	82.68	Y		
FUZE POINT DETONATOR M783										
FY 2014	L-3 FUZING & ORDANCE SYSTEMS CINCINNATI, OH	C / FFP	PICATINNY ARSENAL, NJ	Dec 13	Aug 15	17039	158.29	Y		
FY 2015	L-3 FUZING & ORDANCE SYSTEMS CINCINNATI, OH	C / FFP	PICATINNY ARSENAL, NJ	Feb 15	Oct 16	9720	156.55	Y		
FY 2016	TO BE SELECTED TBS02	C / FFP	PICATINNY ARSENAL, NJ	Feb 16	Oct 17	8868	250.00	Y		
SHELL BODY, 81MM HE										
FY 2014	MEDICO INDUSTRIES INC. WILKES BARRE, PA	C / IDIQ	PICATINNY ARSENAL, NJ	Feb 14	Aug 15	17039	48.63	Y		
FY 2015	TO BE SELECTED TBS03	C / IDIQ	PICATINNY ARSENAL, NJ	Apr 15	Oct 16	9720	50.49	Y		
FY 2016	TO BE SELECTED TBS03	C / IDIQ	PICATINNY ARSENAL, NJ	Feb 16	Aug 17	8868	51.49	Y		
IGN CTG M299										
FY 2014	NAMMO POCAL INC. SCRANTON, PA	C / FFP	PICATINNY ARSENAL, NJ	Mar 14	Sep 15	17039	14.35	Y		
FY 2015	TO BE SELECTED TBS04	C / IDIQ	ROCK ISLAND ARSENAL, IL	Apr 15	Oct 16	9720	17.02	Y		
FY 2016	TO BE SELECTED TBS04	C / IDIQ	ROCK ISLAND ARSENAL, IL	Feb 16	Aug 17	8868	17.36	Y		
CHG PROP 81MM M220										
FY 2014	GENERAL DYNAMICS ORD & TAC MARION, IL	C / IDIQ	PICATINNY ARSENAL, NJ	May 14	Nov 15	68157	10.50	Y		
FY 2015	TO BE SELECTED TBS05	C / IDIQ	ROCK ISLAND ARSENAL, IL	Apr 15	Oct 16	38880	12.69	Y		
FY 2016	TO BE SELECTED TBS05	C / IDIQ	ROCK ISLAND ARSENAL, IL	Feb 16	Aug 17	35473	12.94	Y		
FIN MORTAR CTG M24 F/81MM										
FY 2014	GAYSTON CORPORATION SPRINGBORO, OH	C / IDIQ	ROCK ISLAND ARSENAL, IL	Apr 14	Oct 15	17039	14.95	Y		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:
Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature:
CTG, MORTAR 81MM HE M889 SERIES W/PD FUZE (E18404)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
FY 2015	TO BE SELECTED TBS06	C / IDIQ	PICATINNY ARSENAL, NJ	Feb 15	Aug 16	9720	15.81	Y		
FY 2016	TO BE SELECTED TBS06	C / IDIQ	PICATINNY ARSENAL, NJ	Feb 16	Aug 17	8868	16.12	Y		
PBXW-14 BULK EXPLOSIVE										
FY 2014	BAE SYSTEMS ORDNANCE SYSTEMS KINGSPORT, TN	C / FFP	ROCK ISLAND ARSENAL, IL	Aug 14	Apr 15	1919	80.31	Y		
FY 2015	BAE SYSTEMS ORDNANCE SYSTEMS KINGSPORT, TN	C / FFP	ROCK ISLAND ARSENAL, IL	Apr 15	Dec 16	1095	81.78	Y		
FY 2016	BAE SYSTEMS ORDNANCE SYSTEMS KINGSPORT, TN	C / FFP	ROCK ISLAND ARSENAL, IL	Feb 16	Oct 17	1033	83.41	Y		
EXPLOSIVE FILL IMX-104										
FY 2014	BAE SYSTEMS ORDNANCE SYSTEMS KINGSPORT, TN	C / FFP	ROCK ISLAND ARSENAL, IL	Aug 14	Apr 15	53765	21.90	Y		
FY 2016	BAE SYSTEMS ORDNANCE SYSTEMS KINGSPORT, TN	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 16	Nov 17	36162	22.74	Y		
***EXPLOSIVE FILL IMX-104**										
FY 2015	GOVERNMENT FURNISHED MATERIAL STOCK ISSUE,	GFM	ROCK ISLAND ARSENAL, IL	Oct 14	Oct 14	30670	23.33			

REMARKS: Ignition Cartridges: IDIQ awarded (Jun 12) to multiple contractors. Requirements will be competed among the following contractors: Pocal Industries, Scranton, PA; American Ordnance, Middletown, IA; and DZI Lonestar LLC., Texarkana, TX. HE LAP: IDIQ awarded (Aug 11) to multiple contractors. Requirements will be competed among the following contractors: Day and Zimmerman, Camden, AR; Day and Zimmerman, Parsons, KS; General Dynamics, LeGardeur, Canada; American Ordnance, Middletown, IA. HE Shell Bodes: IDIQ awarded (Aug 11) to multiple contractors. Requirements will be competed among the following contractors: Medico Industries, Wilkes Barre, PA; Modern Industries, Erie, PA; T&A Screw Products, Terryville, CT. M220 Propellant Charges: IDIQ awarded (Dec 12) to multiple contractors. Requirements will be competed among the following contractors: Day and Zimmerman, Camden, AR; American Ordnance, Middletown, IA; and General Dynamics, Marion IL. Fins: IDIQ awarded (Jul 12) to multiple contractors. Requirements will be competed among the following contractors: Gayston Corp., Springboro, OH and T&A Screw Products, Terryville, CT.

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, MORTAR 81MM HE M889 SERIES W/PD FUZE (E18404)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 14	A	16543	0	16543																							10000	6543	0
2	FY 15	A	9437	0	9437						A																			9437
2	FY 16	A	8610	0	8610																		A							8610
Total					34590																							10000	6543	18047
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	GEN DYNAMICS ORD & TAC SYS -, LE GARDEUR, CANADA	6000	12000	30000	
2	TO BE SELECTED, TBS01	6000	12000	30000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	6	24	30
2	Initial	6	6	24	30
	Reorder	6	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, MORTAR 81MM HE M889 SERIES W/PD FUZE (E18404)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 14	A	16543	16543																										0
2	FY 15	A	9437	0	9437						9437																			0
2	FY 16	A	8610	0	8610																		8610							0
Total					18047						9437												8610							
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	GEN DYNAMICS ORD & TAC SYS -, LE GARDEUR, CANADA	6000	12000	30000	
2	TO BE SELECTED, TBS01	6000	12000	30000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	6	24	30
2	Initial	6	6	24	30
	Reorder	6	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG, MORTAR, 81MM FRPC M879 SERIES W/PRACTICE FUZE (E69600)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty		23609	32020	44567		44567	57006	64279	67348	70273		359102
Gross Cost	114.7	4.7	7.1	10.0		10.0	13.0	15.0	16.0	17.0		197.5
Less PY Adv Proc												
Net Proc P1	114.7	4.7	7.1	10.0		10.0	13.0	15.0	16.0	17.0		197.5
Plus CY Adv Proc												
Total Proc Cost	114.7	4.7	7.1	10.0		10.0	13.0	15.0	16.0	17.0		197.5
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												0.0

Description:
The M879 is a low-cost, full range, practice round that will replace a percentage of the standard HE rounds used in 81mm mortar training. The M879 FRPC (Range 70 meter minimum to 5,800 meter maximum) has been designed to provide the user with realistic training at a fraction of the cost. It is identical in shape, size and weight to the M889A2/M821A2 HE cartridges. The flash, bang and smoke signature provided by the M751 fuze is channeled to exhaust holes in the rear of the cartridge through the use of a center vent tube.
This item is Code A, approved for service use.

Justification:
This is a training standard item used in training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals.

Comments:
TYPE CLASSIFICATION DATE: August 1986

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG, MORTAR, 81MM FRPC M879 SERIES W/PRACTICE FUZE (E69600)	Weapon System Type:	MDAP:	DODIC: C875	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
LOAD, ASSEMBLE, PACK (LAP)		893128	23609	37.83	1174494	32020	36.68	1781789	44567	39.98				1781789	44567	39.98
FUZE PRACTICE, M751		452296	24317	18.60	784618	32981	23.79	1113631	45904	24.26				1113631	45904	24.26
SHELL BODY, 81MM FRPC		943256	24317	38.79	1352881	32981	41.02	1920164	45904	41.83				1920164	45904	41.83
IGN CTG M299		348949	24317	14.35	561337	32981	17.02	796893	45904	17.36				796893	45904	17.36
CHG PROP 81MM M220		1021325	97269	10.50	1674090	131922	12.69	2375991	183616	12.94				2375991	183616	12.94
FIN MORTAR CTG M24 F/81MM		363539	24317	14.95	521430	32981	15.81	739972	45904	16.12				739972	45904	16.12
SUBTOTAL HARDWARE COST		**4022494**			**6068849**			**8728441**						**8728441**		
Support																
PRODUCTION ENGINEERING		544010			780185			1000082						1000082		
QUALITY ASSURANCE		7430														
ACCEPTANCE TESTING		133000			193000			271000						271000		
SUBTOTAL PRODUCTION SUPPORT		**684440**			**973185**			**1271082**						**1271082**		
NON-RECURRING COSTS																
FIRST ARTICLE TEST		37042			50000											
SUBTOTAL NON-RECURRING COSTS		**37042**			**50000**											
Total:		**4743**			**7091**			**10000**						**10000**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2015

Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature: CTG, MORTAR, 81MM FRPC M879 SERIES W/PRACTICE FUZE (E69600)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
LOAD, ASSEMBLE, PACK (LAP)										
FY 2014	DAY & ZIMMERMANN LONE STAR CAMDEN, AR	C / IDIQ	ROCK ISLAND ARSENAL, IL	Jun 14	Jun 16	23609	37.83	Y		
FY 2015	TO BE SELECTED TBS01	C / IDIQ	ROCK ISLAND ARSENAL, IL	Mar 15	Mar 17	32020	36.68	Y		
FY 2016	TO BE SELECTED TBS01	C / IDIQ	ROCK ISLAND ARSENAL, IL	Mar 16	Mar 18	44567	39.98	Y		
FUZE PRACTICE, M751										
FY 2014	NAMMO POCAL INC. SCRANTON, PA	C / FFP	PICATINNY ARSENAL, NJ	Mar 14	Sep 15	24317	18.60	Y		
FY 2015	NAMMO POCAL INC. SCRANTON, PA	C / FFP	PICATINNY ARSENAL, NJ	Mar 15	Sep 16	32981	23.79	Y		
FY 2016	NAMMO POCAL INC. SCRANTON, PA	C / FFP	PICATINNY ARSENAL, NJ	Mar 16	Sep 17	45904	24.26	Y		
SHELL BODY, 81MM FRPC										
FY 2014	MEDICO INDUSTRIES INC. WILKES BARRE, PA	C / IDIQ	PICATINNY ARSENAL, NJ	Jun 14	Dec 15	24317	38.79	Y		
FY 2015	TO BE SELECTED TBS02	C / IDIQ	PICATINNY ARSENAL, NJ	Feb 15	Aug 16	32981	41.02	Y		
FY 2016	TO BE SELECTED TBS02	C / IDIQ	PICATINNY ARSENAL, NJ	Feb 16	Aug 17	45904	41.83	Y		
IGN CTG M299										
FY 2014	NAMMO POCAL INC. SCRANTON, PA	C / FFP	PICATINNY ARSENAL, NJ	Mar 14	Sep 15	24317	14.35	Y		
FY 2015	NAMMO POCAL INC. SCRANTON, PA	C / IDIQ	ROCK ISLAND ARSENAL, IL	Feb 15	Aug 16	32981	17.02	Y		
FY 2016	TO BE SELECTED TBS03	C / IDIQ	ROCK ISLAND ARSENAL, IL	Feb 16	Aug 17	45904	17.36	Y		
CHG PROP 81MM M220										
FY 2014	GENERAL DYNAMICS ORD & TAC MARION, IL	C / IDIQ	PICATINNY ARSENAL, NJ	May 14	Nov 15	97269	10.50	Y		
FY 2015	TO BE SELECTED TBS04	C / IDIQ	ROCK ISLAND ARSENAL, IL	Feb 15	Aug 16	131922	12.69	Y		
FY 2016	TO BE SELECTED TBS04	C / IDIQ	ROCK ISLAND ARSENAL, IL	Feb 16	Aug 17	183616	12.94	Y		
FIN MORTAR CTG M24 F/81MM										
FY 2014	GAYSTON CORPORATION SPRINGBORO, OH	C / IDIQ	ROCK ISLAND ARSENAL, IL	Apr 14	Oct 15	24317	14.95	Y		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Procurement of Ammunition, Army/ 1/ Ammunition		CTG, MORTAR, 81MM FRPC M879 SERIES W/PRACTICE FUZE (E69600)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
FY 2015	TO BE SELECTED TBS05	C / IDIQ	PICATINNY ARSENAL, NJ	Feb 15	Aug 16	32981	15.81	Y		
FY 2016	TO BE SELECTED TBS05	C / IDIQ	PICATINNY ARSENAL, NJ	Feb 16	Aug 17	45904	16.12	Y		

REMARKS: FRPC LAP: IDIQ awarded (Feb 11) to multiple contractors. Requirements will be competed among the following contractors: Day and Zimmerman, Camden, AR; Pocal Industries, Scranton, PA; Day and Zimmerman, Parsons, KS; Chemring Ordnance, Perry, FL. FRPC Shell Bodies: IDIQ awarded (Aug 11) to multiple contractors. Requirements will be competed among the following contractors: Medico Industries, Wilkes Barre, PA; Modern Industries, Erie, PA. Ignition Cartridges: IDIQ awarded (Jun 12) to multiple contractors. Requirements will be competed among the following contractors: Pocal Industries, Scranton, PA; DZI Lonestar LLC., Texarkana, TX and American Ordnance, Middletown, IA. M220 Propellant Charges: IDIQ awarded (Dec 12) to multiple contractors. Requirements will be competed among the following contractors: Day and Zimmerman, Camden, AR; American Ordnance, Middletown, IA; and General Dynamics, Marion, Il. Fins: IDIQ awarded (Jul 12) to multiple contractors. Requirements will be competed among the following contractors: Gayston Corp., Springboro, OH and T&A Screw Machine INC., Waterbury, CT.

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, MORTAR, 81MM FRPC M879 SERIES W/PRACTICE FUZE (E69600)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	48000	0	48000						12000	12000	12000																	0
1	FY 14	A	23609	0	23609																					12000	11609			0
2	FY 15	A	32020	0	32020						A																			32020
2	FY 16	A	44567	0	44567																		A							44567
Total					148196						12000	12000	12000													12000	11609			76587
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	DAY & ZIMMERMANN LONE STAR, CAMDEN, AR	10000	12000	24000	
2	TO BE SELECTED, TBS01	10000	12000	24000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	6	24	30
2	Initial	6	6	24	30
	Reorder	6	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, MORTAR, 81MM FRPC M879 SERIES W/PRACTICE FUZE (E69600)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	48000	48000																										0
1	FY 14	A	23609	23609																										0
2	FY 15	A	32020	0	32020						12000	12000	8020																	0
2	FY 16	A	44567	0	44567																		12000	12000	12000	8567				0
Total					76587						12000	12000	8020										12000	12000	12000	8567				
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	DAY & ZIMMERMANN LONE STAR, CAMDEN, AR	10000	12000	24000	
2	TO BE SELECTED, TBS01	10000	12000	24000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	6	24	30
2	Initial	6	6	24	30
	Reorder	6	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG, MORTAR, 81MM VL ILLUM M853 SERIES W/MTSQ FUZE (E76100)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty			17870	11224		11224				10986		40080
Gross Cost	81.1		12.9	8.6		8.6				9.1		111.7
Less PY Adv Proc												
Net Proc P1	81.1		12.9	8.6		8.6				9.1		111.7
Plus CY Adv Proc												
Total Proc Cost	81.1		12.9	8.6		8.6				9.1		111.7
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												0.0

Description:
The M853A1 cartridge is a fin stabilized, mortar cartridge that consists of a M772 Mechanical Time Super Quick (MTSQ) fuze, a thin wall aluminum body tube and aluminum tail cone that contains the payload (parachute and canister), and a fin assembly that contains the ignition cartridge and propelling charges. The payload is base ejected and upon ignition produces visible light illumination. This visible light illumination allows for monitoring of enemy activities and adjustment of fire at greater observation distances during night operations. It also provides a means for day/night signaling. It is particularly useful in combined operations with allies who may not have night vision devices (NVDs). This round illuminates to the full range of the HE round, which allows adjustment of fire at any distance out to the maximum range. The M853A1 (Range 300 meter minimum and 5,050 maximum) is range-matched to the 81mm High Explosive (HE) and smoke cartridges.
This item is Code A, approved for service use.

Justification:
This is a training standard item used in training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army procurement goals.

Comments:
TYPE CLASSIFICATION DATE: December 1986

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG, MORTAR, 81MM VL ILLUM M853 SERIES W/MTSQ FUZE (E76100)	Weapon System Type:	MDAP:	DODIC: C871	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
LOAD, ASSEMBLE, PACK (LAP)					1803083	17870	100.90	1155062	11224	102.91				1155062	11224	102.91
FUZE MTSQ, M772					3636473	18406	197.57	2329340	11560	201.50				2329340	11560	201.50
BODY TUBE, 81MM ILLUM					498619	18406	27.09	319287	11560	27.62				319287	11560	27.62
TAIL CONE, 81MM ILLUM					413215	18406	22.45	264608	11560	22.89				264608	11560	22.89
IGN CTG M752					362414	18406	19.69	232125	11560	20.08				232125	11560	20.08
CHG PROP 81MM M219					934289	73624	12.69	598371	46242	12.94				598371	46242	12.94
FIN MORTAR CTG M28 F/81MM M819 RP					352107	18406	19.13	225651	11560	19.52				225651	11560	19.52
ILLUM CANDLE VL F/81MM M853A1					2827346	18406	153.61	1809371	11560	156.52				1809371	11560	156.52
PARACHUTE, 81MM					572427	18406	31.10	366568	11560	31.71				366568	11560	31.71
FIBER CONTAINER PA 162, 81MM					105650	18406	5.74	67626	11560	5.85				67626	11560	5.85
METAL CONTAINER PA 157, 81MM					320444	6255	51.23	205238	3928	52.25				205238	3928	52.25
SUBTOTAL HARDWARE COST					**11826K**			**7573248**						**7573248**		
Support																
PRODUCTION ENGINEERING					908000			862000						862000		
ACCEPTANCE TESTING					205000			165000						165000		
SUBTOTAL PRODUCTION SUPPORT					**1113000**			**1027000**						**1027000**		
Total:					**12937**			**8600**						**8600**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2015

Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature: CTG, MORTAR, 81MM VL ILLUM M853 SERIES W/MTSQ FUZE (E76100)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
LOAD, ASSEMBLE, PACK (LAP)										
FY 2015	PINE BLUFF ARSENAL PINE BLUFF, AR	PO	ROCK ISLAND ARSENAL, IL	Feb 15	Feb 17	17870	100.90	Y		
FY 2016	PINE BLUFF ARSENAL PINE BLUFF, AR	PO	ROCK ISLAND ARSENAL, IL	Jan 16	Jan 18	11224	102.91	Y		
FUZE MTSQ, M772										
FY 2015	JUNGHANS MICROTEC GMBH DUNNINGEN, GERMANY	PO	ROCK ISLAND ARSENAL, IL	Apr 15	Dec 16	18406	197.57	Y		
FY 2016	JUNGHANS MICROTEC GMBH DUNNINGEN, GERMANY	PO	ROCK ISLAND ARSENAL, IL	Apr 16	Dec 17	11560	201.50	Y		
BODY TUBE, 81MM ILLUM										
FY 2015	TO BE SELECTED TBS01	C / FFP	PICATINNY ARSENAL, NJ	Feb 15	Aug 16	18406	27.09	Y		
FY 2016	TO BE SELECTED TBS01	C / FFP	PICATINNY ARSENAL, NJ	Feb 16	Aug 17	11560	27.62	Y		
TAIL CONE, 81MM ILLUM										
FY 2015	TO BE SELECTED TBS02	C / FFP	PICATINNY ARSENAL, NJ	Feb 15	Aug 16	18406	22.45	Y		
FY 2016	TO BE SELECTED TBS02	C / FFP	PICATINNY ARSENAL, NJ	Feb 16	Aug 17	11560	22.89	Y		
IGN CTG M752										
FY 2015	TO BE SELECTED TBS03	C / IDIQ	ROCK ISLAND ARSENAL, IL	Apr 15	Oct 16	18406	19.69	Y		
FY 2016	TO BE SELECTED TBS03	C / IDIQ	ROCK ISLAND ARSENAL, IL	Apr 16	Oct 17	11560	20.08	Y		
CHG PROP 81MM M219										
FY 2015	TO BE SELECTED TBS04	C / IDIQ	ROCK ISLAND ARSENAL, IL	Apr 15	Oct 16	73624	12.69	Y		
FY 2016	TO BE SELECTED TBS04	C / IDIQ	ROCK ISLAND ARSENAL, IL	Apr 16	Oct 17	46242	12.94	Y		
FIN MORTAR CTG M28 F/81MM M819 RP										
FY 2015	TO BE SELECTED TBS05	C / FFP	ROCK ISLAND ARSENAL, IL	Apr 15	Oct 16	18406	19.13	Y		
FY 2016	TO BE SELECTED TBS05	C / FFP	ROCK ISLAND ARSENAL, IL	Apr 16	Oct 17	11560	19.52	Y		
ILLUM CANDLE VL F/81MM M853A1										
FY 2015	CRANE ARMY AMMO ACTIVITY CRANE, IN	PO	ROCK ISLAND ARSENAL, IL	Feb 15	Oct 16	18406	153.61	Y		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Procurement of Ammunition, Army/ 1/ Ammunition		CTG, MORTAR, 81MM VL ILLUM M853 SERIES W/MTSQ FUZE (E76100)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
FY 2016	CRANE ARMY AMMO ACTIVITY CRANE, IN	PO	ROCK ISLAND ARSENAL, IL	Apr 16	Dec 17	11560	156.52	Y		
PARACHUTE, 81MM										
FY 2015	TO BE SELECTED TBS06	C / FFP	ROCK ISLAND ARSENAL, IL	Feb 15	Aug 16	18406	31.10	Y		
FY 2016	TO BE SELECTED TBS06	C / FFP	ROCK ISLAND ARSENAL, IL	Apr 16	Oct 17	11560	31.71	Y		
FIBER CONTAINER PA 162, 81MM										
FY 2015	UNITED AMMUNITION CONTAINER WYNNEWOOD, PA	C / FFP	PICATINNY ARSENAL, NJ	Apr 15	Oct 16	18406	5.74	Y		
FY 2016	UNITED AMMUNITION CONTAINER WYNNEWOOD, PA	C / FFP	PICATINNY ARSENAL, NJ	Apr 16	Oct 17	11560	5.85	Y		
METAL CONTAINER PA 157, 81MM										
FY 2015	BWAY CORPORATION ATLANTA, GA	C / IDIQ	PICATINNY ARSENAL, NJ	Apr 15	Oct 16	6255	51.23	Y		
FY 2016	BWAY CORPORATION ATLANTA, GA	C / IDIQ	PICATINNY ARSENAL, NJ	Apr 16	Oct 17	3928	52.25	Y		

REMARKS: 81MM Illum Body Tubes and Tail Cones: IDIQ awarded (Aug 11) to multiple contractors. Requirements will be competed among the following contractors: Medico, Wilkes Barre, PA and Lewis Engineering, Marshall, TX. Ignition Cartridges: IDIQ awarded (Jun 12) to multiple contractors. Requirements will be competed among the following contractors: Pocal Industries, Scranton, PA; DZI Lonestar, LLC., Texarka, TX and American Ordnance, Middletown, IA. M28 Fin: IDIQ awarded (Sept 11) to multiple contractors. Requirements will be competed among the following contractors: Gayston Corporation, Springboro, OH and Flexible Concepts, Elkhart, IN. M219 Propellant Charges: IDIQ awarded (Dec 12) to multiple contractors. Requirements will be competed among the following contractors: Day and Zimmerman, Camden, AR; American Ordnance, Middletown, IA and General Dynamics, Marion, Il. 81MM Parachutes: IDIQ awarded (Aug 10) to multiple contractors. Requirements will be competed among the following contractors: North American Aerodynamics INC., Roxboro, NC and Yoland Corp. Jamaica, NY.
81MM Illum Body Tubes and Tail Cones: IDIQ awarded (Aug 11) to multiple contractors. Requirements will be competed among the following contractors: Medico, Wilkes Barre, PA and Lewis Engineering, Marshall, TX Ignition Cartridges: IDIQ awarded (Jun 12) to multiple contractors. Requirements will be competed among the following contractors: Pocal Industries, Scranton, PA and American Ordnance, Middletown, IA.

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, MORTAR, 81MM VL ILLUM M853 SERIES W/MTSQ FUZE (E76100)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	26838	0	26838												11781													15057
1	FY 15	A	17870	0	17870					A																				17870
1	FY 16	A	11224	0	11224																A									11224
Total					55932												11781													44151
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	PINE BLUFF ARSENAL, PINE BLUFF, AR	12000	16000	28800	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	4	24	28
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS
PINE BLUFF PRODUCTION LINE SHARED WITH OTHER 60 & 81MM SMOKE & ILLUM ITEMS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, MORTAR, 81MM VL ILLUM M853 SERIES W/MTSQ FUZE (E76100)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	26838	11781	15057				2999	2999																				0
1	FY 15	A	17870	0	17870						13870																			0
1	FY 16	A	11224	0	11224																11224									0
Total					44151				2999	2999	13870										11224									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	PINE BLUFF ARSENAL, PINE BLUFF, AR	12000	16000	28800	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	4	24	28
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS
PINE BLUFF PRODUCTION LINE SHARED WITH OTHER 60 & 81MM SMOKE & ILLUM ITEMS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG, MORTAR, 81MM RP SMOKE M819 SERIES W/MTSQ FUZE (E76200)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty		18230	12358	8379		8379	8465	8587	8588	8592		73199
Gross Cost	58.1	11.6	8.7	6.0		6.0	6.2	6.4	6.6	6.7		110.5
Less PY Adv Proc												
Net Proc P1	58.1	11.6	8.7	6.0		6.0	6.2	6.4	6.6	6.7		110.5
Plus CY Adv Proc												
Total Proc Cost	58.1	11.6	8.7	6.0		6.0	6.2	6.4	6.6	6.7		110.5
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												0.0

Description:
The M819 Cartridge is a fin stabilized thin wall steel body tube containing 28 palletized red phosphorous (RP) wedges; it uses the highly reliable M772 Mechanical Time Super Quick (MTSQ) fuze. After a set time delay, the RP wedges are ejected and dispersed on the target to quickly produce an obscuring smoke screen. A full screen can be developed with 3 rounds as opposed to 15 rounds with the M375 series WP cartridge that is used to create smoke screens to cover movement of troops and/or disrupt visibility of enemy forces
This cartridge was modified to include Gas Absorbent Modules (GAMS) that absorb the phosphine gas emitted by the RP to keep the round stable. The M819 (Range 300 meter minimum and 4,900 maximum) is range-matched to the 81mm High Explosive (HE) and Illum cartridges.
This item is code A, approved for service use.

Justification:
This is a training standard item used in training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army procurement goals.

Comments:
TYPE CLASSIFICATION DATE: December 1986

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG, MORTAR, 81MM RP SMOKE M819 SERIES W/MTSQ FUZE (E76200)	Weapon System Type:	MDAP:	DODIC: C870	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
LOAD, ASSEMBLE, PACK (LAP)		2705879	18230	148.43	2202319	12358	178.21	1522967	8379	181.76				1522967	8379	181.76
BODY TUBE, 81MM RP SMK		459098	18777	24.45	484466	12729	38.06	334930	8630	38.81				334930	8630	38.81
FUZE MTSQ, M772		3639921	18777	193.85	2514869	12729	197.57	1738945	8630	201.50				1738945	8630	201.50
IGN CTG M752		337047	18777	17.95	250634	12729	19.69	173290	8630	20.08				173290	8630	20.08
PROPELLANT CHARGE, M218		788634	75108	10.50	646111	50915	12.69	446702	34521	12.94				446702	34521	12.94
FIN MORTAR CTG M28 F/81MM M819 RP		305126	18777	16.25	243506	12729	19.13	168458	8630	19.52				168458	8630	19.52
TAIL CONE, 81MM SMOKE		414221	18777	22.06	373087	12729	29.31	257951	8630	29.89				257951	8630	29.89
GAMS		299552	37918	7.90	261677	25705	10.18	179159	17260	10.38				179159	17260	10.38
RED PHOSPHOROUS PELLET		674875	54690	12.34	465649	37074	12.56	322256	25137	12.82				322256	25137	12.82
FIBER CONTAINER PA 162, 81MM		101208	18777	5.39	73064	12729	5.74	50486	8630	5.85				50486	8630	5.85
METAL CONTAINER PA 157, 81MM		309159	6381	48.45	221570	4325	51.23	153197	2932	52.25				153197	2932	52.25
SUBTOTAL HARDWARE COST		**10035K**			**7736952**			**5348340**						**5348340**		
Support																
PRODUCTION ENGINEERING		1094953			861000			604979						604979		
ACCEPTANCE TESTING		200000			140818			90000						90000		
SUBTOTAL PRODUCTION SUPPORT		**1294953**			**1001818**			**694979**						**694979**		
FIRST ARTICLE TEST		40230														
RED PHOSPHOROUS FORMULATION TEST		251225														
SUBTOTAL NON-RECURRING COSTS		**291455**														
Total:		**11621**			**8740**			**6042**						**6042**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2015

Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature: CTG, MORTAR, 81MM RP SMOKE M819 SERIES W/MTSQ FUZE (E76200)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
LOAD, ASSEMBLE, PACK (LAP)										
FY 2014	PINE BLUFF ARSENAL PINE BLUFF, AR	PO	ROCK ISLAND ARSENAL, IL	Dec 13	Dec 15	18230	148.43	Y		
FY 2015	PINE BLUFF ARSENAL PINE BLUFF, AR	PO	ROCK ISLAND ARSENAL, IL	Feb 15	Feb 17	12358	178.21	Y		
FY 2016	PINE BLUFF ARSENAL PINE BLUFF, AR	PO	ROCK ISLAND ARSENAL, IL	Jan 16	Jan 18	8379	181.76	Y		
BODY TUBE, 81MM RP SMK										
FY 2014	LEWIS ENGINEERING COMPANY MARSHALL, TX	C / IDIQ	PICATINNY ARSENAL, NJ	Mar 14	Sep 15	18777	24.45	Y		
FY 2015	TO BE SELECTED TBS01	C / IDIQ	PICATINNY ARSENAL, NJ	Mar 15	Sep 16	12729	38.06	Y		
FY 2016	TO BE SELECTED TBS01	C / IDIQ	PICATINNY ARSENAL, NJ	Feb 16	Aug 17	8630	38.81	Y		
FUZE MTSQ, M772										
FY 2014	JUNGHANS MICROTEC GMBH DUNNINGEN, GERMANY	PO	ROCK ISLAND ARSENAL, IL	May 14	Nov 15	18777	193.85	Y		
FY 2015	JUNGHANS MICROTEC GMBH DUNNINGEN, GERMANY	PO	ROCK ISLAND ARSENAL, IL	Apr 15	Dec 16	12729	197.57	Y		
FY 2016	JUNGHANS MICROTEC GMBH DUNNINGEN, GERMANY	PO	ROCK ISLAND ARSENAL, IL	Feb 16	Oct 17	8630	201.50	Y		
IGN CTG M752										
FY 2014	NAMMO POCAL INC. SCRANTON, PA	C / IDIQ	ROCK ISLAND ARSENAL, IL	Jan 14	Jul 15	18777	17.95	Y		
FY 2015	TO BE SELECTED TBS02	C / IDIQ	ROCK ISLAND ARSENAL, IL	Apr 15	Oct 16	12729	19.69	Y		
FY 2016	TO BE SELECTED TBS02	C / IDIQ	ROCK ISLAND ARSENAL, IL	Feb 16	Aug 17	8630	20.08	Y		
PROPELLANT CHARGE, M218										
FY 2014	GENERAL DYNAMICS ORD & TAC MARION, IL	C / IDIQ	ROCK ISLAND ARSENAL, IL	May 15	Nov 15	75108	10.50	Y		
FY 2015	TO BE SELECTED TBS03	C / IDIQ	ROCK ISLAND ARSENAL, IL	Apr 15	Oct 16	50915	12.69	Y		
FY 2016	TO BE SELECTED TBS03	C / IDIQ	ROCK ISLAND ARSENAL, IL	Feb 16	Aug 17	34521	12.94	Y		
FIN MORTAR CTG M28 F/81MM M819 RP										
FY 2014	FLEXIBLE CONCEPTS INC. ELKHART, IN	C / FFP	ROCK ISLAND ARSENAL, IL	Jan 14	Jul 15	18777	16.25	Y		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2015

Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature: CTG, MORTAR, 81MM RP SMOKE M819 SERIES W/MTSQ FUZE (E76200)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
FY 2015	TO BE SELECTED TBS04	C / FFP	ROCK ISLAND ARSENAL, IL	Apr 15	Oct 16	12729	19.13	Y		
FY 2016	TO BE SELECTED TBS04	C / FFP	ROCK ISLAND ARSENAL, IL	Feb 16	Aug 17	8630	19.52	Y		
TAIL CONE, 81MM SMOKE										
FY 2014	LEWIS ENGINEERING COMPANY MARSHALL, TX	C / IDIQ	PICATINNY ARSENAL, NJ	Mar 14	Sep 15	18777	22.06	Y		
FY 2015	TO BE SELECTED TBS05	C / IDIQ	PICATINNY ARSENAL, NJ	Mar 15	Sep 16	12729	29.31	Y		
FY 2016	TO BE SELECTED TBS05	C / IDIQ	PICATINNY ARSENAL, NJ	Feb 16	Aug 17	8630	29.89	Y		
GAMS										
FY 2014	DESIGN WEST TECHNOLOGIES, TUSTIN, CA	C / FFP	PICATINNY ARSENAL, NJ	May 14	Nov 15	37918	7.90	Y		
FY 2015	DESIGN WEST TECHNOLOGIES, TUSTIN, CA	C / FFP	PICATINNY ARSENAL, NJ	Apr 15	Oct 16	25705	10.18	Y		
FY 2016	DESIGN WEST TECHNOLOGIES, TUSTIN, CA	C / FFP	PICATINNY ARSENAL, NJ	Jan 16	Jul 17	17260	10.38	Y		
RED PHOSPHOROUS PELLET										
FY 2014	CLARIANT CORPORATION CHARLOTTE, NC	C / FFP	ROCK ISLAND ARSENAL, IL	May 14	Nov 15	54690	12.34	Y		
FY 2015	CLARIANT CORPORATION CHARLOTTE, NC	C / FFP	ROCK ISLAND ARSENAL, IL	Apr 15	Oct 16	37074	12.56	Y		
FY 2016	CLARIANT CORPORATION CHARLOTTE, NC	C / FFP	ROCK ISLAND ARSENAL, IL	Feb 16	Aug 17	25137	12.82	Y		
FIBER CONTAINER PA 162, 81MM										
FY 2014	UNITED AMMUNITION CONTAINER WYNNEWOOD, PA	C / FFP	PICATINNY ARSENAL, NJ	Dec 13	May 15	18777	5.39	Y		
FY 2015	UNITED AMMUNITION CONTAINER WYNNEWOOD, PA	C / FFP	PICATINNY ARSENAL, NJ	Apr 15	Oct 16	12729	5.74	Y		
FY 2016	UNITED AMMUNITION CONTAINER WYNNEWOOD, PA	C / FFP	PICATINNY ARSENAL, NJ	Feb 16	Aug 17	8630	5.85	Y		
METAL CONTAINER PA 157, 81MM										
FY 2014	BWAY CORPORATION ATLANTA, GA	C / IDIQ	PICATINNY ARSENAL, NJ	Mar 14	Sep 15	6381	48.45	Y		
FY 2015	BWAY CORPORATION ATLANTA, GA	C / IDIQ	PICATINNY ARSENAL, NJ	Apr 15	Oct 16	4325	51.23	Y		
FY 2016	BWAY CORPORATION	C / IDIQ	PICATINNY	Feb 16	Aug 17	2932	52.25	Y		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Procurement of Ammunition, Army/ 1/ Ammunition		CTG, MORTAR, 81MM RP SMOKE M819 SERIES W/MTSQ FUZE (E76200)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
	ATLANTA, GA		ARSENAL, NJ							

REMARKS: Body Tubes and Tail Cones: IDIQ awarded (Aug 11) to multiple contractors. Requirements will be competed among the following contractors: Lewis Engineering Co., Marshall, TX; Medico Industries Inc., Wilkes Barre, PA and Woodlawn MFG. Inc., Marshall, TX. Ignition Cartridges: IDIQ awarded (Jun 12) to multiple contractors. Requirements will be competed among the following contractors: Pocal Industries, Scranton, PA; DZI Lonestar LLC., Texarkana, TX and American Ordnance, Middletown, IA. Propellant Charges: IDIQ awarded (Dec 12) to multiple contractors. Requirements will be competed among the following contractors: General Dynamics, Marion, IL; Day and Zimmerman, Camden, AR and American Ordnance, Middletown, IA. Fins: IDIQ awarded (Sep 11) to multiple contractors. Requirements will be competed among the following contractors: Flexible Concepts Inc. Elkhart, IN and Gayston Corp., Springboro, OH.

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, MORTAR, 81MM RP SMOKE M819 SERIES W/MTSQ FUZE (E76200)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	2646	0	2646																									2646
1	FY 14	A	18230	0	18230															18230										0
1	FY 15	A	12358	0	12358					A																				12358
1	FY 16	A	8379	0	8379																A									8379
1	FY 13	MC	74927	35102	39825			17898						6363																0
1	FY 15	MC	6152	0	6152					A																				6152
Total					87590			17898						6363						18230										29535
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+	MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	PINE BLUFF ARSENAL, PINE BLUFF, AR	16000	16000	28000		1	Initial	6	6	24	30
							Reorder	6	4	24	28
							Initial				
							Reorder				
							Initial				
							Reorder				
							Initial				
							Reorder				
							Initial				
							Reorder				

REMARKS
PINE BLUFF PRODUCTION LINE SHARED WITH OTHER 60 & 81MM SMOKE & ILLUM ITEMS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, MORTAR, 81MM RP SMOKE M819 SERIES W/MTSQ FUZE (E76200)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	2646	0	2646																			2646						0
1	FY 14	A	18230	18230																										0
1	FY 15	A	12358	0	12358																									0
1	FY 16	A	8379	0	8379																8379									0
1	FY 13	MC	74927	74927																										0
1	FY 15	MC	6152	0	6152																									0
Total					29535																8379			2646						
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	PINE BLUFF ARSENAL, PINE BLUFF, AR	16000	16000	28000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	4	24	28
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS
PINE BLUFF PRODUCTION LINE SHARED WITH OTHER 60 & 81MM SMOKE & ILLUM ITEMS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
120MM Mortar, All Types (E25500)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	1783.5	60.8	39.4	64.4	7.0	71.4	62.4	85.5	67.9	90.4		2261.2
Less PY Adv Proc												
Net Proc P1	1783.5	60.8	39.4	64.4	7.0	71.4	62.4	85.5	67.9	90.4		2261.2
Plus CY Adv Proc												
Total Proc Cost	1783.5	60.8	39.4	64.4	7.0	71.4	62.4	85.5	67.9	90.4		2261.2
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
This budget line item includes 120mm Mortars, All Types.
The 120mm Mortar Cartridges are designed for use with the M120, 120mm Towed Mortar System and the M121, Carrier Mortar System. As well as use with the Brigade Combat Team Mortar System.

(E25502)CTG, MORTAR, 120MM HE M933 SERIES W/PD FUZE
The M933A1 120mm High Explosive (HE) cartridge with the M783 Point Detonating/ Delay (PD/DLY) Fuze is used against personnel, bunker and light materiel targets. It consists of a Steel Shell Body with Composition B fill, and aluminum M31 Fin Assembly. The propulsion system utilizes the M1020 Ignition Cartridge and four horseshoe-shaped, water- resistant M234 Propelling Charges. The M933A1 HE (Range 200 meter minimum to 7,200 meter maximum) is used with the new M783 dual safety, point detonating/delay fuze. This round is used primarily in training because it is significantly less expensive than the M934A1, the preferred war fighting round. However, the M933A1 is lethal and can be used in combat.
This item is Code A, approved for service use.

(E25507)CTG, MORTAR, 120MM FRPC M931 SERIES W/PRACT FUZE
The M931 is a low-cost, full range, practice round that will replace a percentage of the standard HE rounds used in 120mm mortar training. The M931 FRPC (Range 200 meter minimum to 7,200 meter maximum) has been designed to provide the user with realistic training for 120mm Mortar crews at a fraction of the cost. It is identical in shape, size and weight to the M933A1/M934A1 HE cartridges. The M931 is equipped with M781 PD Practice Fuze. The M781 PD Practice Fuze produces a flash, bang, and smoke signature that provides audio/visual feedback to the mortar crew and forward observer.
This item is Code A, approved for service use.

(E91300)CTG, MORTAR, 120MM WP SMOKE M929 SERIES W/MOFM
The M929 White Phosphorous (WP) Smoke Cartridge is used to provide smoke, with some incendiary effect for various screening missions. The cartridge is filled with 5 lbs of WP. The M929 uses the highly reliable and countermeasure resistant M734A1 multi-option fuze when functions, detonates the burster, which disperses the felt pads which are soaked with WP over the target. The smoke obscuration is generated by a spontaneous reaction between the WP and oxygen. The M929 (Range 200 meter minimum and 7,200 maximum) is range-matched to the 120mm High Explosive (HE) and Illum cartridges
This item is Code A, approved for service use.

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature 120MM Mortar, All Types (E25500)	
Program Elements for Code B Items:	Code:	Other Related Program Elements:	

Justification:

FY 2016 Base Budget supports critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station, and the combined training centers. Test requirements support the development, fielding, safety, and quality assurance of Army munitions and equipment throughout their life-cycle.

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.

FY 2016 Base procurement dollars in the amount of $64.372 million supports production of 92,909 cartridges. FY 2016 OCO procurement dollars in the amount of $7.000 million supports production of 8,031 cartridges. Funds are required to replenish munitions expended in combat operations in theater.

E25502 - CTG, MORTAR, 120MM HE M933 SERIES W/PD FUZE
This is a training standard item used in training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army procurement goals.
TYPE CLASSIFICATION DATE: 2009
FY 2016 Base procurement dollars in the amount of $14.782 million supports production of 15,264 cartridges.
FY 2016 OCO procurement dollars in the amount of $7.000 million supports production of 8,031 cartridges. Funds are required to replenish munitions expended in combat operations in theater.

E25507 - CTG, MORTAR, 120MM FRPC M931 SERIES W/PRACT FUZE
This is a training unique item not used in combat. FY 2016 request supports annual training and builds a depot level in accordance with the Army procurement goals.
TYPE CLASSIFICATION DATE: 1996
FY 2016 Base procurement dollars in the amount of $31.000 million supports production of 64,416 cartridges.

E91300 - CTG, MORTAR, 120MM WP SMOKE M929 SERIES W/MOFM
This is a training standard item used in training and combat. The request supports annual training and builds a war reserve inventory in accordance with the Army procurement goals.
TYPE CLASSIFICATION DATE: 1996
FY 2016 Base procurement dollars in the amount of $18.590 million supports production of 13,229 cartridg

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: 120MM Mortar, All Types (E25500)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
Qty in thousands unless otherwise noted																
E25502 CTG, MORTAR, 120MM HE M933	ca44	29186K	42357	689.04	16713K	23962	697.46	14782K	15264	968.42	7000000	8031	871.62	21782K	23295	968.42
E25507 CTG, MORTAR, 120MM FRPC M931	ca09	19478K	43992	442.76	22652K	51343	441.19	31000K	64416	481.24				31000K	64416	481.24
E91300 CTG, MORTAR, 120MM WP SMOKE M929	ca03	12116K	9374	1292.47				18590K	13229	1405.24				18590K	13229	1405.24
Total:		**60780**			**39365**			**64372**			**7000**			**71372**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG, MORTAR, 120MM HE M933 SERIES W/PD FUZE (E25502)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty		42357	23962	15264	8031	23295	15596	15452	13239	13787		147688
Gross Cost	315.0	29.2	16.7	14.8	7.0	21.8	15.4	15.7	15.9	16.2		445.9
Less PY Adv Proc												
Net Proc P1	315.0	29.2	16.7	14.8	7.0	21.8	15.4	15.7	15.9	16.2		445.9
Plus CY Adv Proc												
Total Proc Cost	315.0	29.2	16.7	14.8	7.0	21.8	15.4	15.7	15.9	16.2		445.9
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												0.0

Description:
The M933A1 120mm High Explosive (HE) cartridge with the M783 Point Detonating/ Delay (PD/DLY) Fuze is used against personnel, bunker and light materiel targets. It consists of a Steel Shell Body with Composition B fill, and aluminum M31 Fin Assembly. The propulsion system utilizes the M1020 Ignition Cartridge and four horseshoe-shaped, water-resistant M234 Propelling Charges. The M933A1 HE (Range 200 meter minimum to 7,200 meter maximum) is used with the new M783 dual safety, point detonating/delay fuze. This round is used primarily in training because it is significantly less expensive than the M934A1, the preferred war fighting round. However, the M933A1 is lethal and can be used in combat.
This item is Code A, approved for service use.

Justification:
This is a training standard item used in training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army procurement goals.

Comments:
TYPE CLASSIFICATION DATE: 2009

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG, MORTAR, 120MM HE M933 SERIES W/PD FUZE (E25502)	Weapon System Type:	MDAP:	DODIC: CA44	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
LOAD, ASSEMBLE, PACK (LAP)		6128211	42357	144.68	3673854	23962	153.32	2386832	15264	156.37	1255807	8031	156.37	3642639	23295	156.37
FUZE POINT DETONATOR M783		6867920	43628	157.42	3863811	24681	156.55	3930250	15721	250.00	2068000	8272	250.00	5998250	23993	250.00
SHELL BODY, 120MM HE		4070056	43628	93.29	2513513	24681	101.84	1632940	15721	103.87	859213	8272	103.87	2492153	23993	103.87
IGNITION CARTRIDGE, M1020		905281	43628	20.75	581731	24681	23.57	377933	15721	24.04	198859	8272	24.04	576792	23993	24.04
PROPELLANT CHARGE, M234A1		2797411	174511	16.03	1673355	98723	16.95	1425648	62887	22.67	750105	33088	22.67	2175753	95975	22.67
FIN ASSEMBLY, M31		1688840	43628	38.71	974159	24681	39.47	632927	15721	40.26	333031	8272	40.26	965958	23993	40.26
FUZE ADAPTER, 120MM		424937	43628	9.74	296172	24681	12.00	357653	15721	22.75	188188	8272	22.75	545841	23993	22.75
COMP B TYPE I GRADE A		3445318	296499	11.62	1059964	90984	11.65	2460404	137376	17.91	1294517	72279	17.91	3754921	209655	17.91
SUBTOTAL HARDWARE COST		**26328K**			**14637K**			**13205K**			**6947720**			**20152K**		
Support																
PRODUCTION ENGINEERING		2522000			1838984			1478000						1478000		
ACCEPTANCE TESTING		337000			186500			99287			51713			151000		
SUBTOTAL PRODUCTION SUPPORT		**2859000**			**2025484**			**1577287**			**51713**			**1629000**		
NON-RECURRING COSTS																
FIRST ARTICLE TEST					50000											
SUBTOTAL NON-RECURRING COSTS					**50000**											
Total:		**29186**			**16713**			**14782**			**7000**			**21782**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2015

Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature: CTG, MORTAR, 120MM HE M933 SERIES W/PD FUZE (E25502)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
LOAD, ASSEMBLE, PACK (LAP)										
FY 2014	GEN DYNAMICS ORD & TAC SYS - LE GARDEUR, CANADA	C / FFP	PICATINNY ARSENAL, NJ	Jan 14	Mar 16	42357	144.68	Y		
FY 2015	AMERICAN ORDNANCE LLC (IAAP) MIDDLETOWN, IA	SS / FFP	PICATINNY ARSENAL, NJ	Aug 15	Aug 17	23962	153.32	Y		
FY 2016	AMERICAN ORDNANCE LLC (IAAP) MIDDLETOWN, IA	SS / FFP	PICATINNY ARSENAL, NJ	Mar 16	Mar 18	23295	156.37	Y		
FUZE POINT DETONATOR M783										
FY 2014	L-3 FUZING & ORDANCE SYSTEMS CINCINNATI, OH	C / FFP	PICATINNY ARSENAL, NJ	Mar 14	Nov 15	43628	157.42	Y		
FY 2015	L-3 FUZING & ORDANCE SYSTEMS CINCINNATI, OH	C / FFP	PICATINNY ARSENAL, NJ	Feb 15	Oct 16	24681	156.55	Y		
FY 2016	TO BE SELECTED TBS01	C / FFP	PICATINNY ARSENAL, NJ	Feb 16	Oct 17	23993	250.00	Y		
SHELL BODY, 120MM HE										
FY 2014	MEDICO INDUSTRIES INC. WILKES BARRE, PA	C / FFP	PICATINNY ARSENAL, NJ	Jan 14	Sep 15	43628	93.29	Y		
FY 2015	MEDICO INDUSTRIES INC. WILKES BARRE, PA	C / FFP	PICATINNY ARSENAL, NJ	Feb 15	Aug 16	24681	101.84	Y		
FY 2016	MEDICO INDUSTRIES INC. WILKES BARRE, PA	C / FFP	PICATINNY ARSENAL, NJ	Feb 16	Aug 17	23993	103.87	Y		
IGNITION CARTRIDGE, M1020										
FY 2014	NAMMO POCAL INC. SCRANTON, PA	C / IDIQ	PICATINNY ARSENAL, NJ	Jan 14	Sep 15	43628	20.75	Y		
FY 2015	NAMMO POCAL INC. SCRANTON, PA	C / IDIQ	PICATINNY ARSENAL, NJ	Apr 15	Oct 16	24681	23.57	Y		
FY 2016	NAMMO POCAL INC. SCRANTON, PA	C / IDIQ	PICATINNY ARSENAL, NJ	Feb 16	Aug 17	23993	24.04	Y		
PROPELLANT CHARGE, M234A1										
FY 2014	AMERICAN ORDNANCE LLC (IAAP) MIDDLETOWN, IA	C / IDIQ	ROCK ISLAND ARSENAL, IL	Jun 14	Dec 15	174511	16.03	Y		
FY 2015	TO BE SELECTED TBS02	C / IDIQ	ROCK ISLAND ARSENAL, IL	Apr 15	Oct 16	98723	16.95	Y		
FY 2016	TO BE SELECTED TBS02	C / IDIQ	ROCK ISLAND ARSENAL, IL	Feb 16	Aug 17	95975	22.67	Y		
FIN ASSEMBLY, M31										
FY 2014	MACHINING TECHNOLOGIES INC SALISBURY, MD	C / FFP	PICATINNY ARSENAL, NJ	Mar 14	Sep 15	43628	38.71	Y		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:
Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature:
CTG, MORTAR, 120MM HE M933 SERIES W/PD FUZE (E25502)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
FY 2015	MACHINING TECHNOLOGIES INC SALISBURY, MD	C / FFP	PICATINNY ARSENAL, NJ	Apr 15	Oct 16	24681	39.47	Y		
FY 2016	MACHINING TECHNOLOGIES INC SALISBURY, MD	C / FFP	PICATINNY ARSENAL, NJ	Mar 16	Sep 17	23993	40.26	Y		
FUZE ADAPTER, 120MM										
FY 2014	MANUFACTURING SUPPORT HEBRON, MD	C / FFP	PICATINNY ARSENAL, NJ	Feb 14	Aug 15	43628	9.74	Y		
FY 2015	TO BE SELECTED TBS03	C / FFP	PICATINNY ARSENAL, NJ	Apr 15	Oct 16	24681	12.00	Y		
FY 2016	TO BE SELECTED TBS03	C / FFP	PICATINNY ARSENAL, NJ	Feb 16	Aug 17	23993	22.75	Y		
COMP B TYPE I GRADE A										
FY 2014	BAE SYSTEMS ORDNANCE SYSTEMS KINGSPORT, TN	SS / FFP	ROCK ISLAND ARSENAL, IL	Dec 13	Dec 14	296499	11.62	Y		
FY 2015	BAE SYSTEMS ORDNANCE SYSTEMS KINGSPORT, TN	SS / FFP	ROCK ISLAND ARSENAL, IL	Mar 15	Mar 16	90984	11.65	Y		
FY 2016	BAE SYSTEMS ORDNANCE SYSTEMS KINGSPORT, TN	SS / FFP	ROCK ISLAND ARSENAL, IL	Mar 16	Mar 17	209655	17.91	Y		

REMARKS: M234A1 Propellant Chargres: IDIQ awarded (Dec 12) to multiple contractors. Requirements will be competed among the following contractors: Day and Zimmerman, Camden, AR; American Ordnance, Middletwon, IA; General Dynamics, Marion, IL.

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, MORTAR, 120MM HE M933 SERIES W/PD FUZE (E25502)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15													Fiscal Year 16												Later
									Calendar Year 15													Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
LOAD, ASSEMBLE, PACK (LAP)																															
1	FY 13	A	77857	47646	30211										10000	10000	10000	211													0
2	FY 14	A	42357	0	42357																		12000	12000	12000	6357					0
3	FY 15	A	23962	0	23962											A															23962
3	FY 16	A	23295	0	23295																		A								23295
Total					119825										10000	10000	10000	211					12000	12000	12000	6357					47257
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	CANADIAN COMMERCIAL CORP, OTTAWA, CANADA	12000	12000	36000	
2	GEN DYNAMICS ORD & TAC SYS -, LE GARDEUR, CANADA	6000	12000	30000	
3	AMERICAN ORDNANCE LLC (IAAP), MIDDLETOWN, IA	6000	12000	30000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	6	24	30
2	Initial	6	6	24	30
	Reorder	6	6	24	30
3	Initial	6	6	24	30
	Reorder	6	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, MORTAR, 120MM HE M933 SERIES W/PD FUZE (E25502)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	77857	77857																										0
2	FY 14	A	42357	42357																										0
3	FY 15	A	23962	0	23962											12000	11962													0
3	FY 16	A	23295	0	23295																		10000	8031	5264					0
Total					47257											12000	11962						10000	8031	5264					
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	CANADIAN COMMERCIAL CORP, OTTAWA, CANADA	12000	12000	36000	
2	GEN DYNAMICS ORD & TAC SYS -, LE GARDEUR, CANADA	6000	12000	30000	
3	AMERICAN ORDNANCE LLC (IAAP), MIDDLETOWN, IA	6000	12000	30000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	6	24	30
2	Initial	6	6	24	30
	Reorder	6	6	24	30
3	Initial	6	6	24	30
	Reorder	6	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG, MORTAR, 120MM FRPC M931 SERIES W/PRACT FUZE (E25507)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty		43992	51343	64416		64416	95900	105959	101984	103878		567472
Gross Cost	374.2	19.5	22.7	31.0		31.0	47.0	53.0	52.0	54.0		653.3
Less PY Adv Proc												
Net Proc P1	374.2	19.5	22.7	31.0		31.0	47.0	53.0	52.0	54.0		653.3
Plus CY Adv Proc												
Total Proc Cost	374.2	19.5	22.7	31.0		31.0	47.0	53.0	52.0	54.0		653.3
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												0.0

Description:
The M931 is a low-cost, full range, practice round that will replace a percentage of the standard HE rounds used in 120mm mortar training. The M931 FRPC (Range 200 meter minimum to 7,200 meter maximum) has been designed to provide the user with realistic training for 120mm Mortar crews at a fraction of the cost. It is identical in shape, size and weight to the M933A1/M934A1 HE cartridges. The M931 is equipped with M781 PD Practice Fuze. The M781 PD Practice Fuze produces a flash, bang, and smoke signature that provides audio/visual feedback to the mortar crew and forward observer.
This item is Code A, approved for service use.

Justification:
This is a training unique item not used in combat. FY 2016 request supports annual training and builds a depot level in accordance with the Army procurement goals.

Comments:
TYPE CLASSIFICATION DATE: 1996

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG, MORTAR, 120MM FRPC M931 SERIES W/PRACT FUZE (E25507)	Weapon System Type:	MDAP:	DODIC: CA09	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
LOAD, ASSEMBLE, PACK (LAP)		3997113	43992	90.86	6161160	51343	120.00	7883874	64416	122.39				7883874	64416	122.39
FUZE PRACTICE, M781		807913	45312	17.83	1004248	52883	18.99	1284497	66348	19.36				1284497	66348	19.36
SHELL BODY, 120MM FRPC		3976128	45312	87.75	5115901	52883	96.74	6546557	66348	98.67				6546557	66348	98.67
IGNITION CARTRIDGE, M1020		940224	45312	20.75	1246452	52883	23.57	1595006	66348	24.04				1595006	66348	24.04
PROPELLANT CHARGE, M234A1		2905389	181247	16.03	3585484	211533	16.95	6016459	265393	22.67				6016459	265393	22.67
FIN ASSEMBLY, M31		1749043	45312	38.60	2087292	52883	39.47	2671170	66348	40.26				2671170	66348	40.26
FUZE ADAPTER, 120MM		406902	45312	8.98	634596	52883	12.00	1509417	66348	22.75				1509417	66348	22.75
SUBTOTAL HARDWARE COST		**14783K**			**19835K**			**27507K**						**27507K**		
Support																
PRODUCTION ENGINEERING		4373303			2491808			3100111						3100111		
ACCEPTANCE TESTING		322026			325000			390000						390000		
SUBTOTAL PRODUCTION SUPPORT		**4695329**			**2816808**			**3490111**						**3490111**		
Total:		**19477**			**22651**			**30996**						**30996**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2015

Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature: CTG, MORTAR, 120MM FRPC M931 SERIES W/PRACT FUZE (E25507)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
LOAD, ASSEMBLE, PACK (LAP)										
FY 2014	AMERICAN ORDNANCE LLC (IAAP) MIDDLETOWN, IA	SS / FFP	PICATINNY ARSENAL, NJ	Jul 15	Jul 17	43992	90.86	Y		
FY 2015	AMERICAN ORDNANCE LLC (IAAP) MIDDLETOWN, IA	SS / FFP	PICATINNY ARSENAL, NJ	Aug 15	Aug 17	51343	120.00	Y		
FY 2016	AMERICAN ORDNANCE LLC (IAAP) MIDDLETOWN, IA	SS / FFP	PICATINNY ARSENAL, NJ	Mar 16	Mar 18	64416	122.39	Y		
FUZE PRACTICE, M781										
FY 2014	NAMMO POCAL INC. SCRANTON, PA	C / IDIQ	PICATINNY ARSENAL, NJ	Jan 14	Jul 15	45312	17.83	Y		
FY 2015	NAMMO POCAL INC. SCRANTON, PA	C / IDIQ	PICATINNY ARSENAL, NJ	Apr 15	Oct 16	52883	18.99	Y		
FY 2016	NAMMO POCAL INC. SCRANTON, PA	C / IDIQ	PICATINNY ARSENAL, NJ	Feb 16	Aug 17	66348	19.36	Y		
SHELL BODY, 120MM FRPC										
FY 2014	MEDICO INDUSTRIES INC. WILKES BARRE, PA	C / FFP	PICATINNY ARSENAL, NJ	Dec 13	Jun 14	45312	87.75	Y		
FY 2015	MEDICO INDUSTRIES INC. WILKES BARRE, PA	C / FFP	PICATINNY ARSENAL, NJ	Apr 15	Oct 16	52883	96.74	Y		
FY 2016	MEDICO INDUSTRIES INC. WILKES BARRE, PA	C / FFP	PICATINNY ARSENAL, NJ	Feb 16	Aug 17	66348	98.67	Y		
IGNITION CARTRIDGE, M1020										
FY 2014	NAMMO POCAL INC. SCRANTON, PA	C / IDIQ	PICATINNY ARSENAL, NJ	Dec 14	Jun 15	45312	20.75	Y		
FY 2015	NAMMO POCAL INC. SCRANTON, PA	C / IDIQ	PICATINNY ARSENAL, NJ	Apr 15	Oct 16	52883	23.57	Y		
FY 2016	NAMMO POCAL INC. SCRANTON, PA	C / IDIQ	PICATINNY ARSENAL, NJ	Feb 16	Aug 17	66348	24.04	Y		
PROPELLANT CHARGE, M234A1										
FY 2014	AMERICAN ORDNANCE LLC (IAAP) MIDDLETOWN, IA	C / IDIQ	ROCK ISLAND ARSENAL, IL	May 14	Nov 15	181247	16.03	Y		
FY 2015	TO BE SELECTED TBS01	C / IDIQ	ROCK ISLAND ARSENAL, IL	Apr 15	Oct 16	211533	16.95	Y		
FY 2016	TO BE SELECTED TBS01	C / IDIQ	ROCK ISLAND ARSENAL, IL	Feb 16	Aug 17	265393	22.67	Y		
FIN ASSEMBLY, M31										
FY 2014	MACHINING TECHNOLOGIES INC SALISBURY, MD	C / FFP	PICATINNY ARSENAL, NJ	Dec 13	Jun 14	45312	38.60	Y		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:
Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature:
CTG, MORTAR, 120MM FRPC M931 SERIES W/PRACT FUZE (E25507)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
FY 2015	MACHINING TECHNOLOGIES INC SALISBURY, MD	C / FFP	PICATINNY ARSENAL, NJ	Apr 15	Oct 16	52883	39.47	Y		
FY 2016	MACHINING TECHNOLOGIES INC SALISBURY, MD	C / FFP	PICATINNY ARSENAL, NJ	Feb 16	Aug 17	66348	40.26	Y		
FUZE ADAPTER, 120MM										
FY 2014	MANUFACTURING SUPPORT HEBRON, MD	C / FFP	PICATINNY ARSENAL, NJ	Feb 14	Aug 15	45312	8.98	Y		
FY 2015	TO BE SELECTED TBS02	C / FFP	PICATINNY ARSENAL, NJ	Apr 15	Oct 16	52883	12.00	Y		
FY 2016	TO BE SELECTED TBS02	C / FFP	PICATINNY ARSENAL, NJ	Feb 16	Aug 17	66348	22.75	Y		

REMARKS: M234A1 Propellant Charges: IDIQ awarded (Dec 12) to multiple contractors. Requirements will be competed among the following contractors: Day and Zimmerman, Camden, AR; American Ordnance, Middletwon, IA and General Dynamics, Marion, Il.

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, MORTAR, 120MM FRPC M931 SERIES W/PRACT FUZE (E25507)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	230040	151111	78929															10000	9953	10000	9947	8029			4371	10000	10000	6629
2	FY 14	A	43992	0	43992										A															43992
2	FY 15	A	51343	0	51343											A														51343
2	FY 16	A	64416	0	64416																		A							64416
Total					238680															10000	9953	10000	9947	8029			4371	10000	10000	166380
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	CANADIAN COMMERCIAL CORP, OTTAWA, CANADA	10000	10000	20000	
2	AMERICAN ORDNANCE LLC (IAAP), MIDDLETOWN, IA	10000	10000	20000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	6	24	30
2	Initial	6	6	24	30
	Reorder	6	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, MORTAR, 120MM FRPC M931 SERIES W/PRACT FUZE (E25507)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17													Fiscal Year 18											Later
									Calendar Year 17													Calendar Year 18								
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	230040	223411	6629	6629																								0
2	FY 14	A	43992	0	43992										10000	5000	5000	5000	5000	5000	5000	3992								0
2	FY 15	A	51343	0	51343											5000	5000	5000	5000	5000	5000	6008	5000	5000	5000	335				0
2	FY 16	A	64416	0	64416																		5000	5000	5000	9665	10000	10000	10000	9751
Total					166380	6629									10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	9751
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	CANADIAN COMMERCIAL CORP, OTTAWA, CANADA	10000	10000	20000	
2	AMERICAN ORDNANCE LLC (IAAP), MIDDLETOWN, IA	10000	10000	20000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	6	24	30
2	Initial	6	6	24	30
	Reorder	6	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 19 / 20 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, MORTAR, 120MM FRPC M931 SERIES W/PRACT FUZE (E25507)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 19												Fiscal Year 20												Later
									Calendar Year 19												Calendar Year 20									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	230040	230040																										0
2	FY 14	A	43992	43992																										0
2	FY 15	A	51343	51343																										0
2	FY 16	A	64416	54665	9751	9751																								0
Total					9751	9751																								
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	CANADIAN COMMERCIAL CORP, OTTAWA, CANADA	10000	10000	20000	
2	AMERICAN ORDNANCE LLC (IAAP), MIDDLETOWN, IA	10000	10000	20000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	6	24	30
2	Initial	6	6	24	30
	Reorder	6	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG, MORTAR, 120MM WP SMOKE M929 SERIES W/MOFM (E91300)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty		9374		13229		13229		11483		13296		47382
Gross Cost	166.4	12.1		18.6		18.6		16.8		20.2		234.1
Less PY Adv Proc												
Net Proc P1	166.4	12.1		18.6		18.6		16.8		20.2		234.1
Plus CY Adv Proc												
Total Proc Cost	166.4	12.1		18.6		18.6		16.8		20.2		234.1
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												0.0

Description:
The M929 White Phosphorous (WP) Smoke Cartridge is used to provide smoke, with some incendiary effect for various screening missions. The cartridge is filled with 5 lbs of WP. The M929 uses the highly reliable and countermeasure resistant M734A1 multi-option fuze when functions, detonates the burster, which disperses the felt pads which are soaked with WP over the target. The smoke obscuration is generated by a spontaneous reaction between the WP and oxygen. The M929 (Range 200 meter minimum and 7,200 maximum) is range-matched to the 120mm High Explosive (HE) and Illum cartridges
This item is Code A, approved for service use.

Justification:
This is a training standard item used in training and combat. The request supports annual training and builds a war reserve inventory in accordance with the Army procurement goals.

Comments:
TYPE CLASSIFICATION DATE: 1996

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG, MORTAR, 120MM WP SMOKE M929 SERIES W/MOFM (E91300)	Weapon System Type:	MDAP:	DODIC: CA03	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
LOAD, ASSEMBLE, PACK (LAP)		3596710	9374	383.69				5202437	13229	393.26				5202437	13229	393.26
SHELL BODY, 120MM SMK		2102376	9655	217.75				3113449	13625	228.51				3113449	13625	228.51
BURSTER ASSEMBLY, M86		500998	9655	51.89				672666	13625	49.37				672666	13625	49.37
PROPELLANT CHARGE, M234A1		619095	38621	16.03				1235583	54503	22.67				1235583	54503	22.67
FUZE MOFM, M734A1		2397626	9655	248.33				4555246	13625	334.33				4555246	13625	334.33
IGNITION CARTRIDGE, M1020		200341	9655	20.75				327545	13625	24.04				327545	13625	24.04
BURSTER HOUSING, 120MM SMOKE		317263	9655	32.86				425509	13625	31.23				425509	13625	31.23
FIN ASSEMBLY, M31		372683	9655	38.60				548543	13625	40.26				548543	13625	40.26
FIBER CONTAINER PA 167, 120MM		108715	9655	11.26				159276	13625	11.69				159276	13625	11.69
METAL CONTAINER PA 154, 120MM		271482	4874	55.70				389420	6879	56.61				389420	6879	56.61
SUBTOTAL HARDWARE COST		**10487K**						**16630K**						**16630K**		
Support																
PRODUCTION ENGINEERING		1558000						1860000						1860000		
ACCEPTANCE TESTING		71429						100000						100000		
SUBTOTAL PRODUCTION SUPPORT		**1629429**						**1960000**						**1960000**		
Total:		**12116**						**18590**						**18590**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2015

Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature: CTG, MORTAR, 120MM WP SMOKE M929 SERIES W/MOFM (E91300)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
LOAD, ASSEMBLE, PACK (LAP)										
FY 2014	PINE BLUFF ARSENAL PINE BLUFF, AR	PO	PICATINNY ARSENAL, NJ	Jan 14	Jan 16	9374	383.69	Y		
FY 2016	PINE BLUFF ARSENAL PINE BLUFF, AR	PO	PICATINNY ARSENAL, NJ	Jan 16	Jan 18	13229	393.26	Y		
SHELL BODY, 120MM SMK										
FY 2014	MEDICO INDUSTRIES INC. WILKES BARRE, PA	C / FFP	PICATINNY ARSENAL, NJ	Mar 14	Sep 15	9655	217.75	Y		
FY 2016	MEDICO INDUSTRIES INC. WILKES BARRE, PA	C / FFP	PICATINNY ARSENAL, NJ	Mar 16	Sep 17	13625	228.51	Y		
BURSTER ASSEMBLY, M86										
FY 2014	CRANE ARMY AMMO ACTIVITY CRANE, IN	PO	PICATINNY ARSENAL, NJ	Jan 14	Jul 15	9655	51.89	Y		
FY 2016	CRANE ARMY AMMO ACTIVITY CRANE, IN	PO	PICATINNY ARSENAL, NJ	Jan 16	Jul 17	13625	49.37	Y		
PROPELLANT CHARGE, M234A1										
FY 2014	AMERICAN ORDNANCE LLC (IAAP) MIDDLETOWN, IA	C / IDIQ	ROCK ISLAND ARSENAL, IL	May 14	Nov 15	38621	16.03	Y		
FY 2016	TO BE SELECTED TBS01	C / IDIQ	ROCK ISLAND ARSENAL, IL	Mar 16	Sep 17	54503	22.67	Y		
FUZE MOFM, M734A1										
FY 2014	L-3 FUZING & ORDANCE SYSTEMS CINCINNATI, OH	C / FFP	PICATINNY ARSENAL, NJ	Mar 14	Sep 15	9655	248.33	Y		
FY 2016	TO BE SELECTED TBS02	C / FFP	PICATINNY ARSENAL, NJ	Mar 16	Nov 17	13625	334.33	Y		
IGNITION CARTRIDGE, M1020										
FY 2014	NAMMO POCAL INC. SCRANTON, PA	C / IDIQ	PICATINNY ARSENAL, NJ	Mar 14	Sep 15	9655	20.75	Y		
FY 2016	NAMMO POCAL INC. SCRANTON, PA	C / IDIQ	PICATINNY ARSENAL, NJ	Mar 16	Sep 17	13625	24.04	Y		
BURSTER HOUSING, 120MM SMOKE										
FY 2014	CRANE ARMY AMMO ACTIVITY CRANE, IN	PO	PICATINNY ARSENAL, NJ	Jan 14	Jul 15	9655	32.86	Y		
FY 2016	CRANE ARMY AMMO ACTIVITY CRANE, IN	PO	PICATINNY ARSENAL, NJ	Jan 16	Jul 17	13625	31.23	Y		
FIN ASSEMBLY, M31										
FY 2014	MACHINING TECHNOLOGIES INC SALISBURY, MD	C / FFP	PICATINNY ARSENAL, NJ	Mar 14	Sep 15	9655	38.60	Y		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:
Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature:
CTG, MORTAR, 120MM WP SMOKE M929 SERIES W/MOFM (E91300)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
FY 2016	MACHINING TECHNOLOGIES INC SALISBURY, MD	C / FFP	PICATINNY ARSENAL, NJ	Mar 16	Sep 17	13625	40.26	Y		
FIBER CONTAINER PA 167, 120MM										
FY 2014	UNITED AMMUNITION CONTAINER WYNNEWOOD, PA	C / FFP	PICATINNY ARSENAL, NJ	Mar 14	Sep 15	9655	11.26	Y		
FY 2016	UNITED AMMUNITION CONTAINER WYNNEWOOD, PA	C / FFP	PICATINNY ARSENAL, NJ	Mar 16	Sep 17	13625	11.69	Y		
METAL CONTAINER PA 154, 120MM										
FY 2014	BWAY CORPORATION ATLANTA, GA	C / FFP	PICATINNY ARSENAL, NJ	Mar 14	Sep 15	4874	55.70	Y		
FY 2016	BWAY CORPORATION ATLANTA, GA	C / FFP	PICATINNY ARSENAL, NJ	Mar 16	Sep 17	6879	56.61	Y		

REMARKS: Propellant Charges: IDIQ awarded (Dec 12) to multiple contractors. Requirements will be competed among the following contractors: General Dynamics, Marion, IL; Day and Zimmerman, Camden, AR and American Ordnance, Middletown, IA.

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, MORTAR, 120MM WP SMOKE M929 SERIES W/MOFM (E91300)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	4944	0	4944																									4944
1	FY 14	A	9374	0	9374																9374									0
1	FY 16	A	13229	0	13229																A									13229
Total					27547																9374									18173
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	PINE BLUFF ARSENAL, PINE BLUFF, AR	12000	12000	24000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	4	24	28
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, MORTAR, 120MM WP SMOKE M929 SERIES W/MOFM (E91300)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17													Fiscal Year 18											Later
									Calendar Year 17													Calendar Year 18								
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	4944	0	4944				4944																					0
1	FY 14	A	9374	9374																										0
1	FY 16	A	13229	0	13229																13229									0
Total					18173				4944												13229									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+	MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
1	PINE BLUFF ARSENAL, PINE BLUFF, AR	12000	12000	24000		1	Initial	6	6	24	30	
							Reorder	6	4	24	28	
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
Cartridges, Tank, 105MM And 120MM, All Types (E22203)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	2867.6	121.6	101.9	105.5		105.5	125.8	125.7	147.2	175.5		3770.7
Less PY Adv Proc												
Net Proc P1	2867.6	121.6	101.9	105.5		105.5	125.8	125.7	147.2	175.5		3770.7
Plus CY Adv Proc												
Total Proc Cost	2867.6	121.6	101.9	105.5		105.5	125.8	125.7	147.2	175.5		3770.7
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
This budget line includes CARTRIDGE, TANK, 105MM and 120MM ALL TYPES:

(E22125) The M724A1E1 Cartridge will replace the (E22100) M724A1 Cartridge and provide the Army with a range limited (7,000 meters, maximum) round which can be safely fired at all training sites. The Cartridge, M724A1E1, 105mm Target Practice Discarding Sabot with Tracer (TPDS-T) is used for gunnery training in the Army's 105mm Stryker Brigade Combat Team (SBCT) Mobile Gun System (MGS). This discarding sabot round is similar in external appearance and is ballistically similar out to 2,000 meters with the M900, Armor Piercing Fin Stabilized Discarding Sabot w/Tracer Cartridge. It is used as a training surrogate for the M900 Cartridge used by the MGS. The M724A1E1 Cartridge consists of a deep drawn steel cartridge case, electric primer, propellant and a projectile consisting of a sub-projectile (steel core, windshield, fin and tracer) and aluminum sabot. This item is Code A, approved for service use.

(E73201) The Cartridge, 120mm, Target Practice Multi Purpose-Tracer (TPMP-T) M1002 is a target practice cartridge that simulates the size, weight, ballistics and the loader's function of setting the nose switch of the High Explosive Multi-Purpose cartridge M830A1. This round is fired from the M256 120mm smoothbore cannon on the M1A1/M1A2 Abrams Tank. The projectile is inert and composed of an aluminum body, steel nose with dummy plastic switch, aluminum tailcone, aluminum sabot, nylon obturators and tracer. The tailcone imparts spin to the projectile in flight for stabilization and provides the mechanism to limit the projectile's maximum range. The M1002 replaces the M831A1 cartridge. Tank crews will conduct live fire training with the cartridge to achieve and maintain gunnery proficiency. This item is Code A, approved for service use.

(E73400) The 120mm M865 Target Practice Cone-Stabilized Discarding Sabot with Tracer (TPCSDS-T) is a target practice round that simulates the ballistics of the 120mm M829 Series Armor Piercing Fin-Stabilized Discarding Sabot with Tracer (APFSDS-T) round. This round is fired from the M256 120mm smoothbore cannon on the M1A1/M1A2 Abrams Tank. The projectile is inert and is composed of a steel core, aluminum fin, aluminum sabots, nylon obturator and tracer. The fin imparts spin to the projectile in flight for stabilization and provides the mechanism to limit the projectile's maximum range. Tank crews will conduct live fire training with the cartridge to achieve and maintain gunnery proficiency. This item is Code A, approved for service use.

(E88106) The 120mm M829E4 Armor Piercing Fin Stabilized, Discarding Sabot with Tracer (APFSDS-T) cartridge is the follow on to the M829A3 APFSDS-T cartridge. The M829E4 is the most effective anti-armor kinetic energy cartridge fired from the M256 120mm smoothbore cannon on the M1A1/M1A2 Abrams Tank. This cartridge has been designed to defeat advances in armor protection, specifically advancement in explosive reactive armor (ERA). The cartridge incorporates advancements in propulsion, using a temperature insensitive propellant, novel penetrator design, and an advanced composite sabot. The projectile system consists of a depleted uranium penetrator mated to a drag reducing windshield and flight stabilizing multi-bladed fin, all secured for launch with a composite sabot. The M829E4 captures several new technologies along with components previously used on previous APFSDS-T cartridges, but incorporates technology advancements to yield significant improvement in performance over previous fielded cartridges. This item is Code A, approved for service use.

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature Cartridges, Tank, 105MM And 120MM, All Types (E22203)	
Program Elements for Code B Items:	Code:	Other Related Program Elements:	

Justification:
FY 2016 Base Budget supports critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station, and the combined training centers. Test requirements support the development, fielding, safety, and quality assurance of Army munitions and equipment throughout their life-cycle.

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.

(E22125) M724A1E1 – This is a training unique item not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army procurement goals. FY 2016 Base procurement dollars in the amount of $5.800 million supports the procurement of .001 million M724A1E1 cartridges.

(E73201) M1002 (TPMP-T) - This is a training unique item not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army procurement goals. FY 2016 Base procurement dollars in the amount of $32.500 million supports the procurement of .005 million M1002 cartridges.

(E73400) M865 (TPCSDS-T) - This is a training unique item not used in combat. The FY 2016 request supports annual training and provides a safer round by incorporating safety initiatives such as a safer case. FY 2016 Base procurement dollars in the amount of $28.263 million supports recapitalizing M865 cartridges.

(E88106) M829E4 (APFSDS-T) - This is a war reserve item used in combat. The FY 2016 request builds a war reserve inventory in accordance with Army's procurement goals. FY 2016 Base procurement dollars in the amount of $38.978 million supports .004 million M829E4 cartridges.

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: Cartridges, Tank, 105MM And 120MM, All Types (E22203)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
Qty in thousands unless otherwise noted																
E22125 CTG, TANK, 105MM TPDS-T	ca58	7024000	912	7701.75	6103000	1127	5415.26	5800000	1292	4489.16				5800000	1292	4489.16
E73201 CTG, TANK, 120MM TGT PRACT - TRACER (	ca31	22129K	4652	4756.88	34647K	9266	3739.15	32500K	4880	6659.84				32500K	4880	6659.84
E73400 CTG TANK 120MM TPCSDS-T M865	c785	62229K			19915K			28263K						28263K		
E88106 CTG, TANK, 120MM APFSDS-T, M829E4	ca64	30168K	860	35079.07	41235K	3485	11832.14	38978K	3673	10612.03				38978K	3673	10612.03
Total:		**121550**			**101900**			**105541**						**105541**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG, TANK, 105MM TPDS-T M724A1E1(short rg KE trnr) (E22125)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty		912	1127	1292		1292	1351	645	657	675		6659
Gross Cost		7.0	6.1	5.8		5.8	5.9	3.8	3.9	4.0		36.5
Less PY Adv Proc												
Net Proc P1		7.0	6.1	5.8		5.8	5.9	3.8	3.9	4.0		36.5
Plus CY Adv Proc												
Total Proc Cost		7.0	6.1	5.8		5.8	5.9	3.8	3.9	4.0		36.5
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:

(E22125) The M724A1E1 Cartridge will replace the (E22100) M724A1 Cartridge and provide the Army with a range limited (7,000 meters, maximum) round which can be safely fired at all training sites. The Cartridge, M724A1E1, 105mm Target Practice Discarding Sabot with Tracer (TPDS-T) is used for gunnery training in the Army's 105mm Stryker Brigade Combat Team (SBCT) Mobile Gun System (MGS). This discarding sabot round is similar in external appearance and is ballistically similar out to 2,000 meters with the M900, Armor Piercing Fin Stabilized Discarding Sabot w/Tracer Cartridge. It is used as a training surrogate for the M900 Cartridge used by the MGS. The M724A1E1 Cartridge consists of a deep drawn steel cartridge case, electric primer, propellant and a projectile consisting of a sub-projectile (steel core, windshield, fin and tracer) and aluminum sabot. This item is Code A, approved for service use.

Justification:

FY 2016 Base Budget supports critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station, and the combined training centers. Test requirements support the development, fielding, safety, and quality assurance of Army munitions and equipment throughout their life-cycle.

(E22125) M724A1E1 – This is a training unique item not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army procurement goals. FY 2016 Base procurement dollars in the amount of $5.800 million supports the procurement of .001 million M724A1E1 cartridges.

TYPE CLASSIFICATION DATE: 2014

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG, TANK, 105MM TPDS-T M724A1E1(short rg KE trnr) (E22125)	Weapon System Type:	MDAP:	DODIC: CA58	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
COMPLETE ROUND		5685408	912	6234.00	3177329	1127	2819.28	3715107	1292	2875.47				3715107	1292	2875.47
SUBTOTAL HARDWARE COST		**5685408**			**3177329**			**3715107**						**3715107**		
Support																
PRODUCTION ENGINEERING		1146968			1285320			1673497						1673497		
ACCEPTANCE TESTING		60000			60000			60000						60000		
SUBTOTAL PRODUCTION SUPPORT		**1206968**			**1345320**			**1733497**						**1733497**		
NON-RECURRING COSTS																
FIRST ARTICLE TEST		131624			106351			102386						102386		
PRODUCTION VERIFICATION TEST					1475000			250000						250000		
SUBTOTAL NON-RECURRING COSTS		**131624**			**1581351**			**352386**						**352386**		
Total:		**7024**			**6103**			**5800**						**5800**		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:
Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature:
CTG, TANK, 105MM TPDS-T M724A1E1(short rg KE trnr) (E22125)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
COMPLETE ROUND										
FY 2014	ALLIANT TECHSYSTEMS INC. PLYMOUTH, MN	C / FFP	PICATINNY ARSENAL, NJ	Aug 14	Sep 15	912	6234.00	Y		
FY 2015	TO BE SELECTED TBS01	C / FFP	PICATINNY ARSENAL, NJ	Mar 15	Mar 16	1127	2819.28	Y		
FY 2016	TO BE SELECTED TBS01	C / FFP	PICATINNY ARSENAL, NJ	Mar 16	Mar 17	1292	2875.47	Y		

REMARKS: This is a training unique item not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army procurement goals. FY 2016 Base procurement dollars in the amount of $5.800 million supports .001 million M724A1E1 cartridges.

This item is Code A, approved for service use.

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, TANK, 105MM TPDS-T M724A1E1(short rg KE trnr) (E22125)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15														Fiscal Year 16										Later
									Calendar Year 15														Calendar Year 16							
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Complete Round																														
1	FY 14	A	912	0	912												912													0
2	FY 15	A	1127	0	1127						A												1127							0
2	FY 16	A	1292	0	1292																		A							1292
Total					3331												912						1127							1292
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	ALLIANT TECHSYSTEMS INC., PLYMOUTH, MN	1000	2000	3000	
2	TO BE SELECTED, TBS01	1000	2000	3000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	7	11	12	23
	Reorder	6	6	12	18
2	Initial	7	11	12	23
	Reorder	6	6	12	18
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, TANK, 105MM TPDS-T M724A1E1(short rg KE trnr) (E22125)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Complete Round																														
1	FY 14	A	912	912																										0
2	FY 15	A	1127	1127																										0
2	FY 16	A	1292	0	1292						1292																			0
Total					1292						1292																			
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	ALLIANT TECHSYSTEMS INC., PLYMOUTH, MN	1000	2000	3000	
2	TO BE SELECTED, TBS01	1000	2000	3000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	7	11	12	23
	Reorder	6	6	12	18
2	Initial	7	11	12	23
	Reorder	6	6	12	18
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG, TANK, 120MM TGT PRACT - TRACER (TP-T), M1002 (E73201)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	169000	4652	9266	4880		4880	7044	9240	10730	10690		225502
Gross Cost	338.2	22.1	34.6	32.5		32.5	37.2	37.5	37.3	37.9		577.4
Less PY Adv Proc												
Net Proc P1	338.2	22.1	34.6	32.5		32.5	37.2	37.5	37.3	37.9		577.4
Plus CY Adv Proc												
Total Proc Cost	338.2	22.1	34.6	32.5		32.5	37.2	37.5	37.3	37.9		577.4
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
(E73201) The Cartridge, 120mm, Target Practice Multi Purpose-Tracer (TPMP-T) M1002 is a target practice cartridge that simulates the size, weight, ballistics and the loader's function of setting the nose switch of the High Explosive Multi-Purpose cartridge M830A1. This round is fired from the M256 120mm smoothbore cannon on the M1A1/M1A2 Abrams Tank. The projectile is inert and composed of an aluminum body, steel nose with dummy plastic switch, aluminum tailcone, aluminum sabot, nylon obturators and tracer. The tailcone imparts spin to the projectile in flight for stabilization and provides the mechanism to limit the projectile's maximum range. The M1002 replaces the M831A1 cartridge. Tank crews will conduct live fire training with the cartridge to achieve and maintain gunnery proficiency. This item is Code A, approved for service use.

Justification:
FY 2016 Base Budget supports critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station, and the combined training centers. Test requirements support the development, fielding, safety, and quality assurance of Army munitions and equipment throughout their life-cycle.

(E73201) M1002 (TPMP-T) - This is a training unique item not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army procurement goals. FY 2016 Base procurement dollars in the amount of $32.500 million supports the procurement of .005 million M1002 cartridges.

Type Classification Date: 2006

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG, TANK, 120MM TGT PRACT - TRACER (TP-T), M1002 (E73201)	Weapon System Type:	MDAP:	DODIC: CA31	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
COMPLETE ROUND		10647K	4652	2288.80	26335K	9266	2842.08	14133K	4880	2896.06				14133K	4880	2896.06
SUBTOTAL HARDWARE COST		**10647K**			**26335K**			**14133K**						**14133K**		
Support																
PRODUCTION ENGINEERING		3863496			2973710			3250570						3250570		
QUALITY ASSURANCE		25446			7466			8347						8347		
ACCEPTANCE TESTING		964515			841782			872443						872443		
SUBTOTAL PRODUCTION SUPPORT		**4853458**			**3822958**			**4131360**						**4131360**		
NON-RECURRING COSTS																
RPD596 QUALIFICATION		3150000			1694553			2909586						2909586		
TRACER IMPROVEMENT		840712			642187											
HERO PRIMER		1539000			1259350											
PRIMER IMPROVEMENT		1099350			893251			1409586						1409586		
RECAPITALIZATION M1002								9915668						9915668		
SUBTOTAL NON-RECURRING COSTS		**6629062**			**4489341**			**14235K**						**14235K**		
Total:		**22129**			**34647**			**32500**						**32500**		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:
Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature:
CTG, TANK, 120MM TGT PRACT - TRACER (TP-T), M1002 (E73201)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
COMPLETE ROUND										
FY 2014	ALLIANT TECHSYSTEMS INC. PLYMOUTH, MN	SS / FFP	ROCK ISLAND ARSENAL, IL	Mar 14	Sep 15	2326	2288.80	Y		
FY 2014	GENERAL DYNAMICS ORD AND TACT ST PETERSBURG, FL	SS / FFP	ROCK ISLAND ARSENAL, IL	Mar 14	Oct 15	2326	2288.80	Y		
FY 2015	ALLIANT TECHSYSTEMS INC. PLYMOUTH, MN	SS / FFP	ROCK ISLAND ARSENAL, IL	Mar 15	Feb 16	4633	2842.08	Y		
FY 2015	GENERAL DYNAMICS ORD AND TACT ST PETERSBURG, FL	SS / FFP	ROCK ISLAND ARSENAL, IL	Mar 15	Feb 16	4633	2842.08	Y		
FY 2016	ALLIANT TECHSYSTEMS INC. PLYMOUTH, MN	SS / FFP	ROCK ISLAND ARSENAL, IL	Mar 16	Feb 17	2440	2896.06	Y		
FY 2016	GENERAL DYNAMICS ORD AND TACT ST PETERSBURG, FL	SS / FFP	ROCK ISLAND ARSENAL, IL	Mar 16	Feb 17	2440	2896.06	Y		

REMARKS: FY 2014, FY 2015, and FY 2016 hardware unit prices are an average unit price for multiple producers. FY 2014, FY 2015, and FY 2016 complete round is awarded as an option to the FY 2012 contract.

This is a training unique item not used in combat. The FY 2016 request supports annual training and builds a depot level in accordance with the Army procurement goals. FY 2016 Base procurement dollars in the amount of $32.500 million supports .005 million M1002 cartridges.

This item is Code A, approved for service use.

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, TANK, 120MM TGT PRACT - TRACER (TP-T), M1002 (E73201)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Complete Round																														
1	FY 13	A	15825	7388	8437			4353			4084																			0
2	FY 13	A	24338	17307	7031	7031																								0
1	FY 14	A	2326	0	2326													2326												0
2	FY 14	A	2326	0	2326												2326													0
1	FY 15	A	4633	0	4633						A											387	386	386	386	386	386	386	386	1544
2	FY 15	A	4633	0	4633						A											387	386	386	386	386	386	386	386	1544
1	FY 16	A	2440	0	2440																		A							2440
2	FY 16	A	2440	0	2440																		A							2440
1	FY 15	MC	513	0	513						A											52	42	42	42	42	42	42	42	167
2	FY 15	MC	513	0	513						A											52	42	42	42	42	42	42	42	167
Total					35292	7031		4353			4084						2326	2326				878	856	856	856	856	856	856	856	8302
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	GENERAL DYNAMICS ORD AND TACT, ST PETERSBURG, FL	500	11000	33000	
2	ALLIANT TECHSYSTEMS INC., PLYMOUTH, MN	500	11000	33000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	11	17
	Reorder	6	6	11	17
2	Initial	6	6	11	17
	Reorder	6	6	11	17
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS
M1002 & M865 LINE SHARE AT IOWA AAP.

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, TANK, 120MM TGT PRACT - TRACER (TP-T), M1002 (E73201)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Complete Round																														
1	FY 13	A	15825	15825																										0
2	FY 13	A	24338	24338																										0
1	FY 14	A	2326	2326																										0
2	FY 14	A	2326	2326																										0
1	FY 15	A	4633	3089	1544	386	386	386	386																					0
2	FY 15	A	4633	3089	1544	386	386	386	386																					0
1	FY 16	A	2440	0	2440						203	203	203	203	203	203	203	203	203	203	203									0
2	FY 16	A	2440	0	2440						203	203	203	203	203	203	203	203	203	203	203									0
1	FY 15	MC	513	346	167	42	42	42	41																					0
2	FY 15	MC	513	346	167	42	42	42	41																					0
Total					8302	856	856	856	854		406	406	406	406	406	406	406	406	406	406	406									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	GENERAL DYNAMICS ORD AND TACT, ST PETERSBURG, FL	500	11000	33000	
2	ALLIANT TECHSYSTEMS INC., PLYMOUTH, MN	500	11000	33000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	11	17
	Reorder	6	6	11	17
2	Initial	6	6	11	17
	Reorder	6	6	11	17
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS
M1002 & M865 LINE SHARE AT IOWA AAP.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG TANK 120MM TPCSDS-T M865 (E73400)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	3649000											3649000
Gross Cost	2529.4	62.2	19.9	28.3		28.3	39.2	40.5	39.2	40.5		2799.1
Less PY Adv Proc												
Net Proc P1	2529.4	62.2	19.9	28.3		28.3	39.2	40.5	39.2	40.5		2799.1
Plus CY Adv Proc												
Total Proc Cost	2529.4	62.2	19.9	28.3		28.3	39.2	40.5	39.2	40.5		2799.1
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0											0.0

Description:
(E73400) The 120mm M865 Target Practice Cone-Stabilized Discarding Sabot with Tracer (TPCSDS-T) is a target practice round that simulates the ballistics of the 120mm M829 Series Armor Piercing Fin-Stabilized Discarding Sabot with Tracer (APFSDS-T) round. This round is fired from the M256 120mm smoothbore cannon on the M1A1/M1A2 Abrams Tank. The projectile is inert and is composed of a steel core, aluminum fin, aluminum sabots, nylon obturator and tracer. The fin imparts spin to the projectile in flight for stabilization and provides the mechanism to limit the projectile's maximum range. Tank crews will conduct live fire training with the cartridge to achieve and maintain gunnery proficiency. This item is Code A, approved for service use.

Justification:
FY 2016 Base Budget supports critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station, and the combined training centers. Test requirements support the development, fielding, safety, and quality assurance of Army munitions and equipment throughout their life-cycle.

(E73400) M865 (TPCSDS-T) - This is a training unique item not used in combat. The FY 2016 request supports annual training and provides a safer round by incorporating safety initiatives such as a safer case. FY 2016 Base procurement dollars in the amount of $28.263 million supports recapitalizing M865 cartridges.

TYPE CLASSIFICATION DATE: 1984

Comments:
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Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG TANK 120MM TPCSDS-T M865 (E73400)	Weapon System Type:	MDAP:	DODIC: C785	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Support																
PRODUCTION ENGINEERING		2382632			809160			1129520						1129520		
ACCEPTANCE TESTING		1552821														
QUALITY ASSURANCE		12687			10218			10435						10435		
NRE SUPPORT		1268896			1789300			1716650						1716650		
SUBTOTAL PRODUCTION SUPPORT		**5217036**			**2608678**			**2856605**						**2856605**		
NON-RECURRING COSTS																
RECAPITALIZATION- M865		54953K			12390K			22619K						22619K		
QUALIFICATION OF LONGER M865 PROJECTILE		1763000			2620256			600879						600879		
CTG CASE IMPROVEMENT		95000			1219188			1050073						1050073		
HERO PRIMER		199500			1077614			1135666						1135666		
SUBTOTAL NON-RECURRING COSTS		**57011K**			**17307K**			**25405K**						**25405K**		
Total:		**62229**			**19915**			**28263**						**28263**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG, TANK, 120MM APFSDS-T, M829E4 (E88106)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty		860	3485	3673		3673	3659	3664	3423	3465		22229
Gross Cost		30.2	41.2	39.0		39.0	43.5	43.9	41.8	43.1		282.7
Less PY Adv Proc												
Net Proc P1		30.2	41.2	39.0		39.0	43.5	43.9	41.8	43.1		282.7
Plus CY Adv Proc												
Total Proc Cost		30.2	41.2	39.0		39.0	43.5	43.9	41.8	43.1		282.7
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:

(E88106) The 120mm M829E4 Armor Piercing Fin Stabilized, Discarding Sabot with Tracer (APFSDS-T) cartridge is the follow on to the M829A3 APFSDS-T cartridge. The M829E4 is the most effective anti-armor kinetic energy cartridge fired from the M256 120mm smoothbore cannon on the M1A1/M1A2 Abrams Tank. This cartridge has been designed to defeat advances in armor protection, specifically advancement in explosive reactive armor (ERA). The cartridge incorporates advancements in propulsion, using a temperature insensitive propellant, novel penetrator design, and an advanced composite sabot. The projectile system consists of a depleted uranium penetrator mated to a drag reducing windshield and flight stabilizing multi-bladed fin, all secured for launch with a composite sabot. The M829E4 captures several new technologies along with components previously used on previous APFSDS-T cartridge, but incorporates technology advancements to yield significant improvement in performance over previous fielded cartridges. This item is Code A, approved for service use.

Justification:

FY 2016 Base Budget supports critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station, and the combined training centers. Test requirements support the development, fielding, safety, and quality assurance of Army munitions and equipment throughout their life-cycle.

(E88106) M829E4 (APFSDS-T) - This is a war reserve item used in combat. The FY 2016 request builds a war reserve inventory in accordance with Army's procurement goals. FY 2016 Base procurement dollars in the amount of $38.978 million supports .004 million M829E4 cartridges.

TYPE CLASSIFICATION DATE: 2014

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG, TANK, 120MM APFSDS-T, M829E4 (E88106)	Weapon System Type:	MDAP:	DODIC: CA64	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
COMPLETE ROUND		22550K	860	26221.00	35867K	3485	10291.68	34640K	3673	9430.86				34640K	3673	9430.86
SUBTOTAL HARDWARE COST		**22550K**			**35867K**			**34640K**						**34640K**		
Support																
PRODUCTION ENGINEERING		3196842			4510220			3730854						3730854		
ACCEPTANCE TESTING		250000			250000			250000						250000		
SUBTOTAL PRODUCTION SUPPORT		**3446842**			**4760220**			**3980854**						**3980854**		
NON-RECURRING COSTS																
FIRST ARTICLE TEST		1461058			158275			156586						156586		
SABOT ALTERNATE MATERIAL		118740														
PRODUCTION VERIFICATION TEST					450000			200000						200000		
DEPLETED URANIUM CLEANUP		1500000														
LIVE FIRE SUPPORT		1091300														
SUBTOTAL NON-RECURRING COSTS		**4171098**			**608275**			**356586**						**356586**		
Total:		**30168**			**41235**			**38978**						**38978**		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:
Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature:
CTG, TANK, 120MM APFSDS-T, M829E4 (E88106)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
COMPLETE ROUND										
FY 2014	ALLIANT TECHSYSTEMS INC. PLYMOUTH, MN	SS / FFP	PICATINNY ARSENAL, NJ	Jul 14	Mar 15	860	26221.00	Y		
FY 2015	ALLIANT TECHSYSTEMS INC. PLYMOUTH, MN	SS / FFP	PICATINNY ARSENAL, NJ	Mar 15	May 16	3485	10291.68	Y		
FY 2016	ALLIANT TECHSYSTEMS INC. PLYMOUTH, MN	SS / FFP	PICATINNY ARSENAL, NJ	Mar 16	May 17	3673	9430.86	Y		

REMARKS: This is a war reserve item used in combat. The FY 2016 request builds a war reserve inventory in accordance with Army's procurement goals. FY 2016 Base procurement dollars in the amount of $38.978 million supports .004 million M829E4 cartridges.

TYPE CLASSIFICATION DATE: 2014

This item is Code A, approved for service use.

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, TANK, 120MM APFSDS-T, M829E4 (E88106)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15													Fiscal Year 16											Later
									Calendar Year 15													Calendar Year 16								
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
COMPLETE ROUND																														
1	FY 14	A	860	0	860						430				430															0
1	FY 15	A	3485	0	3485						A														295	290	290	290	290	2030
1	FY 16	A	3673	0	3673																		A							3673
Total					8018						430				430										295	290	290	290	290	5703
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	ALLIANT TECHSYSTEMS INC., PLYMOUTH, MN	1000	3000	5000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	9	15	24
	Reorder	6	6	14	20
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, TANK, 120MM APFSDS-T, M829E4 (E88106)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
COMPLETE ROUND																														
1	FY 14	A	860	860																										0
1	FY 15	A	3485	1455	2030	290	290	290	290	290	290	290																		0
1	FY 16	A	3673	0	3673								307	306	306	306	306	306	306	306	306	306	306	306						0
Total					5703	290	290	290	290	290	290	290	307	306	306	306	306	306	306	306	306	306	306	306						
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	ALLIANT TECHSYSTEMS INC., PLYMOUTH, MN	1000	3000	5000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	9	15	24
	Reorder	6	6	14	20
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
Artillery Cartridges, 75MM & 105MM, All Types (E15101)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	2970.9	51.2	47.5	57.8	5.0	62.8	57.9	65.5	64.6	62.5		3382.8
Less PY Adv Proc												
Net Proc P1	2970.9	51.2	47.5	57.8	5.0	62.8	57.9	65.5	64.6	62.5		3382.8
Plus CY Adv Proc												
Total Proc Cost	2970.9	51.2	47.5	57.8	5.0	62.8	57.9	65.5	64.6	62.5		3382.8
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
(E15101)Artillery Cartridges, 75MM And 105MM, All Types
This budget line includes Cartridge, Artillery, 75mm & 105mm, All Types.

(E15200)CTG, ARTY, 75MM BLANK, M337A1
The 75mm M337A2 is a non-tactical blank cartridge fired from a M116 Howitzer that is used in burial, retreat ceremonies and VIP Salutes. It consists of a cartridge case containing loosely packed black powder and a press-fitted percussion primer. A fiberglass wad is inserted over the black powder and a polystyrene closing cup is cemented in place with a polyester resin adhesive. When the firing pin of the weapon strikes the primer, a flash is generated which ignites the black powder charge producing flash, smoke, and a loud report to simulate weapon firing.
This item is Code A, approved for service use.

(E21200)CTG, ARTY, 105MM BLANK M395
The 105mm M395 blank cartridge is a non-tactical cartridge fired from a M119 Series Towed Howitzer that is used in burial, retreat ceremonies and VIP Salutes as well as simulation of battlefield noise used for training exercises. It is assembled with a loose 770 gram black powder charge retained by a glass-fibre closing wad and a polystyrene closing cup glued in place by an epoxy resin. The base of the case is fitted with an M61 percussion element and a primer. Detonation of the case contents creates sound, flash and smoke.
This item is Code A, approved for service use.

(E21501)CTG, ARTY, 105MM HE, M1 W/O FUZE
The 105mm M1 High Explosive (HE) cartridge contains a HE fill and is used primarily for training although some cartridges are expended in combat operations for fragmentation and blast. The cartridge is loaded with an M67 propellant charge, consisting of seven numbered increment bags sewn together in numerical order. Projectile function is dependent upon the fuze used and may function on impact (instantaneous or delay), above ground at a predetermined height or in proximity to the target area. Fuze function detonates the HE projectile filler resulting in projectile fragmentation and blast. Range varies from 3.5 to 11.3 kilometers, depending on the number of charge bags used. The program remanufactures/recapitalizes the remaining unserviceable cartridges through replacement of M67 Prop Charge and Primer at a reduced cost over new production to provide a cost effective training cartridge. This item is Code A, approved for service use.
Funding for the 105MM HE, M1 program in FY2015 and FY16 is for recapitalization.

(E21610)CTG, ARTY, 105MM HE-BB PFF M1130A1 W/O FUZE
The 105mm M1130A1 High Explosive (HE) cartridge fired from a M119 Series Towed Howitzer contains a HE fill and is primarily used in combat operations for missions that are fired at long

range (maximum range is 17.5 kilometers) and high quadrant elevation. Firing rounds at high quadrant elevation is required to engage targets beyond the tall crests of mountainous terrain. The projectile warhead is composed of natural fragmenting steel with an inner liner that provides increased lethality against personnel and soft targets as well as increased accuracy due to its aerodynamic shape. The cartridge also consists of insensitive munition (IM) explosive filler that reduces vulnerability to unplanned stimuli. The M1130A1 Cartridge is compatible with the M782 MOFA and the M767ETSQ series fuzes. The program upgrades current M1130 cartridges by replacing the M67 propellant with the M350 propellant that extends the range an additional 4 kilomieters.
This item is Code B, not approved for service use.

(E21705)CTG, ARTY, 105MM IR ILLUM M1064 W/O FUZE
The 105mm M1064 Infrared (IR) Illuminating Cartridge is compatible with the M762 series ET fuze, M67 propelling charge, and is packaged in the PA117 Shipping Container. The XM1064 consists of a 40 gram expelling charge, illuminant canister and parachute assembly. Upon fuze function, the expelling charge simultaneously ignites the illuminate while ejecting it from the projectile. Once dispensed, fins on the canister assist in reducing the spin rate while the parachute provides a descent rate of 12 m/s. The Infrared Illumination greatly enhances the effectiveness of night vision devices providing front line units with temporary battlefield infrared illumination to observe the movements and maneuvers of enemy forces under the cover of darkness.
The item is Code A approved for service use.

Justification:
FY 2016 Base Budget supports critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station, and the combined training centers. Test requirements support the development, fielding, safety, and quality assurance of Army munitions and equipment throughout their life-cycle.

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.

FY 2016 Base procurement dollars in the amount of $57.756 million suppports production of 246,000 RECAP Cartridges. FY16 OCO procurement dollars in the amount of $5.000 million supports 21,000 RECAP Cartridges. Funds are required to replenish munitions expended in combat operations in theater.

E15200 - CTG, ARTY, 75MM BLANK, M337A1
This is a training unique item not used in combat. FY 2015 request supports annual training and builds a depot level inventory in accordance with the Army procurement goals.
TYPE CLASSIFICATION DATE: 1975

E21200 - CTG, ARTY, 105MM BLANK M395
This is a training unique item not used in combat.
TYPE CLASSIFICATION: 1962

E21501 - CTG, ARTY, 105MM HE, M1 W/O FUZE
This program will remanufacture/recapitalize unserviceable rounds in the inventory.
This is a training standard item used in both training and combat. FY 2016 procurement supports annual training and builds a war reserve inventory in accordance with the Army procurement goals.
TYPE CLASSIFICATION DATE: 1966

E21610 - CTG, ARTY, 105MM, EXT RANGE HE-BB PFF, M1130A1 W/O
This is a war reserve item used in combat.

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature Artillery Cartridges, 75MM & 105MM, All Types (E15101)	
Program Elements for Code B Items:	Code:	Other Related Program Elements:	

E21702 - CTG, ARTY, 105MM VL ILLUM M314 W/O FUZE
This item is a training standard item used in both training and combat. The procurement supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals.
TYPE CLASSIFICATION: 1970

E21705 - CTG, ARTY,105MM IR ILLUM M1064 W/O FUZE
This item is a training standard item used in both training and combat. Procurement supports annual training and builds a war reserve inventory in accordance with the Army procurement goals.
TYPE CLASSIFICATION DATE: 2009

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: Artillery Cartridges, 75MM & 105MM, All Types (E15101)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
E15200 CTG, ARTY, 75MM BLANK, M337A1	c025				4435000	57815	77									
E21200 CTG, ARTY, 105MM BLANK M395	c440	4000000	52053	77												
E21501 CTG, ARTY, 105MM HE, M1 W/O FUZE	c445	42493K			36613K			57756K			5000000			62756K		
E21610 CTG, ARTY, 105MM, ER HE M1130A1	cz21	3332000														
E21702 CTG, ARTY, 105MM VL ILLUM M314 W/O FU	c541	1400000														
E21705 CTG, ARTY,105MM IR ILLUM M1064 W/O FU	ca53				6407000											
Total:		**51225**			**47455**			**57756**			**5000**			**62756**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG, ARTY, 75MM BLANK, M337A1 (E15200)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	55.0		4.4							4.7		64.2
Less PY Adv Proc												
Net Proc P1	55.0		4.4							4.7		64.2
Plus CY Adv Proc												
Total Proc Cost	55.0		4.4							4.7		64.2
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
The 75mm M337A2 is a non-tactical blank cartridge fired from a M116 Howitzer that is used in ceremonies and saluting purposes. It consists of a cartridge case containing loosely packed black powder and a press-fitted percussion primer. A fiberglass wad is inserted over the black powder and a polystyrene closing cup is cemented in place with a polyester resin adhesive. When the firing pin of the weapon strikes the primer, a flash is generated which ignites the black powder charge producing flash, smoke, and a loud report to simulate weapon firing.
This item is Code A, approved for service use.

Justification:
This is a training unique item not used in combat. FY 2015 request supports annual training and builds a depot level inventory in accordance with the Army procurement goals.

Comments:
TYPE CLASSIFICATION DATE: 1975

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG, ARTY, 105MM BLANK M395 (E21200)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	24.5	4.0										28.5
Less PY Adv Proc												
Net Proc P1	24.5	4.0										28.5
Plus CY Adv Proc												
Total Proc Cost	24.5	4.0										28.5
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

P-40 Breakdown

Area		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Active	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	3240.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
National Guard	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	640.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reserve	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	120.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	Qty	0	0	0	0	0	0	0	0	0
	Gross Cost	4000	0	0	0	0	0	0	0	0

Description:
The 105mm M395 is a non-tactical blank cartridge fired from a M119 Series Towed Howitzer is used in burial and retreat ceremonies, VIP Salutes as well as simulate battlefield noise used for training exercises. It is assembled with a loose 770 gram black powder charge retained by a glass-fibre closing wad and a polystyrene closing cup glued in place by an epoxy resin. The base of the case is fitted with an M61 percussion element and an M1A2 or M1B1A2 primer. Detonation of the case contents creates sound, flash and smoke.
This item is Code A, approved for service use.

Justification:
This is a training unique item not used in combat.
TYPE CLASSIFICATION: 1962

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG, ARTY, 105MM HE, M1 W/O FUZE (E21501)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	2635.2	42.5	36.6	57.8	5.0	62.8	57.9	58.6	57.5	57.8		3008.8
Less PY Adv Proc												
Net Proc P1	2635.2	42.5	36.6	57.8	5.0	62.8	57.9	58.6	57.5	57.8		3008.8
Plus CY Adv Proc												
Total Proc Cost	2635.2	42.5	36.6	57.8	5.0	62.8	57.9	58.6	57.5	57.8		3008.8
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
The 105mm M1 High Explosive (HE) cartridge contains a HE fill and is used primarily for training although some cartridges are expended in combat operations for fragmentation and blast. The cartridge is loaded with an M67 propellant charge, consisting of seven numbered increment bags sewn together in numerical order. Projectile function is dependent upon the fuze used and may function on impact (instantaneous or delay), above ground at a predetermined height or in proximity to the target area. Fuze function detonates the HE projectile filler resulting in projectile fragmentation and blast. Range varies from 3.5 to 11.3 kilometers, depending on the number of charge bags used. The program remanufactures/recapitalize the remaining unserviceable cartridges through replacement of M67 Prop Charge and Primer and put back into the serviceable inventory at a reduced cost over new production to provide a cost effective training cartridge.
This item is Code A, approved for service use.

Justification:
This program will remanufacture/recapitalize unserviceable rounds in the inventory.

This is a training standard item used in both training and combat. FY 2016 procurement supports annual training and builds a war reserve inventory in accordance with the Army procurement goals.

Comments:
TYPE CLASSIFICATION DATE: 1966

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG, ARTY, 105MM HE, M1 W/O FUZE (E21501)	Weapon System Type:	MDAP:	DODIC: C445	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Support																
NON-RECURRING COSTS																
RECAPITALIZATION		42493K			36613K			57756K			5000000			62756K		
SUBTOTAL NON-RECURRING COSTS		**42493K**			**36613K**			**57756K**			**5000000**			**62756K**		
Total:		**42493**			**36613**			**57756**			**5000**			**62756**		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Procurement of Ammunition, Army/ 1/ Ammunition		CTG, ARTY, 105MM HE, M1 W/O FUZE (E21501)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
LOAD, ASSEMBLE, PACK (LAP)										
M14B1 BRASS CARTRIDGE CASE										
METAL PARTS, M1 HF										
M67 PROP CHARGE										
SUPPLEMENTAL CHARGE, PBXN9										
PRIMER PERCUSSION M28B2										
PROPELLANT POWDER M1 SP										
PROPELLANT POWDER M1 MP										
METAL CONTAINER PA 117										
CONTAINER AMMUNITION FIBER PA55										
EXPLOSIVE FILL IMX-101										

REMARKS:

FY 14 / 15 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, ARTY, 105MM HE, M1 W/O FUZE (E21501)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 14												Fiscal Year 15												Later
									Calendar Year 14												Calendar Year 15									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13 P	A	23000	0	23000																									23000
1	FY 14	A	0	0																								A		0
Total					23000																									23000
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	AMERICAN ORDNANCE LLC (IAAP), MIDDLETOWN, IA	10000	21000	58800	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 16 / 17 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, ARTY, 105MM HE, M1 W/O FUZE (E21501)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 16												Fiscal Year 17												Later
									Calendar Year 16												Calendar Year 17									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13 P	A	23000	0	23000	10000	13000																							0
1	FY 14	A	0	0																								11000		-11000
Total					23000	10000	13000																					11000		-11000
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	AMERICAN ORDNANCE LLC (IAAP), MIDDLETOWN, IA	10000	21000	58800	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG, ARTY, 105MM, EXT RANGE HE-BB PFF, M1130A1 W/O (E21610)

Program Elements for Code B Items:

Code: B

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost		3.3										3.3
Less PY Adv Proc												
Net Proc P1		3.3										3.3
Plus CY Adv Proc												
Total Proc Cost		3.3										3.3
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
The 105mm M1130A1 High Explosive (HE) cartridge fired from a M119 Series Towed Howitzer contains a HE fill and is used in combat operations for missions that are fired at long range (maximum range is 17.5 kilometers) and high quadrant elevation. Firing rounds at high quadrant elevation is required to engage targets beyond the tall crests of mountainous terrain. The M1130 is a semi-fixed cartridge composed of the M14 Cartridge Case, M133 Percussion Primer, M350 Propelling Charge and a Base Bleed. The projectile warhead is composed of natural fragmenting steel with an inner liner of tungsten spheres that provides increased lethality against personnel and soft targets as well as increased accuracy due to its aerodynamic shape. The cartridge also consists of insensitive munition (IM) explosive filler that reduces vulnerability to unplanned stimuli. The M1130A1 Cartridge is compatible with the M782 MOFA and the M767ETSQ series fuzes. The program upgrades current M1130 cartridges by replacing the M67 propellant with the M350 propellant that extends the range an additional 4 kilometers.
This item is Code B, not approved for service use.

Justification:
This is a war reserve item used in combat.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG, ARTY, 105MM VL ILLUM M314 W/O FUZE (E21702)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	30.1	1.4										31.5
Less PY Adv Proc												
Net Proc P1	30.1	1.4										31.5
Plus CY Adv Proc												
Total Proc Cost	30.1	1.4										31.5
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

P-40 Breakdown

Area		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Active	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	1134.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
National Guard	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	224.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reserve	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	42.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	Qty	0	0	0	0	0	0	0	0	0
	Gross Cost	1400	0	0	0	0	0	0	0	0

Description:
The 105mm M314A3 Visible Light (VL) Illumination cartridge is used to illuminate a designated target area. The M314A3 is a semi-fixed illuminating cartridge which includes an M14 Cartridge Case, M28 Percussion Primer, M67 Prop Charge, a projectile which contains a pinned base plug, a black powder expelling charge, an illuminating canister with anti-rotational vanes, and a parachute assembly which is connected to the closed end of the canister. The canister contains illuminating filler covered by a thin layer of first fire composition.
This item is Code A, approved for service use.

Justification:
This item is a training standard item used in both training and combat. The procurement supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals.

Comments:

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature CTG, ARTY, 105MM VL ILLUM M314 W/O FUZE (E21702)	
Program Elements for Code B Items:	Code: A	Other Related Program Elements:	

TYPE CLASSIFICATION: 1970

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG, ARTY, 105MM VL ILLUM M314 W/O FUZE (E21702)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Support																
PRODUCTION ENGINEERING		1400000														
ACCEPTANCE TESTING																
SUBTOTAL PRODUCTION SUPPORT		**1400000**														
Total:		**1400**														

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG, ARTY,105MM IR ILLUM M1064 W/O FUZE (E21705)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	19.0		6.4					6.9	7.0			39.3
Less PY Adv Proc												
Net Proc P1	19.0		6.4					6.9	7.0			39.3
Plus CY Adv Proc												
Total Proc Cost	19.0		6.4					6.9	7.0			39.3
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
The M1064 is a 105mm Infrared (IR) Illuminating Cartridge compatible with the M762 series ET fuze, M67 propelling charge, and is packaged in the PA117 Shipping Container. The M1064 consists of a 40 gram expelling charge, illuminant canister and parachute assembly. Upon fuze function, the expelling charge simultaneously ignites the illuminate while ejecting it from the projectile. Once dispensed, fins on the canister assist in reducing the spin rate while the parachute provides a descent rate of 12 m/s. The Infrared Illumination greatly enhances the effectiveness of night vision devices providing front line units with temporary battlefield infrared illumination to observe the movements and maneuvers of enemy forces under the cover of darkness.
The item is Code A approved for service use.

Justification:
This item is a training standard item used in both training and combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army procurement goals.

TYPE CLASSIFICATION DATE: 2009

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG, ARTY,105MM IR ILLUM M1064 W/O FUZE (E21705)	Weapon System Type:	MDAP:	DODIC: CA53	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
SUBTOTAL HARDWARE COST																
Support																
NON-RECURRING COSTS																
RECAPITALIZATION					6407000											
SUBTOTAL NON-RECURRING COSTS					**6407000**											
Total:					**6407**											

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Procurement of Ammunition, Army/ 1/ Ammunition		CTG, ARTY,105MM IR ILLUM M1064 W/O FUZE (E21705)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
COMPLETE ROUND										

REMARKS:

FY 14 / 15 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, ARTY,105MM IR ILLUM M1064 W/O FUZE (E21705)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 14													Fiscal Year 15												Later
									Calendar Year 14													Calendar Year 15									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
COMPLETE ROUND																															
1	FY 13	A	7000	0	7000														7000												0
2	FY 15	A	0	0																			A								0
Total					7000														7000												
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	CANADIAN COMMERCIAL CORP, OTTAWA, CANADA	1000	5000	13000	
2	TO BE SELECTED, TBS01	1000	5000	13000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	20	26
	Reorder	6	6	20	26
2	Initial	6	6	24	30
	Reorder	6	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 16 / 17 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG, ARTY,105MM IR ILLUM M1064 W/O FUZE (E21705)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 16												Fiscal Year 17												Later
									Calendar Year 16												Calendar Year 17									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
COMPLETE ROUND																														
1	FY 13	A	7000	7000																										0
2	FY 15	A	0	0																			3000	2303						-5303
Total																							3000	2303						-5303
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	CANADIAN COMMERCIAL CORP, OTTAWA, CANADA	1000	5000	13000	
2	TO BE SELECTED, TBS01	1000	5000	13000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	20	26
	Reorder	6	6	20	26
2	Initial	6	6	24	30
	Reorder	6	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
ARTILLERY PROJECTILE, 155MM, ALL TYPES (E89500)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	3423.9	47.9	62.0	78.0	10.0	88.0	98.1	90.9	119.1	92.9		4022.8
Less PY Adv Proc												
Net Proc P1	3423.9	47.9	62.0	78.0	10.0	88.0	98.1	90.9	119.1	92.9		4022.8
Plus CY Adv Proc												
Total Proc Cost	3423.9	47.9	62.0	78.0	10.0	88.0	98.1	90.9	119.1	92.9		4022.8
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:

(E89500)ARTILLERY PROJECTILE, 155MM, ALL TYPES
This budget line includes Projectiles, Artillery, 155mm, All Types.

(E21618)PROJ, ARTY, 155MM EXT RANGE MARKING RD M110A3
The 155mm Smoke White Phosphorous (WP) M110A3 Artillery Round utilizes projectile bodies generated from the current M483 Dual Purpose Improved Conventional Munition (DPICM) demilitarization program and incorporates a more producible WP Bulk-filled Canister with 15.0 lbs of WP that provides smoke spotting capability to a maximum range of 22.5 kilometers providing increased operational effectiveness and improved training .
This item is Code A, approved for service use.

(E26904)Proj, Arty, 155MM IR ILLUM M1123
The 155mm M1123 Infrared Illumination projectile is used with night vision devices to illuminate a designated target area to a maximum range of 17.5 kilometers. The projectile has a hollow, steel-forged body containing an illumination canister, a canister expelling charge in the nose and a drogue parachute in the base. The illumination canister contains the main parachute and lines, the illumination candle assembly and secondary expelling charge and a delay element holder. The outer shell of the canister is fitted with four longitudinal fins. The projectile uses an Electronic Time Fuze. When the fuze functions, the primary expelling charge ignites forcing the drogue parachute and canister assembly against the base plate, rupturing the base pins and expelling the canister and parachute. The drogue parachute deploys and the canister fins extend. The expelling charge also ignites the delay element in the canister nose. The delay element ignites the secondary expelling charge within the canister after 8 seconds igniting the candle and expelling the main parachute. With the main parachute open, the illuminate candle descends at 15 feet per second and burns for 120 seconds. The M1123 Provides Infrared battlefield illumination that is 2.4x larger in diameter than the M1066 Infrared Illuminating projectile.
This item is Code A, approved for service use.

(E26904)PROJ, ARTY, 155MM VL ILLUM M1124
The 155MM Visual Light Illumination M1124 fired from 155mm howitzers is used to illuminate the battlefield to a maximum range of 17.5 kilometers. The projectile has a hollow, steel-forged body containing an illumination canister, a canister expelling charge in the nose and a drogue parachute in the base. The illuminate canister contains the main parachute and lines, the illuminate candle assembly and secondary expelling charge and a delay element holder. The outer shell of the canister is fitted with four longitudinal fins. The projectile uses a Mechanical or Electronic Time fuze. When the fuze functions, the primary expelling charge ignites forcing the drogue parachute and canister assembly against the base plate, rupturing the base pins and expelling the canister and parachute. The drogue parachute then deploys and the canister fins extend. The expelling charge also ignites the delay element in the canister nose. The delay element ignites the secondary

expelling charge within the canister after 8 seconds igniting the candle and expelling the main parachute. With the main parachute open, the illumination candle descends at 15 feet per second and burns for 120 seconds producing approximately 1,000,000 candlepower.
This item is Code A, approved for service use.

(E27603)PROJ, ARTY, 155MM HE IM TRAINING M1122
The 155mm M1122 High Explosive (HE) projectile will be the primary HE round used for training. The M1122 is a lower cost HE training round. The M1122 will replace the M804A1 and M107 Projectiles for training. It utilizes M483A1 DPICM metal parts from an ongoing M483A1 demil effort, is filled with high density concrete to simulate the weight of the M795 HE Projectile, and incorporates several Insensitive Munitions (IM) technologies (IMX-101 explosive fill, PBXN-9 Supplementary Charge, Meltable Fuze Well Liner and Meltable Fuze Plug) to increase survivability and safety. The M1122 will replicate the flight characteristics of the wartime M795 HE projectile with a maximum range of 22.5 kilometers.
This item is Code A, approved for service use.

(E66800)PROJ, ARTY, 155MM HE, M795
The M795 High Explosive (HE) Projectile is the primary HE round used for warfare operations with maximum range of 22.5 kilometers. The M795 incorporates Insensitive Munitions (IM) technologies that reduces vulnerability from unplanned stimuli e.g. fire/heat, shock and impact, while maintaining or exceeding the same level of effectiveness in combat. The 155mm M795 has a high fragmentation steel (HF1) body projectile filled with 23.8 pounds of IMX101 Explosive fill, PBXN-9 Supplementary Charge, and Meltable Fuze Plug. The projectile can use several different fuzes (impact, mechanical time, electronic time and short intrusion proximity). It is used for conventional fire support for harassment and interdiction, fragmentation and blast effect. The M795 projectile is employed against personnel, trucks, electronic surveillance and target acquisition devices, supply points, command and control and communications (C3) installations, and mechanized and armored forces.
This item is Code A, approved for service use.

Justification:
FY 2016 Base Budget supports critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station, and the combined training centers. Test requirements support the development, fielding, safety, and quality assurance of Army munitions and equipment throughout their life-cycle.

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.

FY 2016 Base procurement dollars in the amount of $77.995 million supports production of 92,777 projectiles. FY 2016 OCO procurement dollars in the amount of $10.000 million supports 6,078 projectiles. Funds are required to replenish munitions expended in combat operations in theater.

E21618 - PROJ, ARTY, 155MM EXT RANGE SPOTTING RD M110A3
This item is a training standard item used in both training and combat. Request supports annual training and build a war reserve inventory in accordance with the Army procurement goals.
TYPE CLASSIFICATION DATE: 1972

E26900 - PROJ, ARTY, 155MM VL ILLUM, M485 / M1124
This is a training standard item used in training and combat. Request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals.
TYPE CLASSIFICATION DATE: 1970

E26901 - PROJ, ARTY, 155MM IR ILLUM M1066 / M1123

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature ARTILLERY PROJECTILE, 155MM, ALL TYPES (E89500)	
Program Elements for Code B Items:	Code:	Other Related Program Elements:	

This item is a training standard item used in both training and combat. FY 2016 procurement supports annual training and builds a war reserve inventory in accordance with the Army procurement goals. TYPE CLASSIFICATION: 2010
FY 2016 Base procurement dollars in the amount of $12.600 million supports production of 8,334 cartridges.

E27603 - PROJ, ARTY, 155MM HE IM TRAINING M1122
This is a training unique item not used in combat. FY 2016 request supports annual training and builds a depot level inventory in accordance with the Army procurement goals.
TYPE CLASSIFICATION DATE: 2010
FY 2016 Base procurement dollars in the amount of $40.514 million supports production of 70,832 cartridges.

E66800 - PROJ, ARTY, 155MM HE, M795
This is a war reserve item used in combat. FY 2016 request builds a war reserve inventory in accordance with Army's procurement goals.
TYPE CLASSIFICATION DATE: 1982
FY 2016 Base procurement dollars in the amount of $24.881 million supports production of 13,611 cartridges.
FY 2016 OCO procurement dollars in the amount of $10.000 million supports production of 6,078 cartridges. Funds are required to replenish munitions expended in combat operations in theater.

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: ARTILLERY PROJECTILE, 155MM, ALL TYPES (E89500)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
Hardware Recurring																
E21618 PROJ, ARTY, 155MM MARKING M110A3	dz09				6294000	6324	995.23									
E26900 PROJ, ARTY, 155MM VL ILLUM, M485	da57				11119K	7557	1471.18									
E26904 PROJ, ARTY, 155MM IR ILLUM M1066	da56	16216K	11107	1459.98	12419K	8427	1473.63	12600K	8334	1511.87				12600K	8334	1511.87
E27603 PROJ, ARTY, 155MM HE IM TRAINING M1122	da51	11917K	19864	599.93	11277K	18238	618.31	40514K	70832	571.97				40514K	70832	571.97
E66800 PROJ, ARTY, 155MM HE, M795	da54	19769K	13891	1423.08	20914K	12595	1660.50	24881K	13611	1828.00	10000K	6078	1645.27	34881K	19689	1828.00
Total:		**47902K**			**62023K**			**77995K**			**10000K**			**87995K**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
PROJ, ARTY, 155MM EXT RANGE SPOTTING RD M110A3 (E21618)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty			6324				6659		6605			19588
Gross Cost			6.3				6.7		6.9			19.9
Less PY Adv Proc												
Net Proc P1			6.3				6.7		6.9			19.9
Plus CY Adv Proc												
Total Proc Cost			6.3				6.7		6.9			19.9
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												0.0

Description:
The 155mm Smoke White Phosphorous (WP) M110A3 Artillery Round utilizes projectile bodies generated from the current M483A1 Dual Purpose Improved Conventional Munition (DPICM) demilitarization program and incorporates a more producible WP Bulk-filled Canister with 15.0 lbs of WP that provides smoke spotting capability to a maximum range of 22.5 kilometers providing increased operational effectiveness and improved training .
This item is Code A, approved for service use.

Justification:
This item is a training standard item used in both training and combat. Request supports annual training and build a war reserve inventory in accordance with the Army procurement goals.

TYPE CLASSIFICATION DATE: 1972
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Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: PROJ, ARTY, 155MM EXT RANGE SPOTTING RD M110A3 (E21618)	Weapon System Type:	MDAP:	DODIC: DZ09	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
Load, Assemble, Pack (Lap)					1976882	6324	312.60									
SMOKE CANNISTER ASSEMBLY					2323674	6514	356.72									
Plug, Lifting, Meltable For Im					124483	6514	19.11									
DOWNLOAD, CLEAN AND INSPECT					652978	6640	98.34									
MODIFIED SUPPLEMENTAL CHARGE, PBXN9					210728	6514	32.35									
SUBTOTAL HARDWARE COST					**5288745**											
Support																
Production Engineering					740764											
Acceptance Testing					135000											
SUBTOTAL PRODUCTION SUPPORT					**875764**											
NON-RECURRING COSTS																
PRODUCTION QUALIFICATION TEST					129301											
SUBTOTAL NON-RECURRING COSTS					**129301**											
Total:					**6294**											

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:
Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature:
PROJ, ARTY, 155MM EXT RANGE SPOTTING RD M110A3 (E21618)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Load, Assemble, Pack (Lap)										
FY 2015	PINE BLUFF ARSENAL PINE BLUFF, AR	SS / FFP	PICATINNY ARSENAL, NJ	Mar 15	Mar 17	6324	312.60	Y		
SMOKE CANNISTER ASSEMBLY										
FY 2015	CRANE ARMY AMMO ACTIVITY CRANE, IN	PO	ROCK ISLAND ARSENAL, IL	Mar 15	Sep 16	6514	356.72	Y		
Plug, Lifting, Meltable For Im										
FY 2015	POLYMER TECHNOLOGIES, INC CLIFTON, NJ	C / FFP	PICATINNY ARSENAL, NJ	Mar 15	Sep 16	6514	19.11	Y		
DOWNLOAD, CLEAN AND INSPECT										
FY 2015	TO BE SELECTED TBS01	PO	PICATINNY ARSENAL, NJ	Mar 15	Sep 16	6640	98.34	Y		
MODIFIED SUPPLEMENTAL CHARGE, PBXN9										
FY 2015	TO BE SELECTED TBS02	C / FFP	PICATINNY ARSENAL, NJ	Mar 15	Sep 16	6514	32.35	Y		

REMARKS:

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
PROJ, ARTY, 155MM EXT RANGE SPOTTING RD M110A3 (E21618)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Load, Assemble, Pack (Lap)																														
1	FY 15	A	6324	0	6324						A																			6324
Total					6324																									6324
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	PINE BLUFF ARSENAL, PINE BLUFF, AR	5000	10000	15000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	3	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
PROJ, ARTY, 155MM EXT RANGE SPOTTING RD M110A3 (E21618)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Load, Assemble, Pack (Lap)																														
1	FY 15	A	6324	0	6324						6324																			0
Total					6324						6324																			
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	PINE BLUFF ARSENAL, PINE BLUFF, AR	5000	10000	15000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	3	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: PROJ, ARTY, 155MM VL ILLUM, M485 / M1124 (E26900)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty			7557				7441		7495			22493
Gross Cost	278.8		11.1				11.5		12.0			313.4
Less PY Adv Proc												
Net Proc P1	278.8		11.1				11.5		12.0			313.4
Plus CY Adv Proc												
Total Proc Cost	278.8		11.1				11.5		12.0			313.4
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												0.0

Description:
The 155MM Visual Light Illumination M1124 fired from 155mm howitzers is used to illuminate the battlefield to a maximum range of 17.5 kilometers. The projectile has a hollow, steel-forged body containing an illumination canister, a canister expelling charge in the nose and a drogue parachute in the base. The illuminate canister contains the main parachute and lines, the illuminate candle assembly and secondary expelling charge and a delay element holder. The outer shell of the canister is fitted with four longitudinal fins. The projectile uses a Mechanical or Electronic Time fuze. When the fuze functions, the primary expelling charge ignites forcing the drogue parachute and canister assembly against the base plate, rupturing the base pins and expelling the canister and parachute. The drogue parachute then deploys and the canister fins extend. The expelling charge also ignites the delay element in the canister nose. The delay element ignites the secondary expelling charge within the canister after 8 seconds igniting the candle and expelling the main parachute. With the main parachute open, the illumination candle descends at 15 feet per second and burns for 120 seconds producing approximately 1,000,000 candlepower.
This item is Code A, approved for service use.

Justification:
This is a training standard item used in training and combat. Request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals.

TYPE CLASSIFICATION DATE: 1970

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: PROJ, ARTY, 155MM VL ILLUM, M485 / M1124 (E26900)	Weapon System Type:	MDAP:	DODIC: DA57	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
LOAD, ASSEMBLE, PACK (LAP)					2195233	7557	290.49									
DOWNLOAD, CLEAN AND INSPECT					780328	7935	98.34									
METAL PARTS SETS					2437208	7557	322.51									
ILLUM CANNISTER, 155MM					2927190	7708	379.76									
CANISTER MPTS ASSY, 155MM ILLUM					450841	7708	58.49									
CANISTER BASE ASSY, 155MM ILLUM					141056	7708	18.30									
M10 EXPULSION CHARGE ASSEMBLY					125486	7708	16.28									
PARACHUTE MAIN, 155MM ILLUM					357497	7708	46.38									
PARACHUTE MAIN SUPPORTS, 155MM ILUM					96199	30833	3.12									
PARACHUTE DROGUE ASSEMBLY, 155MM ILLUM					156395	7708	20.29									
DELAY ELEMENT, 155MM ILLUM					249893	7708	32.42									
WOOD PALLET (HEAT TREATED)					85071	982	86.63									
SUBTOTAL HARDWARE COST					**10002K**											
Support																
PRODUCTION ENGINEERING					1051330											
ACCEPTANCE TESTING					65885											
SUBTOTAL NON-RECURRING COSTS					**1117215**											
SUBTOTAL PRODUCTION SUPPORT																
Total:					**11117**											

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:
Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature:
PROJ, ARTY, 155MM VL ILLUM, M485 / M1124 (E26900)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
LOAD, ASSEMBLE, PACK (LAP)										
FY 2015	PINE BLUFF ARSENAL PINE BLUFF, AR	PO	PICATINNY ARSENAL, NJ	Mar 15	Mar 17	7557	290.49	Y		
DOWNLOAD, CLEAN AND INSPECT										
FY 2015	TO BE SELECTED TBS01	PO	PICATINNY ARSENAL, NJ	Mar 15	Sep 16	7935	98.34	Y		
METAL PARTS SETS										
FY 2015	CRANE ARMY AMMO ACTIVITY CRANE, IN	PO	PICATINNY ARSENAL, NJ	Feb 15	Aug 16	7557	322.51	Y		
ILLUM CANNISTER, 155MM										
FY 2015	CRANE ARMY AMMO ACTIVITY CRANE, IN	PO	ROCK ISLAND ARSENAL, IL	Feb 15	Oct 16	7708	379.76	Y		
CANISTER MPTS ASSY, 155MM ILLUM										
FY 2015	TO BE SELECTED TBS02	C / IDIQ	PICATINNY ARSENAL, NJ	Mar 15	Sep 16	7708	58.49	Y		
CANISTER BASE ASSY, 155MM ILLUM										
FY 2015	TO BE SELECTED TBS03	C / IDIQ	PICATINNY ARSENAL, NJ	Mar 15	Nov 16	7708	18.30	Y		
M10 EXPULSION CHARGE ASSEMBLY										
FY 2015	CRANE ARMY AMMO ACTIVITY CRANE, IN	PO	ROCK ISLAND ARSENAL, IL	Mar 15	Sep 16	7708	16.28	Y		
PARACHUTE MAIN, 155MM ILLUM										
FY 2015	TO BE SELECTED TBS04	C / IDIQ	ROCK ISLAND ARSENAL, IL	Mar 15	Sep 16	7708	46.38	Y		
PARACHUTE MAIN SUPPORTS, 155MM ILUM										
FY 2015	CRANE ARMY AMMO ACTIVITY CRANE, IN	PO	ROCK ISLAND ARSENAL, IL	Mar 15	Nov 16	30833	3.12	Y		
PARACHUTE DROGUE ASSEMBLY, 155MM ILLUM										
FY 2015	TO BE SELECTED TBS05	C / IDIQ	ROCK ISLAND ARSENAL, IL	Mar 15	Oct 16	7708	20.29	Y		
DELAY ELEMENT, 155MM ILLUM										
FY 2015	CRANE ARMY AMMO ACTIVITY CRANE, IN	PO	ROCK ISLAND ARSENAL, IL	Feb 15	Aug 16	7708	32.42	Y		
WOOD PALLET (HEAT TREATED)										
FY 2015	PINE BLUFF ARSENAL PINE BLUFF, AR	PO	ROCK ISLAND ARSENAL, IL	Mar 15	Sep 16	982	86.63	Y		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Procurement of Ammunition, Army/ 1/ Ammunition		PROJ, ARTY, 155MM VL ILLUM, M485 / M1124 (E26900)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date

REMARKS: Canister Base Assembly: IDIQ contract awarded to multiple contractors. Requirements competed among the following contractors: Woodlawn MFG INC., Marshall, TX and Bailey Tooling and MFG CO., Lancaster, TX. Parachute Main: IDIQ contract awarded to multiple contractors. Requirements competed among the following contractors: Production Products MFG., Buffalo, MO; North American Aerodynamics INC., Roxboro, NC and Yoland Corp INC., Brooklyn, NY. Parachute Drogue Assembly: IDIQ contract awarded to mulitple contractors. Requirements will be competed among the following contractors: North American Aerodynamics INC., Roxboro, NC and Yoland Corp INC., Brooklyn, NY.

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
PROJ, ARTY, 155MM VL ILLUM, M485 / M1124 (E26900)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	16100	9500	6600																6600									0
1	FY 15	A	7557	0	7557						A																			7557
1	FY 15	MC	3738	0	3738						A																			3738
Total					17895																6600									11295
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	PINE BLUFF ARSENAL, PINE BLUFF, AR	2000	4000	10000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	4	3	24	27
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
PROJ, ARTY, 155MM VL ILLUM, M485 / M1124 (E26900)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	16100	16100																										0
1	FY 15	A	7557	0	7557						2000	2000	3557																	0
1	FY 15	MC	3738	0	3738						2000	1738																		0
Total					11295						4000	3738	3557																	
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	PINE BLUFF ARSENAL, PINE BLUFF, AR	2000	4000	10000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	4	3	24	27
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: PROJ, ARTY, 155MM IR ILLUM M1066 / M1123 (E26904)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty		11107	8427	8334		8334			8292			36160
Gross Cost	22.6	16.2	12.4	12.6		12.6			13.3			77.1
Less PY Adv Proc												
Net Proc P1	22.6	16.2	12.4	12.6		12.6			13.3			77.1
Plus CY Adv Proc												
Total Proc Cost	22.6	16.2	12.4	12.6		12.6			13.3			77.1
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C						0.0						0.0

Description:

The 155mm M1123 Infrared Illumination projectile is used with night vision devices to illuminate a designated target area to a maximum range of 22.5 kilometers. The round utilizes projectile bodies generated from the current M483 demilitarization ptogram that containins an illumination canister, a canister expelling charge in the nose and a drogue parachute in the base. The illumination canister contains the main parachute and lines, the illumination candle assembly and secondary expelling charge and a delay element holder. The outer shell of the canister is fitted with four longitudinal fins. The projectile uses an Electronic Time Fuze. When the fuze functions, the primary expelling charge ignites forcing the drogue parachute and canister assembly against the base plate, rupturing the base pins and expelling the canister and parachute. The drogue parachute deploys and the canister fins extend. The expelling charge also ignites the delay element in the canister nose. The delay element ignites the secondary expelling charge within the canister after 8 seconds igniting the candle and expelling the main parachute. With the main parachute open, the illuminate candle descends at 15 feet per second and burns for 120 seconds. The M1123 Provides Infrared battlefield illumination that is 2.4x larger in diameter than the M485A2 visible light projectile

This item is Code A, approved for service use.

Justification:

This item is a training standard item used in both training and combat. FY 2016 procurement supports annual training and builds a war reserve inventory in accordance with the Army procurement goals.

TYPE CLASSIFICATION: 2010

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: PROJ, ARTY, 155MM IR ILLUM M1066 / M1123 (E26904)	Weapon System Type:	MDAP:	DODIC: DA56	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
LOAD, ASSEMBLE, PACK (LAP)		2899371	11107	261.04	2447959	8427	290.49	2463364	8334	295.58				2463364	8334	295.58
DOWNLOAD, CLEAN AND INSPECT		962115	11662	82.50	870112	8848	98.34	877625	8750	100.30				877625	8750	100.30
METAL PARTS SETS		3391745	11107	305.37	2717792	8427	322.51	2741303	8334	328.93				2741303	8334	328.93
ILLUM CANNISTER, 155MM		3658814	11329	322.96	3264417	8596	379.76	3292220	8500	387.32				3292220	8500	387.32
CANISTER MPTS ASSY, 155MM ILLUM		652211	11329	57.57	502780	8596	58.49	507025	8500	59.65				507025	8500	59.65
CANISTER BASE ASSY, 155MM ILLUM		158946	11329	14.03	157307	8596	18.30	158610	8500	18.66				158610	8500	18.66
PARACHUTE MAIN, 155MM ILLUM		387225	11329	34.18	398682	8596	46.38	402050	8500	47.30				402050	8500	47.30
PARACHUTE MAIN SUPPORTS, 155MM ILUM		140483	45317	3.10	107272	34382	3.12	108126	34002	3.18				108126	34002	3.18
PARACHUTE DROGUE ASSEMBLY, 155MM ILLUM		194632	11329	17.18	174413	8596	20.29	175865	8500	20.69				175865	8500	20.69
WOOD PALLET (HEAT TREATED)		122639	1444	84.93	94946	1096	86.63	95683	1083	88.35				95683	1083	88.35
M10 EXPULSION CHARGE ASSEMBLY		175600	11329	15.50	139943	8596	16.28	141015	8500	16.59				141015	8500	16.59
DELAY ELEMENT, 155MM ILLUM		401726	11329	35.46	278682	8596	32.42	325295	8500	38.27				325295	8500	38.27
SUBTOTAL HARDWARE COST		**13146K**			**11154K**			**11288K**						**11288K**		
Support																
PRODUCTION ENGINEERING		2905457			1170092			1262000						1262000		
ACCEPTANCE TESTING		165000			94873			50000						50000		
SUBTOTAL PRODUCTION SUPPORT		**3070457**			**1264965**			**1312000**						**1312000**		
Total:		**16216**			**12419**			**12600**						**12600**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2015

Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature: PROJ, ARTY, 155MM IR ILLUM M1066 / M1123 (E26904)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
LOAD, ASSEMBLE, PACK (LAP)										
FY 2014	PINE BLUFF ARSENAL PINE BLUFF, AR	PO	PICATINNY ARSENAL, NJ	Nov 13	Nov 15	11107	261.04	Y		
FY 2015	PINE BLUFF ARSENAL PINE BLUFF, AR	PO	PICATINNY ARSENAL, NJ	Mar 15	Mar 17	8427	290.49	Y		
FY 2016	PINE BLUFF ARSENAL PINE BLUFF, AR	PO	PICATINNY ARSENAL, NJ	Mar 16	Mar 18	8334	295.58	Y		
DOWNLOAD, CLEAN AND INSPECT										
FY 2014	MCALESTER ARMY AMMUNITION MCALESTER, OK	PO	PICATINNY ARSENAL, NJ	Nov 13	May 15	11662	82.50	Y		
FY 2015	TO BE SELECTED TBS01	PO	PICATINNY ARSENAL, NJ	Mar 15	Sep 16	8848	98.34	Y		
FY 2016	TO BE SELECTED TBS01	PO	PICATINNY ARSENAL, NJ	Mar 16	Sep 17	8750	100.30	Y		
METAL PARTS SETS										
FY 2014	CRANE ARMY AMMO ACTIVITY CRANE, IN	PO	PICATINNY ARSENAL, NJ	Nov 13	May 15	11107	305.37	Y		
FY 2015	CRANE ARMY AMMO ACTIVITY CRANE, IN	PO	PICATINNY ARSENAL, NJ	Feb 15	Aug 16	8427	322.51	Y		
FY 2016	CRANE ARMY AMMO ACTIVITY CRANE, IN	PO	PICATINNY ARSENAL, NJ	Jan 16	Jul 17	8334	328.93	Y		
ILLUM CANNISTER, 155MM										
FY 2014	CRANE ARMY AMMO ACTIVITY CRANE, IN	PO	ROCK ISLAND ARSENAL, IL	Nov 13	May 15	11329	322.96	Y		
FY 2015	CRANE ARMY AMMO ACTIVITY CRANE, IN	PO	ROCK ISLAND ARSENAL, IL	Feb 15	Oct 16	8596	379.76	Y		
FY 2016	CRANE ARMY AMMO ACTIVITY CRANE, IN	PO	ROCK ISLAND ARSENAL, IL	Jan 16	Sep 17	8500	387.32	Y		
CANISTER MPTS ASSY, 155MM ILLUM										
FY 2014	BAILEY TOOLING & LANCASTER, TX	C / IDIQ	PICATINNY ARSENAL, NJ	Dec 13	Sep 14	11329	57.57	Y		
FY 2015	TO BE SELECTED TBS02	C / IDIQ	PICATINNY ARSENAL, NJ	Mar 15	Nov 16	8596	58.49	Y		
FY 2016	TO BE SELECTED TBS02	C / IDIQ	PICATINNY ARSENAL, NJ	Feb 16	Oct 17	8500	59.65	Y		
CANISTER BASE ASSY, 155MM ILLUM										
FY 2014	BAILEY TOOLING & LANCASTER, TX	C / IDIQ	PICATINNY ARSENAL, NJ	Dec 13	Aug 14	11329	14.03	Y		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2015

Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature: PROJ, ARTY, 155MM IR ILLUM M1066 / M1123 (E26904)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
FY 2015	TO BE SELECTED TBS03	C / IDIQ	PICATINNY ARSENAL, NJ	Mar 15	Nov 16	8596	18.30	Y		
FY 2016	TO BE SELECTED TBS03	C / IDIQ	PICATINNY ARSENAL, NJ	Feb 16	Oct 17	8500	18.66	Y		
PARACHUTE MAIN, 155MM ILLUM										
FY 2014	YOLAND CORPORATION, INC. BROOKLYN, NY	C / IDIQ	ROCK ISLAND ARSENAL, IL	Dec 13	Sep 14	11329	34.18	Y		
FY 2015	TO BE SELECTED TBS04	C / IDIQ	ROCK ISLAND ARSENAL, IL	Mar 15	Sep 16	8596	46.38	Y		
FY 2016	TO BE SELECTED TBS04	C / IDIQ	ROCK ISLAND ARSENAL, IL	Feb 16	Aug 17	8500	47.30	Y		
PARACHUTE MAIN SUPPORTS, 155MM ILUM										
FY 2014	CRANE ARMY AMMO ACTIVITY CRANE, IN	PO	ROCK ISLAND ARSENAL, IL	Apr 14	Oct 15	45317	3.10	Y		
FY 2015	CRANE ARMY AMMO ACTIVITY CRANE, IN	PO	ROCK ISLAND ARSENAL, IL	Feb 15	Oct 16	34382	3.12	Y		
FY 2016	CRANE ARMY AMMO ACTIVITY CRANE, IN	PO	ROCK ISLAND ARSENAL, IL	Jan 16	Sep 17	34002	3.18	Y		
PARACHUTE DROGUE ASSEMBLY, 155MM ILLUM										
FY 2014	YOLAND CORPORATION, INC. BROOKLYN, NY	C / IDIQ	ROCK ISLAND ARSENAL, IL	Dec 13	Jun 14	11329	17.18	Y		
FY 2015	TO BE SELECTED TBS05	C / IDIQ	ROCK ISLAND ARSENAL, IL	Mar 15	Sep 16	8596	20.29	Y		
FY 2016	TO BE SELECTED TBS05	C / IDIQ	ROCK ISLAND ARSENAL, IL	Feb 16	Aug 17	8500	20.69	Y		
WOOD PALLET (HEAT TREATED)										
FY 2014	PINE BLUFF ARSENAL PINE BLUFF, AR	PO	ROCK ISLAND ARSENAL, IL	Dec 13	Sep 15	1444	84.93	Y		
FY 2015	PINE BLUFF ARSENAL PINE BLUFF, AR	PO	ROCK ISLAND ARSENAL, IL	Mar 15	Sep 16	1096	86.63	Y		
FY 2016	PINE BLUFF ARSENAL PINE BLUFF, AR	PO	ROCK ISLAND ARSENAL, IL	Jan 16	Jul 17	1083	88.35	Y		
M10 EXPULSION CHARGE ASSEMBLY										
FY 2014	CRANE ARMY AMMO ACTIVITY CRANE, IN	PO	ROCK ISLAND ARSENAL, IL	Mar 14	Sep 15	11329	15.50	Y		
FY 2015	CRANE ARMY AMMO ACTIVITY CRANE, IN	PO	ROCK ISLAND ARSENAL, IL	Mar 15	Sep 16	8596	16.28	Y		
FY 2016	CRANE ARMY AMMO ACTIVITY	PO	ROCK ISLAND	Jan 16	Jul 17	8500	16.59	Y		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Procurement of Ammunition, Army/ 1/ Ammunition		PROJ, ARTY, 155MM IR ILLUM M1066 / M1123 (E26904)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
	CRANE, IN		ARSENAL, IL							
DELAY ELEMENT, 155MM ILLUM										
FY 2014	CRANE ARMY AMMO ACTIVITY CRANE, IN	PO	ROCK ISLAND ARSENAL, IL	Nov 13	May 15	11329	35.46	Y		
FY 2015	CRANE ARMY AMMO ACTIVITY CRANE, IN	PO	ROCK ISLAND ARSENAL, IL	Feb 15	Aug 16	8596	32.42	Y		
FY 2016	CRANE ARMY AMMO ACTIVITY CRANE, IN	PO	ROCK ISLAND ARSENAL, IL	Jan 16	Jul 17	8500	38.27	Y		

REMARKS: Canister Base Assembly: IDIQ contract awarded to multiple contractors. Requirements competed among the following contractors: Woodlawn MFG INC., Marshall, TX and Bailey Tooling and MFG CO., Lancaster, TX. Parachute Main: IDIQ contract awarded to multiple contractors. Requirements competed among the following contractors: Production Products MFG., Buffalo, MO; North American Aerodynamics INC., Roxboro, NC and Yoland Corp INC., Brooklyn, NY. Parachute Drogue Assembly: IDIQ contract awarded to mulitple contractors. Requirements will be competed among the following contractors: North American Aerodynamics INC., Roxboro, NC and Yoland Corp INC., Brooklyn, NY.

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
PROJ, ARTY, 155MM IR ILLUM M1066 / M1123 (E26904)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	6200	2000	4200															4200										0
1	FY 14	A	11107	0	11107														11107											0
1	FY 15	A	8427	0	8427						A																			8427
1	FY 16	A	8334	0	8334																		A							8334
1	FY 15	MC	5454	0	5454						A																			5454
Total					37522														11107	4200										22215
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+	MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
1	PINE BLUFF ARSENAL, PINE BLUFF, AR	10000	15000	20000		1	Initial	6	6	24	30	
							Reorder	6	6	24	30	
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
PROJ, ARTY, 155MM IR ILLUM M1066 / M1123 (E26904)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	6200	6200																										0
1	FY 14	A	11107	11107																										0
1	FY 15	A	8427	0	8427						8427																			0
1	FY 16	A	8334	0	8334																		8334							0
1	FY 15	MC	5454	0	5454						5454																			0
Total					22215						13881												8334							
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	PINE BLUFF ARSENAL, PINE BLUFF, AR	10000	15000	20000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
PROJ, ARTY, 155MM HE IM TRAINING M1122 (E27603)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty		19864	18238	70832		70832	94356	102964	94352	102244		502850
Gross Cost	26.1	11.9	11.3	40.5		40.5	55.0	61.0	57.0	63.0		325.9
Less PY Adv Proc												
Net Proc P1	26.1	11.9	11.3	40.5		40.5	55.0	61.0	57.0	63.0		325.9
Plus CY Adv Proc												
Total Proc Cost	26.1	11.9	11.3	40.5		40.5	55.0	61.0	57.0	63.0		325.9
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												0.0

Description:
The 155mm M1122 High Explosive (HE) projectile will be the primary HE round used for training. The M1122 is a lower cost HE training round that combines more realistic performance (improved acoustic and visual signatures) and survivability when compared to standard 155mm training rounds. The M1122 will replace the M804A1 Practice Projectile and be used as an alternative to the M107 HE Projectile for training. It utilizes M483A1 Dual Purpose Improved Conventional Munitions (DPICM) metal parts from an ongoing M483A1 demil effort, is filled with high density concrete to simulate the weight of the M795 HE Projectile, and incorporates several Insensitive Munitions (IM) technologies (IMX-101 explosive fill, PBXN-9 Supplementary Charge, Meltable Fuze Well Liner and Meltable Fuze Plug) to increase survivability and safety. The M1122 will replicate the flight characteristics of the wartime M795 HE projectile with a maximum range of 22.5 kilometers.
This item is Code A, approved for service use.

Justification:
This is a training unique item not used in combat. FY 2016 request supports annual training and builds a depot level inventory in accordance with the Army procurement goals.

TYPE CLASSIFICATION DATE: 2010

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: PROJ, ARTY, 155MM HE IM TRAINING M1122 (E27603)	Weapon System Type:	MDAP:	DODIC: DA51	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
LOAD, ASSEMBLE, PACK (LAP)		7351865	19864	370.11	6885027	18238	377.51	27272K	70832	385.03				27272K	70832	385.03
EXPLOSIVE FILL IMX-101		1229979	59592	20.64	1151183	54714	21.04	4685537	212496	22.05				4685537	212496	22.05
PLUG, LIFTING, MELTABLE FOR IM		353554	20261	17.45	355503	18603	19.11	1408114	72248	19.49				1408114	72248	19.49
SUPPLEMENTAL CHARGE, PBXN9		481604	20261	23.77	468051	18603	25.16	1853884	72248	25.66				1853884	72248	25.66
WOODEN PALLETS, IMX101		260421	2582	100.86	212489	2371	89.62	841611	9208	91.40				841611	9208	91.40
SUBTOTAL HARDWARE COST		**9677423**			**9072254**			**36062K**						**36062K**		
Support																
PRODUCTION ENGINEERING		2089000			2054762			4051776						4051776		
ACCEPTANCE TESTING		150000			150000			400000						400000		
SUBTOTAL PRODUCTION SUPPORT		**2239000**			**2204762**			**4451776**						**4451776**		
Total:		**11917**			**11277**			**40514**						**40514**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2015

Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature: PROJ, ARTY, 155MM HE IM TRAINING M1122 (E27603)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
LOAD, ASSEMBLE, PACK (LAP)										
FY 2014	MCALESTER ARMY AMMUNITION MCALESTER, OK	PO	PICATINNY ARSENAL, NJ	Mar 15	Feb 17	19864	370.11	Y		
FY 2015	MCALESTER ARMY AMMUNITION MCALESTER, OK	PO	PICATINNY ARSENAL, NJ	Mar 15	Mar 17	18238	377.51	Y		
FY 2016	MCALESTER ARMY AMMUNITION MCALESTER, OK	PO	PICATINNY ARSENAL, NJ	Mar 16	Mar 18	70832	385.03	Y		
EXPLOSIVE FILL IMX-101										
FY 2014	BAE SYSTEMS ORDNANCE SYSTEMS KINGSPORT, TN	SS / FFP	ROCK ISLAND ARSENAL, IL	Jul 14	Mar 16	59592	20.64	Y		
FY 2015	BAE SYSTEMS ORDNANCE SYSTEMS KINGSPORT, TN	SS / FFP	ROCK ISLAND ARSENAL, IL	Mar 15	Nov 16	54714	21.04	Y		
FY 2016	BAE SYSTEMS ORDNANCE SYSTEMS KINGSPORT, TN	SS / FFP	ROCK ISLAND ARSENAL, IL	Feb 16	Oct 17	212496	22.05	Y		
PLUG, LIFTING, MELTABLE FOR IM										
FY 2014	POLYMER TECHNOLOGIES, INC CLIFTON, NJ	C / FFP	PICATINNY ARSENAL, NJ	Dec 13	Jun 15	20261	17.45	Y		
FY 2015	POLYMER TECHNOLOGIES, INC CLIFTON, NJ	C / FFP	PICATINNY ARSENAL, NJ	Mar 15	Sep 16	18603	19.11	Y		
FY 2016	POLYMER TECHNOLOGIES, INC CLIFTON, NJ	C / FFP	PICATINNY ARSENAL, NJ	Mar 16	Sep 17	72248	19.49	Y		
SUPPLEMENTAL CHARGE, PBXN9										
FY 2014	CHEMRING ORDNANCE, INC. PERRY, FL	C / IDIQ	ROCK ISLAND ARSENAL, IL	Feb 14	Aug 15	20261	23.77	Y		
FY 2015	TO BE SELECTED TBS01	C / IDIQ	ROCK ISLAND ARSENAL, IL	Mar 15	Sep 16	18603	25.16	Y		
FY 2016	TO BE SELECTED TBS01	C / IDIQ	ROCK ISLAND ARSENAL, IL	Feb 16	Aug 17	72248	25.66	Y		
WOODEN PALLETS, IMX101										
FY 2014	KNOX CNTY ASSOC RETARDED VINCENNES, IN	C / FFP	ROCK ISLAND ARSENAL, IL	Dec 13	Sep 15	2582	100.86	Y		
FY 2015	KNOX CNTY ASSOC RETARDED VINCENNES, IN	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 15	Sep 16	2371	89.62	Y		
FY 2016	KNOX CNTY ASSOC RETARDED VINCENNES, IN	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 16	Sep 17	9208	91.40	Y		

REMARKS: Supplemental Charge, PBXN9 is and IDIQ contract awarded to multiple contractors. Requirements will be competed among the following contractors: DZI Lonestar LLC., Texarkana, TX and Chemring Ordnance, INC., Perry FL.

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
PROJ, ARTY, 155MM HE IM TRAINING M1122 (E27603)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15													Fiscal Year 16											Later
									Calendar Year 15													Calendar Year 16								
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	40290	654	39636			7184					4248			10000			6388											0
1	FY 14	A	19864	0	19864						A																			19864
1	FY 15	A	18238	0	18238						A																			18238
1	FY 16	A	70832	0	70832																		A							70832
Total					148570			7184					4248			10000			6388											108934
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	MCALESTER ARMY AMMUNITION, MCALESTER, OK	1000	5000	13000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	12	24	36
	Reorder	6	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
PROJ, ARTY, 155MM HE IM TRAINING M1122 (E27603)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	40290	40290																										0
1	FY 14	A	19864	0	19864						2500	2500	2500	2500	2500	2364														0
1	FY 15	A	18238	0	18238						2500	2500	2500	2500	2500	2636	3102													0
1	FY 16	A	70832	0	70832																		13000	13000	13000	13000	13000	5832		0
Total					108934						5000	5000	5000	5000	5000	5000	3102						13000	13000	13000	13000	13000	5832		
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	MCALESTER ARMY AMMUNITION, MCALESTER, OK	1000	5000	13000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	12	24	36
	Reorder	6	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: PROJ, ARTY, 155MM HE, M795 (E66800)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty		13891	12595	13611	6078	19689	13339	15896	15587	15279		106276
Gross Cost	285.5	19.8	20.9	24.9	10.0	34.9	24.9	29.9	29.9	29.9		475.5
Less PY Adv Proc												
Net Proc P1	285.5	19.8	20.9	24.9	10.0	34.9	24.9	29.9	29.9	29.9		475.5
Plus CY Adv Proc												
Total Proc Cost	285.5	19.8	20.9	24.9	10.0	34.9	24.9	29.9	29.9	29.9		475.5
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												0.0

Description:
The M795 High Explosive (HE) Projectile is the primary HE round used for warfare operations with maximum range of 22.5 kilometers. The M795 incorporates Insensitive Munitions (IM) technologies that reduces vulnerability from unplanned stimuli e.g. fire/heat, shock and impact, while maintaining or exceeding the same level of effectiveness in combat. The 155mm M795 has a high fragmentation steel (HF1) body projectile filled with 23.8 pounds of IMX101 Explosive fill, PBXN-9 Supplementary Charge, and Meltable Fuze Plug. The projectile can use several different fuzes (impact, mechanical time, electronic time and short intrusion proximity). It is used for conventional fire support for harassment and interdiction, fragmentation and blast effect. The M795 projectile is employed against personnel, trucks, electronic surveillance and target acquisition devices, supply points, command and control and communications (C3) installations, and mechanized and armored forces.
This item is Code A, approved for service use.

Justification:
This is a war reserve item used in combat. FY 2016 request builds a war reserve inventory in accordance with Army's procurement goals.

Comments:
TYPE CLASSIFICATION DATE: 1982

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: PROJ, ARTY, 155MM HE, M795 (E66800)	Weapon System Type:	MDAP:	DODIC: DA54	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
LOAD, ASSEMBLE, PACK (LAP)		4597365	13891	330.96	4309757	12595	342.18	4750239	13611	349.00	2121222	6078	349.00	6871461	19689	349.00
METAL PARTS - M795		4840272	14169	341.61	6284182	12940	485.64	6876528	13883	495.32	3070984	6200	495.32	9947512	20083	495.32
PLUG, LIFTING, MELTABLE FOR IM		247249	14169	17.45	247283	12940	19.11	270580	13883	19.49	120838	6200	19.49	391418	20083	19.49
SUPPLEMENTAL CHARGE, PBXN9		336797	14169	23.77	325570	12940	25.16	356238	13890	25.66	159092	6200	25.66	515330	20090	25.66
WOODEN PALLETS, IMX101		182189	1806	100.88	146708	1637	89.62	161687	1769	91.40	72206	790	91.40	233893	2559	91.40
EXPLOSIVE FILL IMX-101		7141919	458403	15.58	8744960	415635	21.04	9904044	449163	22.05	4422657	200574	22.05	14327K	649737	22.05
SUBTOTAL HARDWARE COST		**17346K**			**20058K**			**22319K**			**9966999**			**32286K**		
Support																
PRODUCTION ENGINEERING		2190252			776687			2489426			895			2490321		
ACCEPTANCE TESTING		42000			78487			72249			32250			104499		
SUBTOTAL PRODUCTION SUPPORT		**2232252**			**855174**			**2561675**			**33145**			**2594820**		
NON-RECURRING COSTS																
REQUEST FOR EQUITABLE ADJUSTMENT		192000														
SUBTOTAL NON-RECURRING COSTS		**192000**														
Total:		**19769**			**20914**			**24881**			**10000**			**34880**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2015

Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature: PROJ, ARTY, 155MM HE, M795 (E66800)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
EXPLOSIVE FILL IMX-104										
LOAD, ASSEMBLE, PACK (LAP)										
FY 2014	AMERICAN ORDNANCE LLC (IAAP) MIDDLETOWN, IA	SS / FFP	ROCK ISLAND ARSENAL, IL	Dec 13	Dec 15	13891	330.96	Y		
FY 2015	AMERICAN ORDNANCE LLC (IAAP) MIDDLETOWN, IA	SS / FFP	ROCK ISLAND ARSENAL, IL	Aug 15	Aug 17	12595	342.18	Y		
FY 2016	AMERICAN ORDNANCE LLC (IAAP) MIDDLETOWN, IA	SS / FFP	ROCK ISLAND ARSENAL, IL	Mar 16	Mar 18	19689	349.00	Y		
METAL PARTS - M795										
FY 2014	GENERAL DYNAMICS ORD AND TACT SCRANTON, PA	C / FFP	PICATINNY ARSENAL, NJ	Dec 13	Jun 15	14169	341.61	Y		
FY 2015	TO BE SELECTED TBS01	C / FFP	PICATINNY ARSENAL, NJ	Feb 15	Aug 16	12940	485.64	Y		
FY 2016	TO BE SELECTED TBS01	C / FFP	PICATINNY ARSENAL, NJ	Feb 16	Aug 17	20083	495.32	Y		
PLUG, LIFTING, MELTABLE FOR IM										
FY 2014	POLYMER TECHNOLOGIES, INC CLIFTON, NJ	C / FFP	PICATINNY ARSENAL, NJ	Dec 13	Jun 15	14169	17.45	Y		
FY 2015	POLYMER TECHNOLOGIES, INC CLIFTON, NJ	C / FFP	PICATINNY ARSENAL, NJ	Mar 15	Sep 16	12940	19.11	Y		
FY 2016	POLYMER TECHNOLOGIES, INC CLIFTON, NJ	C / FFP	PICATINNY ARSENAL, NJ	Mar 16	Sep 17	20083	19.49	Y		
SUPPLEMENTAL CHARGE, PBXN9										
FY 2014	CHEMRING ORDNANCE, INC. PERRY, FL	C / IDIQ	ROCK ISLAND ARSENAL, IL	Mar 14	Sep 15	14169	23.77	Y		
FY 2015	TO BE SELECTED TBS02	C / IDIQ	ROCK ISLAND ARSENAL, IL	Mar 15	Sep 16	12940	25.16	Y		
FY 2016	TO BE SELECTED TBS02	C / IDIQ	ROCK ISLAND ARSENAL, IL	Feb 16	Aug 17	20090	25.66	Y		
WOODEN PALLETS, IMX101										
FY 2014	KNOX CNTY ASSOC RETARDED VINCENNES, IN	C / FFP	ROCK ISLAND ARSENAL, IL	Dec 13	Jun 15	1806	100.88	Y		
FY 2015	KNOX CNTY ASSOC RETARDED VINCENNES, IN	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 15	Sep 16	1637	89.62	Y		
FY 2016	KNOX CNTY ASSOC RETARDED VINCENNES, IN	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 16	Sep 17	2559	91.40	Y		
EXPLOSIVE FILL IMX-101										

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Procurement of Ammunition, Army/ 1/ Ammunition		PROJ, ARTY, 155MM HE, M795 (E66800)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
FY 2014	BAE SYSTEMS ORDNANCE SYSTEMS KINGSPORT, TN	SS / FFP	ROCK ISLAND ARSENAL, IL	Jul 14	Sep 15	458403	15.58	Y		
FY 2015	BAE SYSTEMS ORDNANCE SYSTEMS KINGSPORT, TN	SS / FFP	ROCK ISLAND ARSENAL, IL	Mar 15	Sep 16	415635	21.04	Y		
FY 2016	BAE SYSTEMS ORDNANCE SYSTEMS KINGSPORT, TN	SS / FFP	ROCK ISLAND ARSENAL, IL	Feb 16	Oct 17	649737	22.05	Y		

REMARKS: Supplemental Charge, PBXN9: IDIQ contract awarded to multiple contractors. Requirements will be competed among the following contractors: Chemring Ordnance, INC., Perry FL and DZI Lonestar LLC., Texarkana TX.

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
PROJ, ARTY, 155MM HE, M795 (E66800)

Date: February 2015

COST ELEMENTS						Fiscal Year 15														Fiscal Year 16										
									Calendar Year 15												Calendar Year 16									
MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Later
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	36211	30000	6211			6211																						0
1	FY 14	A	13891	0	13891															3925	2710	1900	1900	1900	1556					0
1	FY 15	A	12595	0	12595											A														12595
1	FY 16	A	19689	0	19689																		A							19689
1	FY 13	MC	128097	0	128097		8904	9169											4050	6075	7290	8100	8100	8100	8100	8100	8100	8100	9812	26097
1	FY 15	MC	16780	0	16780											A														16780
1	FY 16	MC	64145	0	64145																		A							64145
Total					261408		8904	15380											4050	10000	10000	10000	10000	10000	9656	8100	8100	8100	9812	139306
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	AMERICAN ORDNANCE LLC (IAAP), MIDDLETOWN, IA	5000	10000	15000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
PROJ, ARTY, 155MM HE, M795 (E66800)

Date: February 2015

COST ELEMENTS						Fiscal Year 17												Fiscal Year 18												
									Calendar Year 17												Calendar Year 18									
MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Later
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	36211	36211																										0
1	FY 14	A	13891	13891																										0
1	FY 15	A	12595	0	12595											6222	3000	3373												0
1	FY 16	A	19689	0	19689																		5000	5000	3578	2500	2500	1111		0
1	FY 13	MC	128097	102000	26097	8100	9812	8185																						0
1	FY 15	MC	16780	0	16780											3635	7000	6145												0
1	FY 16	MC	64145	0	64145																		5000	5000	6402	7500	7500	8845	10000	13898
Total					139306	8100	9812	8185								9857	10000	9518					10000	10000	9980	10000	10000	9956	10000	13898
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	AMERICAN ORDNANCE LLC (IAAP), MIDDLETOWN, IA	5000	10000	15000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 19 / 20 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
PROJ, ARTY, 155MM HE, M795 (E66800)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 19												Fiscal Year 20												Later
									Calendar Year 19												Calendar Year 20									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	36211	36211																										0
1	FY 14	A	13891	13891																										0
1	FY 15	A	12595	12595																										0
1	FY 16	A	19689	19689																										0
1	FY 13	MC	128097	128097																										0
1	FY 15	MC	16780	16780																										0
1	FY 16	MC	64145	50247	13898	9953	3945																							0
Total					13898	9953	3945																							
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	AMERICAN ORDNANCE LLC (IAAP), MIDDLETOWN, IA	5000	10000	15000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: Proj 155mm Extended Range M982 (E80100)

Program Elements for Code B Items:

Code:

Other Related Program Elements: 0604814A

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	5147	994	422	476		476						7039
Gross Cost	557.2	77.3	35.7	45.5		45.5						715.7
Less PY Adv Proc												
Net Proc P1	557.2	77.3	35.7	45.5		45.5						715.7
Plus CY Adv Proc												
Total Proc Cost	557.2	77.3	35.7	45.5		45.5						715.7
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.1	0.1	0.1	0.1		0.1						0.1

Description:

This budget line item includes the Excalibur family of munitions for the use in the M777A2 Lightweight 155mm Howitzer (LW155), the M109A6 Paladin Howitzer, the M109A7 paladin PIM Howitzer and the Swedish Archer Howitzer.

Excalibur is a Precision Guided Extended Range 155mm Artillery projectile providing Brigade Combat Teams an organic precision fires capability. Additionally it provides improved fire support capability due to its increased range of 40.5 kilometers and demonstrated accuracy of <3 meters radial miss distances, which enables a first round effect on target reducing the number of rounds required while reducing collateral damage. Excalibur is compatible with the M777A2 Lightweight 155mm Howitzer (LW155), the M109A6 Paladin Howitzer, the M109A7 Paladin PIM Howitzer, and the Swedish Archer Howitzer. Excalibur provides a 35% range increase over current Rocket Assisted Projectiles with a <10 meter circular error probable requirement at all ranges. Excalibur is also highly resistant to Global Positioning System (GPS) jamming. This item is Code A, approved for service use.

Justification:

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.

Excalibur Increments Ia-1 and Ia-2 are currently fielded and in use by units throughout Afghanistan and deployed globally to support other Military Contingency Operations. Excalibur is an International Cooperative Development program, teamed with the Kingdom of Sweden (KoS), which contributed resources towards the development in accordance with an established Project Agreement. Excalibur Increment Ia-1 was initially fielded to units in Iraq and Afghanistan in response to an urgent need request in support of Operation Iraqi Freedom (as of September 2010 re-named to Operation New Dawn) and Operation Enduring Freedom. Increment Ia-2 was fielded in early FY 2012 and greatly increases range from 25.2 kilometers to 40.5 kilometers. The Excalibur guided projectile program is using an incremental development approach to provide a combat capability to the Soldier as quickly as possible while delivering advanced capabilities at lower costs. Excalibur Increment Ib will provide further performance improvements while significantly lowering unit costs.

Increment Ib completed a successful Initial Operational Test and Evaluation in February 2014 as well as a Full Rate Production Decision Review in June 2014. The Excalibur Increment Ib projectile was Type Classified and Full Material Released in June 2014.

This is a war reserve item currently being used in combat. The FY 2016 request builds a war reserve inventory in accordance with the Army procurement goals. FY 2016 Base procurement dollars in the amount of $45.518 million supports the procurement of 476 Increment Ib projectiles.

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: Proj 155mm Extended Range M982 (E80100)	Weapon System Type:	MDAP: 366	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
Hardware Recurring																
E80103 PROJ, ARTY, 155MM EXTENDED RANGE	da58	77326K	994	77792.757	35672K	422	84530.806	45518K	476	95626.050				45518K	476	95626.050
Total:		**77326K**			**35672K**			**45518K**						**45518K**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
PROJ, ARTY, 155MM EXTENDED RANGE M982-U EXCALIBUR (E80103)

Program Elements for Code B Items:

Code: A

Other Related Program Elements: 0604814A

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	5147	994	422	476		476						7039
Gross Cost	557.2	77.3	35.7	45.5		45.5						715.7
Less PY Adv Proc												
Net Proc P1	557.2	77.3	35.7	45.5		45.5						715.7
Plus CY Adv Proc												
Total Proc Cost	557.2	77.3	35.7	45.5		45.5						715.7
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.1	0.1	0.1	0.1		0.1						0.1

Description:
Excalibur is a Precision Guided Extended Range 155mm Artillery projectile providing Brigade Combat Teams an organic precision fires capability. Additionally it provides improved fire support capability due to its increased range of 40.5 kilometers and demonstrated accuracy of <3 meters radial miss distances, which enables a first round effect on target reducing the number of rounds required while reducing collateral damage. Excalibur is compatible with the M777A2 Lightweight 155mm Howitzer (LW155), the M109A6 Paladin Howitzer, the M109A7 Paladin PIM Howitzer, and the Swedish Archer Howitzer. Excalibur provides a 35% range increase over current Rocket Assisted Projectiles with a <10 meter circular error probable requirement at all ranges. Excalibur is also highly resistant to Global Positioning System (GPS) jamming. This item is Code A, approved for service use.

Justification:
Excalibur Increments Ia-1 and Ia-2 are currently fielded and in use by units throughout Afghanistan and deployed globally to support other Military Contingency Operations. Excalibur is an International Cooperative Development program, teamed with the Kingdom of Sweden (KoS), which contributed resources towards the development in accordance with an established Project Agreement. Excalibur Increment Ia-1 was initially fielded to units in Iraq and Afghanistan in response to an urgent need request in support of Operation Iraqi Freedom (as of September 2010 re-named to Operation New Dawn) and Operation Enduring Freedom. Increment Ia-2 was fielded in early FY 2012 and greatly increases range from 25.2 kilometers to 40.5 kilometers. The Excalibur guided projectile program is using an incremental development approach to provide a combat capability to the Soldier as quickly as possible while delivering advanced capabilities at lower costs. Excalibur Increment Ib will provide further performance improvements while significantly lowering unit costs.

Increment Ib completed a successful Initial Operational Test and Evaluation in February 2014 as well as a Full Rate Production Decision Review in June 2014. The Excalibur Increment Ib projectile was Type Classified and Full Material Released in June 2014.

This is a war reserve item currently being used in combat. The FY 2016 request builds a war reserve inventory in accordance with the Army procurement goals. FY 2016 Base procurement dollars in the amount of $45.518 million supports the procurement of 476 Increment Ib projectiles.

Comments:
TYPE CLASSIFICATION: Standard: Increment Ia-1 May 2013
Standard: Increment Ia-2 September 2010
Standard: Increment Ib June 2014

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: PROJ, ARTY, 155MM EXTENDED RANGE M982-U EXCALIBUR (E80103)	Weapon System Type:	MDAP: 366	DODIC: DA58	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
COMPLETE ROUND		68002K	994	68412.00	28885K	422	68448.00	32564K	476	68412.00				32564K	476	68412.00
CONTAINER, EXCALIBUR		2169902	994	2183.00	921226	422	2183.00	1039108	476	2183.00				1039108	476	2183.00
SUBTOTAL HARDWARE COST		**70171K**			**29806K**			**33603K**						**33603K**		
Support																
PRODUCTION ENGINEERING		5793418			5138718			5613780						5613780		
QUALITY ASSURANCE		728152			512000			651000						651000		
ACCEPTANCE TESTING		633000			215000			350000						350000		
SUBTOTAL PRODUCTION SUPPORT		**7154570**			**5865718**			**6614780**						**6614780**		
NON-RECURRING COSTS																
CONTRACT CLOSEOUT								5300000						5300000		
SUBTOTAL NON-RECURRING COSTS								**5300000**						**5300000**		
Total:		**77326**			**35672**			**45518**						**45518**		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:
Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature:
PROJ, ARTY, 155MM EXTENDED RANGE M982-U EXCALIBUR (E80103)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
COMPLETE ROUND						5147				
FY 2014	RAYTHEON MISSILE SYSTEMS CO TUCSON	C / FFP	PICATINNY ARSENAL, NJ	Dec 13	May 15	994	68412.00	Y		
FY 2015	RAYTHEON MISSILE SYSTEMS CO TUCSON	C / FFP	PICATINNY ARSENAL, NJ	Mar 15	Jan 16	422	68448.00	Y		
FY 2016	RAYTHEON MISSILE SYSTEMS CO TUCSON	C / FFP	PICATINNY ARSENAL, NJ	Jan 16	Nov 16	476	68412.00	Y		
CONTAINER, EXCALIBUR						5147				
FY 2014	RAYTHEON MISSILE SYSTEMS TUCSON	C / FFP	PICATINNY ARSENAL,NJ	Dec 13	May 15	994	2183.00	Y		
FY 2015	RAYTHEON MISSILE SYSTEMS TUCSON	C / FFP	PICATINNY ARSENAL,NJ	Mar 15	Jan 16	422	2183.00	Y		
FY 2016	RAYTHEON MISSILE SYSTEMS TUCSON	C / FFP	PICATINNY ARSENAL, NJ	Jan 16	Sep 16	476	2183.00	Y		

REMARKS: FY2014 - FY2016 are options of competitive contract original awarded in 2008.

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
PROJ, ARTY, 155MM EXTENDED RANGE M982-U EXCALIBUR (E80103)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
COMPLETE ROUND																														
1	FY 13	A	928	228	700	68	68	68	68	68	125	125	110																	0
1	FY 14	A	994	0	994								12	125	125	125	125	125	125	125	107									0
1	FY 15	A	422	0	422						A										12	70	60	40	40	40	40	40	40	40
1	FY 16	A	476	0	476																A									476
1	FY 13	FMS	297	12	285	57	57	57	57	57																				0
Total					2877	125	125	125	125	125	125	125	122	125	125	125	125	125	125	125	119	70	60	40	40	40	40	40	40	516
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	RAYTHEON MISSILE SYSTEMS CO, TUCSON	40	125	250	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	3	18	12	30
	Reorder	3	8	10	18
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
PROJ, ARTY, 155MM EXTENDED RANGE M982-U EXCALIBUR (E80103)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
COMPLETE ROUND																														
1	FY 13	A	928	928																										0
1	FY 14	A	994	994																										0
1	FY 15	A	422	382	40	40																								0
1	FY 16	A	476	0	476		44	44	44	44	43	43	43	43	43	43	43													0
1	FY 13	FMS	297	297																										0
Total					516	40	44	44	44	44	43	43	43	43	43	43	43													
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	RAYTHEON MISSILE SYSTEMS CO, TUCSON	40	125	250	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	3	18	12	30
	Reorder	3	8	10	18
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
Artillery Propellants, Fuzes and Primers, All (E27501)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	3970.3	35.2	78.0	78.0	2.0	80.0	101.1	106.6	109.8	112.5		4593.5
Less PY Adv Proc												
Net Proc P1	3970.3	35.2	78.0	78.0	2.0	80.0	101.1	106.6	109.8	112.5		4593.5
Plus CY Adv Proc												
Total Proc Cost	3970.3	35.2	78.0	78.0	2.0	80.0	101.1	106.6	109.8	112.5		4593.5
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
(E27501)Artillery Propellants, Fuzes and Primers, All Types.

(ER8021)ARTY, 155MM PROP CHG, MACS M232 SERIES
The Modular Artillery Charge System (MACS) M232 "High Zone" is intended for use with all United States 155mm cannon field artillery systems. The M232 "High Zone" increment is designed to achieve ranges from 10 to 40 kilometers. Each MACS increment includes propellant, an ignition system, and a combustible case. Performance enhancing additives are included in the M232 "High Zone" increment. Packaging permits long-term storage and helps protect the items from unplanned stimuli.
This item is Code A, approved for service use

(E62208)ARTY, FUZE PD M739A1
The M739A1 Point Detonating (PD) and Delay Fuze is the Army's preferred, primary fuze for 105mm and 155mm projectiles to address point detonating/delay artillery functions. The M739A1 fuze contains an Impact Delay Module (IDM) assembly. The IDM provides fuze initiation delay based upon the completion of mechanical actions caused by projectile deceleration and will function immediately after passing through the target.
This item is Code A, approved for service use.

(E63000) ARTY, 155MM PRIMER PERCUSSION M82 SERIES
The M82 Percussion Primer is intended for use with all United States 155mm cannon field artillery systems. The M82 Series Percussion Primer is used to initiate the burning of propellant charges and consists of a cylindrical brass case with an extraction flange which contains a base plunger, an ignition element which contains Primer #34 and a container loaded with 22 grains of black powder.
This item is Code A, approved for service use.

(E99250)ARTY, FUZE, PRECISION GUIDANCE KIT (PGK)
The Precision Guidance Kit (PGK) is a Global Positioning System (GPS) guidance kit with point detonating and height of burst fuzing functions. PGK provides near precision accuracy and efficiency for 155mm M795 and M549A1 high explosive (HE) projectiles. Using an integrated GPS receiver, the PGK corrects the inherent errors associated with ballistic firing solutions and reduces the number of projectiles required to execute fire missions. This item is Code A, approved for service use.

Justification:

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature Artillery Propellants, Fuzes and Primers, All (E27501)	
Program Elements for Code B Items:	Code:	Other Related Program Elements:	

FY 2016 Base Budget supports critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station, and the combined training centers. Test requirements support the development, fielding, safety, and quality assurance of Army munitions and equipment throughout their life-cycle.

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.

FY 2016 Base procurement dollars in the amount of $78.024 million supports production of 229,261 propellant, primers and fuzes. FY 2016 OCO procurement dollars in the amount of $2.000 million suppports production of 24,612 M739A1 PD Artillery Fuzes. Funds are required to replenish munitions expended in combat operations in theater.

E62208 - ARTY, FUZE PD M739A1
This is a training standard item used in training and combat. The FY 2016 supports annual training and a builds a war reserve inventory in accordance with the Army procurement goals.
TYPE CLASSIFICATION: 1982
FY 2016 Base procurement dollars in the amount of $20.700 million supports production of 229,261 cartridges.
FY 2016 OCO procurement dollars in the amount of $2.000 million supports production of 24,612 cartridges. Funds are required to replenish munitions expended in combat operations in theater.

E63000 - ARTY, 155MM PRIMER PERCUSSION M82 Series
Material Change Program (MCP) was approved in FY14 to address known reliability issues because the M82 was originally designed to withstand maximum pressures up to 45,000-psi but 155mm propelling charges developed after the 1980's can generate pressures up to 60,000-psi at top-charge where the primer can remain stuck in the cannon's breech after firing. The M82E1 (strengthen existing design) is the first spiral improvement with ECP date of 4QFY15 and estimated price of $15 each (per Engineering Estimate). The M82E2 (incorporate combustible case technology) is the second spiral improvement with ECP date of 2QFY17 and estimated price of $20 each (per Engineering Estimate).
Procurement will be dual-purpose to fulfill War Reserve and to support Training as needed.

ER8021 - ARTY, 155MM PROP CHG, MACS M232 SERIES
This item is a training standard item used in both training and combat. Request supports annual training and builds a war reserve inventory in accordance with the Army procurement goals.
TYPE CLASSIFICATION DATE: 2001

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: Artillery Propellants, Fuzes and Primers, All (E27501)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
Hardware Recurring																
Qty in thousands unless otherwise noted																
E63000 ARTY, 155MM PRIMER PERCUSSION M82	n523							2000000	100000	20				2000000	100000	20
E62208 ARTY, FUZE PD M739A1	n340	8739000	103612	84	19911K	236710	84	20700K	229261	90	2000000	24612	81	22700K	253873	90
E99250 ARTY, FUZE, PRECISION GUIDANCE KIT	na29	26466K	1593	16614	45285K	2621	17278	55324K	4306	12848				55324K	4306	12848
ER8021 ARTY, 155MM PROP CHG, MACS M232	da13				12814K	77389	166									
Total:		**35205K**			**78010K**			**78024K**			**2000000**			**80024K**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: ARTY, FUZE PD M739A1 (E62208)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty		103612	236710	229261	24612	253873	467660	490800	491927	493164		2537746
Gross Cost	152.9	8.7	19.9	20.7	2.0	22.7	43.0	46.0	47.0	48.0		388.2
Less PY Adv Proc												
Net Proc P1	152.9	8.7	19.9	20.7	2.0	22.7	43.0	46.0	47.0	48.0		388.2
Plus CY Adv Proc												
Total Proc Cost	152.9	8.7	19.9	20.7	2.0	22.7	43.0	46.0	47.0	48.0		388.2
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												0.0

Description:
The M739A1 Point Detonating (PD) and Delay Fuze is the Army's preferred, primary fuze for 105mm and 155mm projectiles to address point detonating/delay artillery functions. The M739A1 fuze contains an Impact Delay Module (IDM) assembly. The IDM provides fuze initiation delay based upon the completion of mechanical actions caused by projectile deceleration and will function immediately after passing through the target.
This item is Code A, approved for service use.

Justification:
This is a training standard item used in training and combat. The FY 2016 supports annual training and a builds a war reserve inventory in accordance with the Army procurement goals.

TYPE CLASSIFICATION: 1982

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: ARTY, FUZE PD M739A1 (E62208)	Weapon System Type:	MDAP:	DODIC: N340	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
COMPLETE ROUND		7380283	103612	71.23	17157K	236710	72.48	17472K	229261	76.21	1875681	24612	76.21	19348K	253873	76.21
SUBTOTAL HARDWARE COST		**7380283**			**17157K**			**17472K**			**1875681**			**19348K**		
Support																
PRODUCTION ENGINEERING		858717			1728928			2070072			10			2070082		
ACCEPTANCE TESTING		500000			1025331			1157864			124301			1282165		
SUBTOTAL PRODUCTION SUPPORT		**1358717**			**2754259**			**3227937**			**124311**			**3352247**		
Total:		**8739**			**19911**			**20700**			**2000**			**22700**		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:
Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature:
ARTY, FUZE PD M739A1 (E62208)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
COMPLETE ROUND										
FY 2014	ACTION MANUFACTURING COMPANY BRISTOL, PA	C / FFP	PICATINNY ARSENAL, NJ	Mar 14	Apr 16	103612	71.23	Y		
FY 2015	ACTION MANUFACTURING COMPANY BRISTOL, PA	C / FFP	PICATINNY ARSENAL, NJ	Mar 15	Feb 17	236710	72.48	Y		
FY 2016	ACTION MANUFACTURING COMPANY BRISTOL, PA	C / FFP	PICATINNY ARSENAL, NJ	Mar 16	Sep 17	253873	76.21	Y		

REMARKS:

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
ARTY, FUZE PD M739A1 (E62208)

Date: February 2015

COST ELEMENTS						Fiscal Year 15												Fiscal Year 16												
									Calendar Year 15												Calendar Year 16									
MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Later
Complete Round																														
1	FY 13	A	112056	0	112056	25116	30732	25000	25000	25000																				0
1	FY 14	A	103612	0	103612																			12000	12000	12000	12000	12000	12000	31612
1	FY 15	A	236710	0	236710						A																			236710
1	FY 16	A	253873	0	253873																		A							253873
1	FY 13	AFSO	28000	0	28000																				28000					0
1	FY 14	AFSO	39997	0	39997																					12000	12000	15997		0
1	FY 15	AFSO	21726	0	21726						A																			21726
1	FY 16	AFSO	23859	0	23859																		A							23859
1	FY 13	MC	500120	60120	440000						40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000									0
1	FY 14	MC	225876	0	225876																			10000	10000	10000	11520	28000	28000	128356
1	FY 15	MC	26805	0	26805						A																			26805
1	FY 16	MC	119298	0	119298																		A							119298
Total					1631812	25116	30732	25000	25000	25000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000	40000			22000	50000	34000	35520	55997	40000	842239
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	ACTION MANUFACTURING COMPANY, BRISTOL, PA	20000	40000	80000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
ARTY, FUZE PD M739A1 (E62208)

Date: February 2015

COST ELEMENTS						Fiscal Year 17												Fiscal Year 18												
MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT				Calendar Year 17												Calendar Year 18									Later
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Complete Round																														
1	FY 13	A	112056	112056																										0
1	FY 14	A	103612	72000	31612	12000	12000	7612																						0
1	FY 15	A	236710	0	236710						40000	40000	40000	40000	36710															0
1	FY 16	A	253873	0	253873												20000	20000	20000	20000	20000	20000	20000	27890	40000	40000	5983			0
1	FY 13	AFSO	28000	28000																										0
1	FY 14	AFSO	39997	39997																										0
1	FY 15	AFSO	21726	0	21726											21726														0
1	FY 16	AFSO	23859	0	23859																		11750	12109						0
1	FY 13	MC	500120	500120																										0
1	FY 14	MC	225876	97520	128356	28000	28000	32356	40000																					0
1	FY 15	MC	26805	0	26805											18030	8775													0
1	FY 16	MC	119298	0	119298												11050	20000	20000	20000	20000	20000	8248							0
Total					842239	40000	40000	39968	40000		40000	40000	40000	40000	36710	39756	39825	40000	40000	40000	40000	40000	39998	39999	40000	40000	5983			
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	ACTION MANUFACTURING COMPANY, BRISTOL, PA	20000	40000	80000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: ARTY, 155MM PRIMER PERCUSSION M82 Series (E63000)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	37.8			2.0		2.0	2.0	2.1	2.1	2.2		48.2
Less PY Adv Proc												
Net Proc P1	37.8			2.0		2.0	2.0	2.1	2.1	2.2		48.2
Plus CY Adv Proc												
Total Proc Cost	37.8			2.0		2.0	2.0	2.1	2.1	2.2		48.2
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
The M82 Percussion Primer is intended for use with all United States 155mm cannon field artillery systems. The M82 Series Percussion Primer is used to initiate the burning of propellant charges and consists of a cylindrical brass case with an extraction flange which contains a base plunger, an ignition element which contains Primer #34 and a container loaded with 22 grains of black powder.

This item is Code A, approved for service use.

Justification:
Material Change Program (MCP) was approved in FY14 to address known reliability issues because the M82 was originally designed to withstand maximum pressures up to 45,000-psi but 155mm propelling charges developed after the 1980's can generate pressures up to 60,000-psi at top-charge where the primer can remain stuck in the cannon's breech after firing. The M82E1 (strengthen existing design) is the first spiral improvement with ECP date of 4QFY15 and estimated price of $15 each (per Engineering Estimate). The M82E2 (incorporate combustible case technology) is the second spiral improvement with ECP date of 2QFY17 and estimated price of $20 each (per Engineering Estimate).

Procurement will be dual-purpose to fulfill War Reserve and to support Training as needed.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: ARTY, FUZE, PRECISION GUIDANCE KIT (PGK) (E99250)

Program Elements for Code B Items:

Code: A

Other Related Program Elements: 0604802A

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	92.1	26.5	45.3	55.3		55.3	56.1	58.5	60.6	62.4		456.8
Less PY Adv Proc												
Net Proc P1	92.1	26.5	45.3	55.3		55.3	56.1	58.5	60.6	62.4		456.8
Plus CY Adv Proc												
Total Proc Cost	92.1	26.5	45.3	55.3		55.3	56.1	58.5	60.6	62.4		456.8
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
The Precision Guidance Kit (PGK) is a Global Positioning System (GPS) guidance kit with point detonating and height of burst fuzing functions. PGK provides near precision accuracy and efficiency for 155mm M795 and M549A1 high explosive (HE) projectiles. Using an integrated GPS receiver, the PGK corrects the inherent errors associated with ballistic firing solutions and reduces the number of projectiles required to execute fire missions. This item is Code A, approved for service use.

Justification:
Approval to initiate the procurement of Low Rate Initial Production (LRIP) occurred at Milestone C in March 2013. Initial Operational Test and Evaluation (IOT&E) is planned to be completed by 3Q FY 2015, Full Material Release (FMR) and Full Rate Production (FRP) decisions are planned for 4Q FY 2015 and Initial Operational Capability (IOC) is scheduled for 1Q FY 2016.

This is a training standard item used in training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals. The FY 2016 Base procurement dollars in the amount of $55.324 million supports the procurement of 4,306 PGK fuzes.

Comments:
TYPE CLASSIFICATION DATE: TC Limited Procurement March 2013 for NA29 and TC Standard August 2014 for NA28.

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: ARTY, FUZE, PRECISION GUIDANCE KIT (PGK) (E99250)	Weapon System Type:	MDAP:	DODIC: NA29	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
COMPLETE ROUND		14238K	1593	8938.00	22585K	2621	8617.00	41157K	4306	9558.00				41157K	4306	9558.00
SUBTOTAL HARDWARE COST		**14238K**			**22585K**			**41157K**						**41157K**		
Support																
PRODUCTION ENGINEERING		6673766			6949843			7308129						7308129		
ACCEPTANCE TESTING		1060000			1450000			1775123						1775123		
SUBTOTAL PRODUCTION SUPPORT		**7733766**			**8399843**			**9083252**						**9083252**		
NON-RECURRING COSTS																
NEW EQUIPMENT TRAINING		2494000			2300000			2200000						2200000		
TECH DATA LICENSE RIGHTS		2000000			10000K											
ENGINEERING CHANGE PROPOSAL					2000000			2884000						2884000		
SUBTOTAL NON-RECURRING COSTS		**4494000**			**14300K**			**5084000**						**5084000**		
Total:		**26466**			**45285**			**55324**						**55324**		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:
Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature:
ARTY, FUZE, PRECISION GUIDANCE KIT (PGK) (E99250)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
COMPLETE ROUND										
FY 2014	ALLIANT TECHSYSTEMS INC. PLYMOUTH, MN	SS / FFP	PICATINNY ARSENAL, NJ	Feb 15	Feb 16	1593	8938.00	Y		
FY 2015	ALLIANT TECHSYSTEMS INC. PLYMOUTH, MN	SS / FFP	PICATINNY ARSENAL, NJ	Feb 15	Apr 16	2621	8617.00	Y		
FY 2016	ALLIANT TECHSYSTEMS INC. PLYMOUTH, MN	SS / FFP	PICATINNY ARSENAL, NJ	Feb 16	Feb 17	4306	9558.00	Y		

REMARKS:

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
ARTY, FUZE, PRECISION GUIDANCE KIT (PGK) (E99250)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
COMPLETE ROUND																														
1	FY 13	A	2535	0	2535									204	366	528	609	690				138								0
1	FY 14	A	1593	0	1593					A												566		1027						0
1	FY 15	A	2621	0	2621					A														73		1100		1100	348	0
1	FY 16	A	4306	0	4306																	A								4306
1	FY 14	FMS	5865	0	5865													84	48				1100		1100		1100		651	1782
1	FY 13	MC	2109	0	2109														690	609	642	168								0
1	FY 14	MC	2185	0	2185					A																			101	2084
1	FY 15	MC	534	0	534					A																				534
1	FY 16	MC	2070	0	2070																	A								2070
Total					23818									204	366	528	609	774	738	609	642	872	1100	1100	1100	1100	1100	1100	1100	10776
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	ALLIANT TECHSYSTEMS INC., PLYMOUTH, MN	300	1100	2200	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	13	9	20	29
	Reorder	12	8	12	20
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
ARTY, FUZE, PRECISION GUIDANCE KIT (PGK) (E99250)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
COMPLETE ROUND																														
1	FY 13	A	2535	2535																										0
1	FY 14	A	1593	1593																										0
1	FY 15	A	2621	2621																										0
1	FY 16	A	4306	0	4306						359	359	359	359	359	359	359	359	359	358	358									0
1	FY 14	FMS	5865	4083	1782			682	1100																					0
1	FY 13	MC	2109	2109																										0
1	FY 14	MC	2185	101	2084	1100	984																							0
1	FY 15	MC	534	0	534		116	418																						0
1	FY 16	MC	2070	0	2070						173	173	173	173	173	172	172	172	172	172	172									0
Total					10776	1100	1100	1100	1100		532	532	532	532	532	531	531	531	531	530	530									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	ALLIANT TECHSYSTEMS INC., PLYMOUTH, MN	300	1100	2200	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	13	9	20	29
	Reorder	12	8	12	20
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: ARTY, 155MM PROP CHG, MACS M232 SERIES (ER8021)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty			77389									77389
Gross Cost	587.6		12.8									600.4
Less PY Adv Proc												
Net Proc P1	587.6		12.8									600.4
Plus CY Adv Proc												
Total Proc Cost	587.6		12.8									600.4
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												0.0

Description:
The Modular Artillery Charge System (MACS), M232 "High Zone" is intended for use with all US 155mm cannon field artillery systems. The M232 "high zone" increment is designed to achieve ranges from 10-40+ kilometers. Each MACS increment includes propellant, an ignition system, and a combustible case. Performance enhancing additives are included in the M232 "high zone" increment. Packaging permits long-term storage and helps protect the items from unplanned stimuli. This item is Code A, approved for service use.

Justification:
This item is a training standard item used in both training and combat. Request supports annual training and builds a war reserve inventory in accordance with the Army procurement goals.

TYPE CLASSIFICATION DATE: 2001

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: ARTY, 155MM PROP CHG, MACS M232 SERIES (ER8021)	Weapon System Type:	MDAP:	DODIC: DA13	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
LOAD, ASSEMBLE, PACK (LAP)					1434792	77389	18.54									
COMBUSTIBLE CASES - M232A1					3268151	79711	41.00									
PROPELLANT, M31A2					6453160	373015	17.30									
*CONTAINER, M232A1					640166	16252	39.39									
*IGNITION PROPELLANT, MACS					44280	4953	8.94									
BLACK POWDER					68484	4643	14.75									
SUBTOTAL HARDWARE COST					**11909K**											
Support																
PRODUCTION ENGINEERING					1450854											
ACCEPTANCE TESTING					138568											
SUBTOTAL PRODUCTION SUPPORT					**1589422**											
*GOVERNMENT FURNISHED MATERIAL					- 684433											
SUBTOTAL NON-RECURRING COSTS					**-684433**											
Total:					**12814**											

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:
Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature:
ARTY, 155MM PROP CHG, MACS M232 SERIES (ER8021)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
LOAD, ASSEMBLE, PACK (LAP)										
FY 2015	TO BE SELECTED TBS01	C / IDIQ	PICATINNY ARSENAL, NJ	Mar 15	Jul 17	77389	18.54	Y		
COMBUSTIBLE CASES - M232A1										
FY 2015	TO BE SELECTED TBS02	C / FFP	PICATINNY ARSENAL, NJ	Mar 15	Sep 16	79711	41.00	Y		
PROPELLANT, M31A2										
FY 2015	GEN DYNAMICS ORDNANCE AND SALABERRY-DE-VALLEYFIELD, CANADA	C / FFP	PICATINNY ARSENAL, NJ	Mar 15	Nov 16	373015	17.30	Y		
***CONTAINER, M232A1**										
FY 2015	GOVERNMENT FURNISHED MATERIAL STOCK ISSUE,	GFM	ROCK ISLAND ARSENAL, IL	Oct 14	Oct 14	16252	39.39			
***IGNITION PROPELLANT, MACS**										
FY 2015	GOVERNMENT FURNISHED MATERIAL STOCK ISSUE,	GFM	PICATINNY ARSENAL, NJ	Oct 14	Oct 14	4953	8.94			
BLACK POWDER										
FY 2015	GOEX POWDER, INC. MINDEN, LA	SS / FFP	ROCK ISLAND ARSENAL, IL	Mar 15	Sep 16	4643	14.75	Y		

REMARKS:

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
ARTY, 155MM PROP CHG, MACS M232 SERIES (ER8021)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	162150	73410	88740									88740																0
3	FY 13	A	486000	231585	254415		43515						4000			49500				88250			35250				33900			0
2	FY 15	A	77389	0	77389						A																			77389
3	FY 13	MC	352200	172500	179700		33000		40800				33000			38100							34800							0
2	FY 15	MC	28800	0	28800						A																			28800
Total					629044		76515		40800				37000	88740		87600				88250			70050				33900			106189
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	AMERICAN ORDNANCE LLC (IAAP), MIDDLETOWN, IA	30000	30000	50000	
2	TO BE SELECTED, TBS01	15000	25000	62000	
3	GENERAL DYNAMICS-OTS, INC., HAMPTON, AR	30000	50000	125000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	6	24	30
2	Initial	6	6	24	30
	Reorder	6	6	24	30
3	Initial	6	6	24	30
	Reorder	6	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
ARTY, 155MM PROP CHG, MACS M232 SERIES (ER8021)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	162150	162150																										0
3	FY 13	A	486000	486000																										0
2	FY 15	A	77389	0	77389										6450	6449	6449	6449	6449	6449	6449	6449	6449	6449	6449	6449				0
3	FY 13	MC	352200	352200																										0
2	FY 15	MC	28800	0	28800										2400	2400	2400	2400	2400	2400	2400	2400	2400	2400	2400	2400				0
Total					106189										8850	8849	8849	8849	8849	8849	8849	8849	8849	8849	8849	8849				
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	AMERICAN ORDNANCE LLC (IAAP), MIDDLETOWN, IA	30000	30000	50000	
2	TO BE SELECTED, TBS01	15000	25000	62000	
3	GENERAL DYNAMICS-OTS, INC., HAMPTON, AR	30000	50000	125000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	6	24	30
	Reorder	6	6	24	30
2	Initial	6	6	24	30
	Reorder	6	6	24	30
3	Initial	6	6	24	30
	Reorder	6	6	24	30
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
Shoulder Launched Munitions, All Types (EA4000)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	3.4	1.0	0.9	7.5		7.5	26.4					39.2
Less PY Adv Proc												
Net Proc P1	3.4	1.0	0.9	7.5		7.5	26.4					39.2
Plus CY Adv Proc												
Total Proc Cost	3.4	1.0	0.9	7.5		7.5	26.4					39.2
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
This budget line includes Shoulder Launched Munitions, All Types.

(E36401) Charge, Backblast Sim, F/SUBCAL ADPTR553B CARLGUST - The 7.62MM 553B Sub-Caliber Backblast Simulator is a charge which produces a real-feel backblast for user. This item is Code A, approved for service use.

(E36402) Cap, Percussion, W/HLDR, F/SUBCAL ADPTR553B CARLGUST - The 7.62MM 553B Sub-Caliber Cap with Holder maintains the position of the individual components of the 553B Sub-Caliber Adapter System.

(E36403) CTG, 7.62MM Tracer, F/SUBCAL ADPTR CARL GUSTAF - The 7.62MM 553B Sub-Caliber Adapter makes it possible to raise the level of proficiency and reduce training costs to a low level both at the firing range and during live firing exercises.

(E36404) CTG, Gun, HEDP 502, 84MM CARL GUSTAF (MAAWS) - For rapid response forces that must have the ability to combat many types of threat, the 84 mm HEDP 502 (High Explosive Dual Purpose) is effective against light-armored vehicles, concrete and brick walls, field fortifications, and bunkers.

(E36405) CTG, Gun, HE 441D, 84MM CARL GUSTAF (MAAWS) - For combating troops in the open, behind cover, or in slit trenches as well as soft-skinned vehicles and similar types of targets, the 84 mm HE 441D (High Explosive)can be set for impact or air burst detonation.

(E36406) CTG, Gun, TGT PRAC-TR 141, 84MM CARL GUSTAF (MAAWS) - The 84 mm TPT 141 (Training Practice Tracer) is the ideal training round for reducing training costs but still retaining the right weapon "feel" and live firing experience.

(E36901) ROCKET, PRACTICE, 21MM SUBCALIBER for Shoulder Launched Munitions (SLM) simulates the firing of unguided shoulder fired munitions. It simulates the tactical munitions flight trajectory, but with less noise and backblast. It is currently used by Navy and Marine Corps to simulate the M72 LAW. It has also been adapted to the M141 Bunker Defeat Munition (BDM) and is used in New Equipment Training (NET)/Mobile Training Teams (MTT).

Justification:

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature Shoulder Launched Munitions, All Types (EA4000)	
Program Elements for Code B Items:	Code:	Other Related Program Elements:	

FY 2016 Base Budget supports critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station, and the combined training centers. Test requirements support the development, fielding, safety, and quality assurance of Army munitions and equipment throughout their life-cycle.

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.

FY 2016 Base procurement dollars in the amount of $7.500 million supports procurement of 6 variants of Shoulder Launched Munitions.

(E36401) Charge, Backblast Sim, F/SUBCAL ADPTR553B CARLGUST - This is a training unique item not used in combat.
The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army Procurement goals. 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. FY2016 Base procurement dollars in the amount of $1.000 million supports the procurement of 150,235 SP Backblast Simulators.

(E36402) Cap, Percussion, W/HLDR, F/SUBCAL ADPTR553B CARLGUST - This is a training unique item not used in combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army Procurement goals. 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. FY2016 Base procurement dollars in the amount of $1.000 million supports the procurement of 1,211,271 CAP, Percussion Adapter rounds.

(E36403) CTG, 7.62MM Tracer, F/SUBCAL ADPTR CARL GUSTAF - This is a training unique item not used in combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army Procurement goals. 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. FY2016 Base procurement dollars in the amount of $1.000 million supports the procurement of 379,215 CTG, 7.62MM TRACER Adapter rounds.

(E36404) CTG, Gun, HEDP 502, 84MM CARL GUSTAF (MAAWS) - This is a training standard (item used in both training and combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army Procurement goals. 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. FY2016 Base procurement dollars in the amount of $1.500 million supports the procurement of 497 CTG, GUN, HEDP 502, 84MM rounds.

(E36405) CTG, Gun, HE 441D, 84MM CARL GUSTAF (MAAWS) - This is a training standard used in both training and combat.The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army Procurement goals. 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. FY2016 Base procurement dollars in the amount of $1.500 million supports the procurement of 545 CTG, GUN, HE 441D, 84MM rounds.

(E36406) CTG, Gun, TGT PRAC-TR 141, 84MM CARL GUSTAF (MAAWS) - This is a training standard used in both training and combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army Procurement goals. 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. FY2016 Base procurement dollars in the amount of $1.500 million supports the procurement of 1986 CTG, GUN, TGT PRAC-TR, 84MM rounds.

(E36901) ROCKET, PRACTICE, 21MM SUBCALIBER for Shoulder Launched Munitions (SLM)This item is Code A, approved for service use. This is a training unique item not used in combat.

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature Shoulder Launched Munitions, All Types (EA4000)	
Program Elements for Code B Items:	Code:	Other Related Program Elements:	

Procurement supports annual training and builds a war reserve inventory in accordance with Army's procurement goals. In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: Shoulder Launched Munitions, All Types (EA4000)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$
Hardware Recurring																
Qty in eaches unless otherwise noted																
E36901 ROCKET, PRACTICE, 21MM SUBCAL*	HA21	1011951	9	112.14	944964	7	137.79									
E36401 CHARGE, BACKBLASTSIM, F/SUBCAL AD	L612							1000000	150	6.64				1000000	150	6.64
E36402 CAP, PERCUSSION W/HLDR F/SUBCAL A	L498							1000000	1211	0.83				1000000	1211	0.83
E36403 CTG, 7.62MM TRACER, F/SUBCAL ADP	A254							1000000	379	2.64				1000000	379	2.64
E36404 CTG, GUN, HEDP 502, 84MM CARL GU	CA21							1500000		3018.11				1500000		3018.11
E36405 CTG, GUN, HE 441D, 84MM CARL GUS	CA27							1500000	1	2752.29				1500000	1	2752.29
E36406 CTG, GUN, TGT PRAC-TR 141, 84MM	CA10							1500000	2	755.28				1500000	2	755.28
***Quantity in thousands**																
Total		**1011951**			**944964**			**7504028**						**7504028**		
Total:		**1012**			**945**			**7500**						**7500**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CHARGE, BACKBLAST SIM, F/SUBCAL ADPTR553B CARLGUST (E36401)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty				150235		150235						150235
Gross Cost				1.0		1.0						1.0
Less PY Adv Proc												
Net Proc P1				1.0		1.0						1.0
Plus CY Adv Proc												
Total Proc Cost				1.0		1.0						1.0
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C				0.0		0.0						0.0

Description:
E36401 Charge, Backblast Sim, F/SUBCAL ADPTR553B CARLGUST - The 7.62MM 553B Sub-Caliber Backblast Simulator is a charge which produces a real-feel backblast for user. This item is Code A, approved for service use.

Justification:
This is a training unique item not used in combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army Procurement goals.
FY2016 Base procurement dollars in the amount of $1.000 million supports the procurement of 150,235 Backblast Simulators.

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.

Type Classification Date: TBD

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CAP, PERCUSSION W/HLDR F/SUBCAL ADPTR553B CARLGUST (E36402)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty				1211271		1211271						1211271
Gross Cost				1.0		1.0						1.0
Less PY Adv Proc												
Net Proc P1				1.0		1.0						1.0
Plus CY Adv Proc												
Total Proc Cost				1.0		1.0						1.0
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C				0.0		0.0						0.0

Description:
E36402 Cap, Percussion, W/HLDR, F/SUBCAL ADPTR553B CARLGUST - The 7.62MM 553B Sub-Caliber Cap with Holder maintains the position of the individual components of the 553B Sub-Caliber Adapter System. This item is Code A, approved for service use.

Justification:
This is a training unique item not used in combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army Procurement goals. FY2016 Base procurement dollars in the amount of $1.000 million supports the procurement of 1,211,271 CAP Percussion Adapter rounds.

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.

Type Classification Date: TBD

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG, 7.62MM TRACER 553 F/SUBCAL ADAPTR CARL GUSTAF (E36403)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty				379215		379215						379215
Gross Cost				1.0		1.0						1.0
Less PY Adv Proc												
Net Proc P1				1.0		1.0						1.0
Plus CY Adv Proc												
Total Proc Cost				1.0		1.0						1.0
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C				0.0		0.0						0.0

Description:
E36403 CTG, 7.62MM Tracer, F/SUBCAL ADPTR CARL GUSTAF - The 7.62MM 553B Sub-Caliber Adapter makes it possible to raise the level of proficiency and reduce training costs to a low level both at the firing range and during live firing exercises. This item is Code A, approved for service use.

Justification:
This is a training unique item not used in combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army Procurement goals.
FY2016 Base procurement dollars in the amount of $1.000 million supports the procurement of 379,215 CTG, 7.62MM TRACER Adapter rounds.

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.

Type Classification Date: TBD

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG, GUN, HEDP 502, 84MM CARL GUSTAF (MAAWS) (E36404)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty				497		497						497
Gross Cost				1.5		1.5						1.5
Less PY Adv Proc												
Net Proc P1				1.5		1.5						1.5
Plus CY Adv Proc												
Total Proc Cost				1.5		1.5						1.5
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C				0.0		0.0						0.0

Description:
E36404 CTG, Gun, HEDP 502, 84MM CARL GUSTAF (MAAWS) - For rapid response forces that must have the ability to combat many types of threat, the 84 mm HEDP 502 (High Explosive Dual Purpose) is effective against light-armored vehicles, concrete and brick walls, field fortifications, and bunkers. This item is Code A, approved for service use.

Justification:
This is a training standard (item used in both training and combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army Procurement goals. FY2016 Base procurement dollars in the amount of $1.500 million supports the procurement of 497 CTG, GUN, HEDP 502, 84MM rounds.

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.

Type Classification Date : TBD

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG, GUN, HE 441D, 84MM CARL GUSTAF (MAAWS) (E36405)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty				545		545						545
Gross Cost				1.5		1.5						1.5
Less PY Adv Proc												
Net Proc P1				1.5		1.5						1.5
Plus CY Adv Proc												
Total Proc Cost				1.5		1.5						1.5
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C				0.0		0.0						0.0

Description:
E36405 CTG, Gun, HE 441D, 84MM CARL GUSTAF (MAAWS) - For combating troops in the open, behind cover, or in slit trenches as well as soft-skinned vehicles and similar types of targets, the 84MM HE 441D (High Explosive) can be set for impact or air burst detonation. This item is Code A, approved for service use.

Justification:
This is a training standard used in both training and combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army Procurement goals. FY2016 Base procurement dollars in the amount of $1.500 million supports the procurement of 545 CTG, GUN, HE 441D, 84MM rounds.

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.

Type Classification Date: TBD

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG, GUN, TGT PRAC-TR 141, 84MM CARL GUSTAF(MAAWS) (E36406)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty				1986		1986						1986
Gross Cost				1.5		1.5						1.5
Less PY Adv Proc												
Net Proc P1				1.5		1.5						1.5
Plus CY Adv Proc												
Total Proc Cost				1.5		1.5						1.5
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C				0.0		0.0						0.0

Description:
E36406 CTG, Gun, TGT PRAC-TR 141, 84MM CARL GUSTAF (MAAWS) - The 84MM TPT 141 (Training Practice Tracer) is the ideal training round for reducing training costs but still retaining the right weapon "feel" and live firing experience. This item is Code A, approved for service use.

Justification:
This is a training standard used in both training and combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army Procurement goals. FY2016 Base procurement dollars in the amount of $1.500 million supports the procurement of 1986 CTG, GUN, TGT PRAC-TR, 84MM rounds.

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.

Type Classification Date: TBD

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
ROCKET, PRACTICE, 21MM SUBCALIBER FOR SLM (E36901)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	31768	9024	6858									47650
Gross Cost	3.4	1.0	0.9									5.4
Less PY Adv Proc												
Net Proc P1	3.4	1.0	0.9									5.4
Plus CY Adv Proc												
Total Proc Cost	3.4	1.0	0.9									5.4
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0									0.0

Description:
The 21MM Sub-Caliber Training Rocket simulates the firing of unguided shoulder fired munitions. It simulates the tactical munitions flight trajectory, but with less noise and backblast. It is currently used by Navy and Marine Corps to simulate the M72 LAW. It has also been adapted to the M141 Bunker Defeat Munition (BDM) and is used in New Equipment Training (NET)/Mobile Training Teams (MTT). This item is Code A, approved for service use.

Justification:
This is a training unique item not used in combat. Procurement supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.

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.

TYPE CLASSIFICATION DATE: 1993

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: Rocket, Hydra 70, All Types (E37300)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty		100058	39632	16356	109407	125763	56696	67877	42401	29787	Continuing	Continuing
Gross Cost	2170.0	165.5	94.2	33.7	136.3	170.0	76.5	92.8	65.1	72.2	Continuing	Continuing
Less PY Adv Proc												
Net Proc P1	2170.0	165.5	94.2	33.7	136.3	170.0	76.5	92.8	65.1	72.2	Continuing	Continuing
Plus CY Adv Proc												
Total Proc Cost	2170.0	165.5	94.2	33.7	136.3	170.0	76.5	92.8	65.1	72.2	Continuing	Continuing
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Continuing	Continuing

P-40 Breakdown

Area		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Active	Qty	100058	39632	16356	109407	125763	56696	67877	42401	29787
	Net Proc (P-1)	165476.0	94191.0	33653.0	136341.0	169994.0	76478.0	92788.0	65071.0	72206.0
National Guard	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reserve	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	Qty	100058	39632	16356	109407	125763	56696	67877	42401	29787
	Gross Cost	165476	94191	33653	136341	169994	76478	92788	65071	72206

Description:

This budget line procures all Hydra-70 rocket types in support of operational, training and war reserve requirements. The system provides combat overmatch capability and ensures the availability of munitions to support combat operations. This system of aerial rockets is used by Army aircraft (AH-64A/D Apache, OH-58D Kiowa Warrior and Special Operations aircraft) to perform a number of roles including anti-materiel, anti-personnel, air-to-ground suppression and illumination. This Hydra-70 rocket funding supports the entire Hydra-70 Rocket System to include resolution of obsolescence, safety, reliability, weapon integration activities, potential test sets, engineering changes, production issues and guidance section repair kits.

NOTE: QTY EA

Justification:

The Hydra-70 Product Office is the procurement agent for all services, for all variants of 2.75 Rockets. This budget activity includes both training standard items and items that may be used in both training and combat. The Fiscal Year (FY) 2016 procurement supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals. FY 2016 Base

procurement dollars in the amount of $33.653 million will procure 16,356 Hydra-70 Rockets. FY 2016 Overseas Contingency Operations (OCO) procurement dollars in the amount of $136.341 million will procure 109,407 Hydra-70 Rockets. The Army intends to convert any price advantage created through contract negotiations, other service procurement, and/or Foreign Military Sales (FMS) into an increase of the Army's procurement of Hydra-70 Rockets. Pricing and quantities in FY 2016-2020 is uncertain due to an unknown Mk90 grain price planned for negotiation in FY 2015. The P-40/P-5 estimates are based on forecasted Mk90 grain pricing and will be updated once a contract has been awarded.

"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."

Rocket Hydra-70 Flechette M255A1:

Beginning in FY2016, Rocket Hydra-70 Flechette M255A1 will be procured under budget line AMMO-Hydra, Aviation Rocket Procurement, Unguided, APE E37412000.

This is a training standard item used in both training and combat. The FY 2015 requests supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals.

Rocket Smoke 2.75 M156 w/fuze M423 w/mtr 66:

Beginning in FY2016, Rocket Smoke 2.75 M156 w/fuze M423 w/mtr 66 will be procured under budget line AMMO-Hydra, Aviation Rocket Procurement, Unguided, APE E37412000.

This is a training standard item used in both training and combat. The FY 2015 requests supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals.

Rocket Hydra, Guidance Section:

The FY2015 procurement provides the Army the potential for achieving a precision engagement capability at a significantly reduced cost across its portfolio of armed helicopter rocket and missile munitions. The laser guided rocket is expected to provide an increase number of stowed kills per mission and reduce collateral damage.

In FY 2015 the Army will procure Navy Program of Record guidance kits for Hydra-70 rockets to support existing theater requirements.

Beginning in FY 2016, Rocket Hydra, Guidance Section will be procured under budget line AMMO-Hydra, Aviation Rocket Procurement, Guided, APE E37413000.

Rocket Hydra 70 Smoke M264:

Beginning in FY2016, Rocket Hydra 70 Smoke M264 will be procured under budget line AMMO-Hydra, Aviation Rocket Procurement, Unguided, APE E37412000.

This is a training standard item used in both training and combat. The FY 2015 requests supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals.

Rocket Hydra 70 HE/PD M151/M423:

Beginning in FY2016, Rocket Hydra 70 HE/PD M151/M423 will be procured under budget line AMMO-Hydra, Aviation Rocket Procurement, Unguided, APE E37412000.

This is a training standard item used in both training and combat. The FY 2015 requests supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals.

Rocket Hydra 70 Sig Prac M274:

Beginning in FY2016, Rocket Hydra 70 Sig Prac M274 will be procured under budget line AMMO-Hydra, Aviation Rocket Procurement, Unguided, APE E37412000.

This is a training unique item not used in combat. The FY 2015 requests supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals.

Rocket Hydra 70 Flare Infrared (IR) M278:

Beginning in FY2016, Rocket Hydra 70 Flare Infrared (IR) M278 will be procured under budget line AMMO-Hydra, Aviation Rocket Procurement, Unguided, APE E37412000.

This is a training standard item used in both training and combat. The FY 2015 requests supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals.

Rocket Hydra 70 Illum M257:

Beginning in FY2016, Rocket Hydra 70 Illum M257 will be procured under budget line AMMO-Hydra, Aviation Rocket Procurement, Unguided, APE E37412000.

This is a training standard item used in both training and combat. The FY 2015 requests supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals.

AMMO-Hydra, Aviation Rocket Procurement, Unguided (E37412):

The Hydra-70 Product Office is the procurement agent for all services, for all variants of 2.75 Rockets. This budget activity includes both training standard items and items that may be used in both training and combat. The FY 2015 requests supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals. The Fiscal Year (FY) 2016 procurement supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals. FY 2016 base procurement dollars in the amount of $30.663 million will procure 16,257 Hydra-70 Rockets. FY 2016 Overseas Contingency Operations (OCO) procurement dollars in the amount of $136,341 million will procure 109,407 Hydra-70 Rockets. The Army intends to convert any price advantage created through contract negotiations, other service procurement and/or Foreign Military Sales (FMS) into an increase of the Army's procurement of Hydra-70 Rockets. Pricing and quantities in FY 2016-2020 is uncertain due to an unknown Mk90 grain price planned for negotiation in FY2015. The P-40/P-5 estimates are based upon forecasted grain pricing and will be updated once a contract has been awarded.

AMMO-Hydra, Aviation Rocket Procurement, Guided (E37413):

The Fiscal Year (FY) 2016 procurement provides the Army the potential for achieving a precision engagement capability at a significantly reduced cost across its portfolio of armed helicopter rocket and missile munitions. The laser guided rocket is expected to provide an increased number of stowed kills per mission and reduce collateral damage. FY 2016 base funding in the amount of $2.990

million will procure 99 guidance sections. The Army intends to convert any price advantage created through contract negotiations, other service procurements and/or Foreign Military Sales (FMS) into an increase of the Army's procurement of Hydra-70 Guided Rockets.

Procurement funding is requested in FY 2016-FY 2020 in order to support further evaluation and theater requirements pending a decision on an enduring guided rocket capability.

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: Rocket, Hydra 70, All Types (E37300)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
Flyaway Recurring																
Ammunition Hardware																
E05302 ROCKET HYDRA 70 FLECHETTE M255A1		23873	10040	2.378	8499	3839	2.214									
E37335 ROCKET HYDRA 70 HE/PD M151/M423		21205	10080	2.104	43724	23857	1.833									
E37337 ROCKET HYDRA 70 SIG PRAC M274		92157	74592	1.235	9037	4389	2.059									
E37338 ROCKET HYDRA 70, FLARE IR M278					13372	3132	4.269									
E37330 ROCKET HYDRA 70 SMOKE M264					2600	671	3.875									
E52200 ROCKET HYDRA 70 ILLUM M257		28241	5346	5.283	5721	1351	4.235									
E37308 ROCKET SMOKE 2.75 M156 W/FUZE M42					7265	2258	3.217									
E37315 ROCKET HYDRA, GUIDANCE SECTION					3973	135	29.430									
E37412 AMMO-Hydra, Av Rkt Proc, Unguided								30663	16257	1.886	136341	109407	1.246	167004	125664	1.329
E37413 AMMO-Hydra, Av Rkt Proc, Guided								2990	99	30.202				2990	99	30.202
Subtotal:		**165447**			**94196**			**33651**			**136321**			**169997**		
Total:		**165476**			**94191**			**33653**			**136341**			**169994**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
ROCKET HYDRA 70 FLECHETTE M255A1 (E05302)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty		10040	3839								Continuing	Continuing
Gross Cost	228.9	23.9	8.5								Continuing	Continuing
Less PY Adv Proc												
Net Proc P1	228.9	23.9	8.5								Continuing	Continuing
Plus CY Adv Proc												
Total Proc Cost	228.9	23.9	8.5								Continuing	Continuing
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C		0.0	0.0								Continuing	Continuing

P-40 Breakdown

Area		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Active	Qty	10040	3839	0	0	0	0	0	0	0
	Net Proc (P-1)	23873.0	8499.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
National Guard	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reserve	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	Qty	10040	3839	0	0	0	0	0	0	0
	Gross Cost	23873	8499	0	0	0	0	0	0	0

Description:
The Hydra-70 family of rockets is used by Army aircraft (AH-64A/D Apache, OH-58D Kiowa Warrior, and Special Operations aircraft) to perform a number of roles including anti-materiel, anti-personnel, air-to-ground suppression and illumination. The M255A1 Flechette warhead is a cargo warhead consisting of a nose cone assembly, a warhead case, an integral fuze, 1,179 60-grain flechettes and an expulsion charge assembly. The M255A1 warhead is combined with the MK66 rocket motor to complete the all-up-round (AUR). The primary fuze (M439) is remotely set with Aerial Rocket Control System (ARCS), Multifunctional Display (MFD) or Rocket Management System (RMS) to provide range from 500 meters to 7200 meters. At expulsion, the 1,179 60-grain, hardened-steel flechettes separate and form a disk-like mass, which breaks up with each flechette assuming an independent trajectory. The flechette uses kinetic energy derived from the velocity of the rocket to produce the desired impact and penetration on the target. This item is Code A, approved for service use. This Hydra-70 rocket funding supports the entire Hydra-70 Rocket System to include resolution of obsolescence, safety, reliability, weapon integration activities, engineering changes and production issues.

NOTE: QTY EA

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature ROCKET HYDRA 70 FLECHETTE M255A1 (E05302)	
Program Elements for Code B Items:	Code: A	Other Related Program Elements:	

Justification:
The Hydra-70 Product Office is the procurement agent for all services.

Beginning in Fiscal Year (FY) 2016, Rocket Hydra-70 Flechette M255A1 will be procured under budget line AMMO-Hydra, Aviation Rocket Procurement, Unguided, APE E37412000.

This is a training standard item used in both training and combat. The FY 2015 requests supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals.

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

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: ROCKET HYDRA 70 FLECHETTE M255A1 (E05302)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
Flyaway Recurring																
AMMUNITION HARDWARE																
Complete Round	HA1	19638	10040	1.956	5777	3839	1.505									
Subtotal		**19638**			**5778**											
Production Support Costs																
Prod/Sys Engineering/Program Management		2536			1427											
Component Eng Spt (Other Gov't Agencies)		1699			1294											
Subtotal		**4235**			**2721**											
Total:		**23873**			**8498**											

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Procurement of Ammunition, Army/ 1/ Ammunition		ROCKET HYDRA 70 FLECHETTE M255A1 (E05302)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Complete Round										
FY 2014	General Dynamics Williston	SS / FFP	AMCOM, Redstone Arsenal, AL	Sep 14	Mar 16	10040	1.956	Y		Apr-13
FY 2015	General Dynamics Williston	SS / FFP	AMCOM, Redstone Arsenal, AL	Mar 15	Sep 16	3839	1.505	Y		Apr-13

REMARKS: Sole Source/Firm Fixed Price (SS/FFP)

FY 2015 is a contract option year.

FY 14 / 15 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
ROCKET HYDRA 70 FLECHETTE M255A1 (E05302)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 14												Fiscal Year 15												Later
									Calendar Year 14												Calendar Year 15									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Complete Round																														
1	FY 14	A	10040	0	10040												A													10040
1	FY 15	A	3839	0	3839																		A							3839
Total					13879																									13879
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	General Dynamics, Williston	0	5	10	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	7	22	29
	Reorder	6	5	18	23
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS
Note: QTY EA for Delivery Schedule. Contractor minimum sustainment rate for the total of all variants is 80,000 rockets annually. The production rate shown in the table is a per variant monthly rate x 1000. Minimum production rate for MFR 1 is 300, database rounds down to 0. FY 2015 is a contract option year.

FY 16 / 17 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
ROCKET HYDRA 70 FLECHETTE M255A1 (E05302)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 16												Fiscal Year 17												Later
									Calendar Year 16												Calendar Year 17									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Complete Round																														
1	FY 14	A	10040	0	10040						1008		1008	1008	1008	1008			1000	1000	1000	1000	1000							0
1	FY 15	A	3839	0	3839												1839	1000	1000											0
Total					13879						1008		1008	1008	1008	1008	1839	1000	2000	1000	1000	1000	1000							
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	General Dynamics, Williston	0	5	10	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	7	22	29
	Reorder	6	5	18	23
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS
Note: QTY EA for Delivery Schedule. Contractor minimum sustainment rate for the total of all variants is 80,000 rockets annually. The production rate shown in the table is a per variant monthly rate x 1000. Minimum production rate for MFR 1 is 300, database rounds down to 0. FY 2015 is a contract option year.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
ROCKET SMOKE 2.75 M156 W/FUZE M423 W/MTR 66 (E37308)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty			2258								Continuing	Continuing
Gross Cost	3.0		7.3								Continuing	Continuing
Less PY Adv Proc												
Net Proc P1	3.0		7.3								Continuing	Continuing
Plus CY Adv Proc												
Total Proc Cost	3.0		7.3								Continuing	Continuing
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C			0.0								Continuing	Continuing

P-40 Breakdown

Area		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Active	Qty	0	2258	0	0	0	0	0	0	0
	Net Proc (P-1)	0.0	7265.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
National Guard	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reserve	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	Qty	0	2258	0	0	0	0	0	0	0
	Gross Cost	0	7265	0	0	0	0	0	0	0

Description:
The Hydra-70 family of rockets is used by Army aircraft (AH-64A/D Apache, OH-58D Kiowa Warrior helicopters, and Special Operations aircraft) to perform a number of roles including anti-materiel, anti-personnel, air-to-ground suppression and illumination. The M156 white phosphorus (smoke) is primarily used for target marking. The M156 has the same ballistic characteristics as the M151 warhead and is of similar construction. Filler for the M156 is 2.2 pounds of white phosphorus with a 0.12 pound bursting charge of composition B. The approximate weight of the fuzed warhead is 9.7 pounds. The M156 all-up-round includes the warhead and MK66 Mod 4 motor. This Hydra-70 rocket funding supports the entire Hydra-70 Rocket System to include resolution of obsolescence, safety, reliability, weapon integration activities, engineering changes and production issues.

NOTE: QTY EA

Justification:
The Hydra-70 Product Office is the procurement agent for all services.

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature ROCKET SMOKE 2.75 M156 W/FUZE M423 W/MTR 66 (E37308)	
Program Elements for Code B Items:	Code:	Other Related Program Elements:	

Beginning in Fiscal Year (FY) 2016, Rocket Smoke 2.75 M156 w/fuze M423 w/mtr 66 will be procured under budget line AMMO-Hydra, Aviation Rocket Procurement, Unguided, APE E37412000.

This is a training standard item used in both training and combat. The FY 2015 requests supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals.

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

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: ROCKET SMOKE 2.75 M156 W/FUZE M423 W/MTR 66 (E37308)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
Flyaway Recurring																
AMMUNITION HARDWARE																
Complete Round					5048	2258	2.236									
Subtotal:					**5049**											
Production Support Costs																
Prod/Sys Engineering/Program Management					1112											
Component Eng Spt (Other Gov't Agencies)					1104											
Subtotal:					**2216**											
Total:					**7264**											

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Procurement of Ammunition, Army/ 1/ Ammunition		ROCKET SMOKE 2.75 M156 W/FUZE M423 W/MTR 66 (E37308)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Complete Round										
FY 2015	General Dynamics Williston, VT	SS / FFP	AMCOM, Redstone Arsenal, AL	Mar 15	Sep 16	2258	2.236	Y		Apr-13

REMARKS: REMARKS: Sole Source/Firm Fixed Price (SS/FFP)

FY 2015 is a contract option year.

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
ROCKET SMOKE 2.75 M156 W/FUZE M423 W/MTR 66 (E37308)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Complete Round																														
1	FY 15	A	2258	0	2258						A																		2258	0
Total					2258																								2258	
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	General Dynamics, Williston, VT	0	5	10	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	7	22	29
	Reorder	6	5	18	23
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS
Note: QTY EA for Delivery Schedule. Contractor minimum sustainment rate for the total of all variants is 80,000 rockets annually. The production rate shown in the table is a per variant monthly rate x 1000. Minimum production rate for MFR 1 is 300, database rounds down to 0. FY 2015 is a contract option year.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
Rocket Hydra, Guidance Section (E37315)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty			135								Continuing	Continuing
Gross Cost			4.0								Continuing	Continuing
Less PY Adv Proc												
Net Proc P1			4.0								Continuing	Continuing
Plus CY Adv Proc												
Total Proc Cost			4.0								Continuing	Continuing
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C			0.0								Continuing	Continuing

P-40 Breakdown

Area		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Active	Qty	0	135	0	0	0	0	0	0	0
	Net Proc (P-1)	0.0	3973.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
National Guard	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reserve	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	Qty	0	135	0	0	0	0	0	0	0
	Gross Cost	0	3973	0	0	0	0	0	0	0

Description:
The Hydra-70 family of rockets is used by Army aircraft (AH-64A/D Apache, OH-58D Kiowa Warrior, and Special Operations aircraft) to perform a number of roles including anti-materiel, anti-personnel, air-to-ground suppression and illumination. The Hydra-70 Guidance section will provide improved accuracy over the current 2.75-inch unguided munition complementing the 30 millimeter cannon (Hughes M230 Chain Gun) and HELLFIRE missile in precision strikes against lightly armored and soft point targets. Under the Hydra-70 program, a laser guidance section for the 2.75 inch munition will be integrated with an M151 High Explosive/Point Detonating warhead and powered by the Hydra Mk66 Mod 4 motor. This Hydra-70 rocket funding supports the entire Hydra-70 Rocket System to include resolution of obsolescence, safety, reliability, weapon integration activities, potential test sets, engineering changes, production issues and guidance section repair kits.

NOTE: QTY EA

Justification:

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature Rocket Hydra, Guidance Section (E37315)	
Program Elements for Code B Items:	Code:	Other Related Program Elements:	

The Fiscal Year (FY) 2015 procurement provides the Army the potential for achieving a precision engagement capability at a significantly reduced cost across its portfolio of armed helicopter rocket and missile munitions. The laser guided rocket is expected to provide an increased number of stowed kills per mission and reduce collateral damage.

In FY 2015 the Army will procure Navy Program of Record guidance kits for Hydra-70 rockets to support existing theater requirements.

Beginning in FY 2016, Rocket Hydra, Guidance Section will be procured under budget line AMMO-Hydra, Aviation Rocket Procurement, Guided, APE E37413000.

"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 Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
ROCKET HYDRA 70 SMOKE M264 (E37330)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty			671								Continuing	Continuing
Gross Cost	26.9		2.6								Continuing	Continuing
Less PY Adv Proc												
Net Proc P1	26.9		2.6								Continuing	Continuing
Plus CY Adv Proc												
Total Proc Cost	26.9		2.6								Continuing	Continuing
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C			0.0								Continuing	Continuing

P-40 Breakdown

Area		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Active	Qty	0	671	0	0	0	0	0	0	0
	Net Proc (P-1)	0.0	2600.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
National Guard	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reserve	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	Qty	0	671	0	0	0	0	0	0	0
	Gross Cost	0	2600	0	0	0	0	0	0	0

Description:
The Hydra-70 family of rockets is used by Army aircraft (AH-64 Apache and OH-58D Kiowa Warrior helicopters) to perform a number of roles including anti-material, anti-personnel, air-to-ground suppression and illumination. The M264 RP (red phosphorous) Smoke is used as a red phosphorous filled smoke rocket propelled by the MK66 motor and the smoke is deployed at a range set remotely from within the cockpit. The M264 warhead is used for smoke obscuration in the visible light spectrum. The pellets can be easily modified for fill content to obscure IR and millimeter-wave spectrums should a requirement materialize. This Hydra-70 rocket funding supports the entire Hydra-70 Rocket System to include resolution of obsolescence, safety, reliability, weapon integration activities, engineering changes and production issues.

NOTE: QTY EA

Justification:
The Hydra-70 Product Office is the procurement agent for all services.

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature ROCKET HYDRA 70 SMOKE M264 (E37330)	
Program Elements for Code B Items:	Code:	Other Related Program Elements:	

Beginning in Fiscal Year (FY) 2016, Rocket Hydra 70 Smoke M264 will be procured under budget line AMMO-Hydra, Aviation Rocket Procurement, Unguided, APE E37412000.

This is a training standard item used in both training and combat. The FY 2015 requests supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals.

"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 Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: ROCKET HYDRA 70 HE/PD M151/M423 (E37335)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty		10080	23857								Continuing	Continuing
Gross Cost	239.7	21.2	43.7								Continuing	Continuing
Less PY Adv Proc												
Net Proc P1	239.7	21.2	43.7								Continuing	Continuing
Plus CY Adv Proc												
Total Proc Cost	239.7	21.2	43.7								Continuing	Continuing
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C		0.0	0.0								Continuing	Continuing

P-40 Breakdown

Area		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Active	Qty	10080	23857	0	0	0	0	0	0	0
	Net Proc (P-1)	21205.0	43724.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
National Guard	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reserve	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	Qty	10080	23857	0	0	0	0	0	0	0
	Gross Cost	21205	43724	0	0	0	0	0	0	0

Description:
The Hydra-70 family of rockets is used by Army aircraft (AH-64A/D Apache, OH-58D Kiowa Warrior helicopters, and Special Operations aircraft) to perform a number of roles including anti-materiel, anti-personnel, air-to-ground suppression and illumination. The M151 HEPD is a unitary fragmenting ten pound anti-personnel warhead with the M423 Point Detonating Fuze. Upon detonation, the warhead fragments into thousands of small, high velocity fragments. The M151 warhead is combined with the MK66 rocket motor to complete the all-up-round (AUR). This item is Code A, approved for service use. This Hydra-70 rocket funding supports the entire Hydra-70 Rocket System to include resolution of obsolescence, safety, reliability, weapon integration activities, engineering changes and production issues.

NOTE: QTY EA

Justification:
The Hydra-70 Product Office is the procurement agent for all services.

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature ROCKET HYDRA 70 HE/PD M151/M423 (E37335)	
Program Elements for Code B Items:	Code: A	Other Related Program Elements:	

Beginning in Fiscal Year (FY) 2016, Rocket Hydra 70 HE/PD M151/M423 will be procured under budget line AMMO-Hydra, Aviation Rocket Procurement, Unguided, APE E37412000.

This is a training standard item used in both training and combat. The FY 2015 requests supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals.

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

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: ROCKET HYDRA 70 HE/PD M151/M423 (E37335)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
Flyaway Recurring																
AMMUNITION HARDWARE																
Complete Round	HA1	16964	10080	1.683	27436	23857	1.150									
SubTotal AMMO Hardware		**16965**			**27436**											
Production Support Costs																
Prod/Sys Engineering/Program Management		2539			8544											
Component Eng Spt (Other Gov't Agencies)		1701			7744											
SubTotal Prod. Support		**4240**			**16288**											
Total:		**21204**			**43724**											

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Procurement of Ammunition, Army/ 1/ Ammunition		ROCKET HYDRA 70 HE/PD M151/M423 (E37335)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Complete Round										
FY 2014	General Dynamics Williston	SS / FFP	AMCOM, Redstone Arsenal, AL	Sep 14	Mar 16	10080	1.683	Y		Apr-13
FY 2015	General Dynamics Williston	SS / FFP	AMCOM, Redstone Arsenal, AL	Mar 15	Sep 16	23857	1.150	Y		Apr-13

REMARKS: Sole Source/Firm Fixed Price (SS/FFP)

FY 15 is a contract option year.

FY 14 / 15 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
ROCKET HYDRA 70 HE/PD M151/M423 (E37335)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 14														Fiscal Year 15										Later
									Calendar Year 14														Calendar Year 15							
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Complete Round																														
1	FY 14	A	10080	0	10080												A													10080
1	FY 15	A	23857	0	23857																		A							23857
1	FY 15	FMS	21648	0	21648																									21648
Total					55585																									55585
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	General Dynamics, Williston	0	15	30	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	7	22	29
	Reorder	6	5	18	23
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS
Note: QTY EA for Delivery Schedule. Contractor minimum sustainment rate for the total of all variants is 80,000 rockets annually. The production rate shown in the table is a per variant monthly rate x 1000. Minimum production rate for MFR 1 is 300, database rounds down to 0. FY 2015 is a contract option year.

FY 16 / 17 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
ROCKET HYDRA 70 HE/PD M151/M423 (E37335)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 16												Fiscal Year 17												Later
									Calendar Year 16												Calendar Year 17									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Complete Round																														
1	FY 14	A	10080	0	10080						1008		1008	1008	1008	1008			1008	1008	1008	1008	1008							0
1	FY 15	A	23857	0	23857												2857	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	1000		0
1	FY 15	FMS	21648	0	21648																		1776							19872
Total					55585						1008		1008	1008	1008	1008	2857	2000	3008	3008	3008	3008	4784	2000	2000	2000	2000	1000		19872
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	General Dynamics, Williston	0	15	30	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	7	22	29
	Reorder	6	5	18	23
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS
Note: QTY EA for Delivery Schedule. Contractor minimum sustainment rate for the total of all variants is 80,000 rockets annually. The production rate shown in the table is a per variant monthly rate x 1000. Minimum production rate for MFR 1 is 300, database rounds down to 0. FY 2015 is a contract option year.

FY 18 / 19 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
ROCKET HYDRA 70 HE/PD M151/M423 (E37335)

Date: February 2015

COST ELEMENTS						Fiscal Year 18												Fiscal Year 19												
MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT				Calendar Year 18												Calendar Year 19									Later
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Complete Round																														
1	FY 14	A	10080	10080																										0
1	FY 15	A	23857	23857																										0
1	FY 15	FMS	21648	1776	19872	14880	4992																							0
Total					19872	14880	4992																							
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	General Dynamics, Williston	0	15	30	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	7	22	29
	Reorder	6	5	18	23
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS
Note: QTY EA for Delivery Schedule. Contractor minimum sustainment rate for the total of all variants is 80,000 rockets annually. The production rate shown in the table is a per variant monthly rate x 1000. Minimum production rate for MFR 1 is 300, database rounds down to 0. FY 2015 is a contract option year.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
ROCKET HYDRA 70 SIG PRAC M274 (E37337)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty		74592	4389								Continuing	Continuing
Gross Cost	1572.9	92.2	9.0								Continuing	Continuing
Less PY Adv Proc												
Net Proc P1	1572.9	92.2	9.0								Continuing	Continuing
Plus CY Adv Proc												
Total Proc Cost	1572.9	92.2	9.0								Continuing	Continuing
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C		0.0	0.0								Continuing	Continuing

P-40 Breakdown

Area		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Active	Qty	74592	4389	0	0	0	0	0	0	0
	Net Proc (P-1)	92157.0	9037.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
National Guard	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reserve	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	Qty	74592	4389	0	0	0	0	0	0	0
	Gross Cost	92157	9037	0	0	0	0	0	0	0

Description:
The Hydra-70 family of rockets is used by Army aircraft (AH-64A/D Apache, OH-58D Kiowa Warrior, and Special Operations aircraft) to perform a number of roles including anti-materiel, anti-personnel, air-to-ground suppression and illumination. The M274 warhead is a smoke/flash signature practice warhead used for pilot/gunner training missions and consists of a cast iron warhead modified with vent holes, an aluminum nose cap with firing pin, a M423 fuze safe and arming device, and a smoke/flash cartridge. The M274 warhead is combined with the MK66 rocket motor to complete the all-up-round (AUR). The M274, with the MK66 Mod 4 rocket motor and electromagnetic radiation protection, can be fired by all aircraft (AH-64A/D Apache, OH-58D Kiowa Warrior, and Special Operations aircraft). This item is Code A, approved for service use. This Hydra-70 rocket funding supports the entire Hydra-70 Rocket System to include resolution of obsolescence, safety, reliability, weapon integration activities, engineering changes and production issues.

NOTE: QTY EA

Justification:

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature ROCKET HYDRA 70 SIG PRAC M274 (E37337)	
Program Elements for Code B Items:	Code: A	Other Related Program Elements:	

The Hydra-70 Product Office is the procurement agent for all services.

Beginning in Fiscal Year (FY) 2016, Rocket Hydra 70 Sig Prac M274 will be procured under budget line AMMO-Hydra, Aviation Rocket Procurement, Unguided, APE E37412000.

This is a training unique item not used in combat. The FY 2015 requests supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals.

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

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: ROCKET HYDRA 70 SIG PRAC M274 (E37337)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
Flyaway Recurring																
AMMUNITION HARDWARE																
Complete Round	HA1	77053	74592	1.033	4977	4389	1.134									
SubTotal AMMO Hardware		**77054**			**4977**											
Production Support Costs																
Prod/Sys Engineering/Program Management		5957			2128											
Component Eng Spt (Other Gov't Agencies)		9146			1932											
SubTotal Prod. Support		**15103**			**4060**											
Total:		**92156**			**9037**											

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Procurement of Ammunition, Army/ 1/ Ammunition		ROCKET HYDRA 70 SIG PRAC M274 (E37337)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Complete Round										
FY 2014	General Dynamics Williston	SS / FFP	AMCOM, Redstone Arsenal, AL	Sep 14	Mar 16	74592	1.033	Y		Apr-13
FY 2015	General Dynamics Williston	SS / FFP	AMCOM, Redstone Arsenal, AL	Mar 15	Sep 16	4389	1.134	Y		Apr-13

REMARKS: Sole Source/Firm Fixed Price (SS/FFP)

FY 2015 is a contract option year.

FY 14 / 15 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
ROCKET HYDRA 70 SIG PRAC M274 (E37337)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 14												Fiscal Year 15												Later
									Calendar Year 14												Calendar Year 15									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Complete Round																														
1	FY 14 BASE	A	74592	0	74592												A													74592
1	FY 15 BASE	A	4389	0	4389																		A							4389
Total					78981																									78981
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	General Dynamics, Williston	0	25	35	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	7	22	29
	Reorder	6	5	18	23
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS
Note: QTY EA for Delivery Schedule. Contractor minimum sustainment rate for the total of all variants is 80,000 rockets annually. The production rate shown in the table is a per variant monthly rate x 1000. Minimum production rate for MFR 1 is 300, database rounds down to 0. FY 2015 is a contract option year.

FY 16 / 17 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
ROCKET HYDRA 70 SIG PRAC M274 (E37337)

Date: February 2015

COST ELEMENTS						Fiscal Year 16												Fiscal Year 17												
									Calendar Year 16												Calendar Year 17									
MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Later
Complete Round																														
1	FY 14 BASE	A	74592	0	74592						6000		7008	7008	7008	7728	8880		6000	6000	6000	6000	6960							0
1	FY 15 BASE	A	4389	0	4389												2389	1000	1000											0
Total					78981						6000		7008	7008	7008	7728	11269	1000	7000	6000	6000	6000	6960							
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	General Dynamics, Williston	0	25	35	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	7	22	29
	Reorder	6	5	18	23

REMARKS
Note: QTY EA for Delivery Schedule. Contractor minimum sustainment rate for the total of all variants is 80,000 rockets annually. The production rate shown in the table is a per variant monthly rate x 1000. Minimum production rate for MFR 1 is 300, database rounds down to 0. FY 2015 is a contract option year.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
Rocket, Hydra 70, Flare Infrared (IR) M278 (E37338)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty			3132								Continuing	Continuing
Gross Cost	52.3		13.4								Continuing	Continuing
Less PY Adv Proc												
Net Proc P1	52.3		13.4								Continuing	Continuing
Plus CY Adv Proc												
Total Proc Cost	52.3		13.4								Continuing	Continuing
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C			0.0								Continuing	Continuing

P-40 Breakdown

Area		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Active	Qty	0	3132	0	0	0	0	0	0	0
	Net Proc (P-1)	0.0	13372.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
National Guard	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reserve	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	Qty	0	3132	0	0	0	0	0	0	0
	Gross Cost	0	13372	0	0	0	0	0	0	0

Description:
The Hydra-70 family of rockets is used by Army aircraft (AH-64 Apache and OH-58D Kiowa Warrior helicopters) to perform a number of roles including anti-material, anti-personnel, air-to-ground suppression and illumination. The M278 Infrared Flare warhead is designed for battlefield illumination for use with Infrared (IR) goggles. The flare rockets can be launched from fixed wing or rotary wing aircraft. The M442 warhead fuze initiates the expulsion of the flare payload approximately ten seconds after rocket launch. This item is Code A, approved for service use. This Hydra-70 rocket funding supports the entire Hydra-70 Rocket System to include resolution of obsolescence, safety, reliability, weapon integration activities, engineering changes and production issues.

NOTE: Qty EA

Justification:
The Hydra-70 Product Office is the procurement agent for all services.

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature Rocket, Hydra 70, Flare Infrared (IR) M278 (E37338)	
Program Elements for Code B Items:	Code:	Other Related Program Elements:	

Beginning in Fiscal Year (FY) 2016, Rocket Hydra 70 Flare Infrared (IR) M278 will be procured under budget line AMMO-Hydra, Aviation Rocket Procurement, Unguided, APE E37412000.

This is a training standard item used in both training and combat. The FY 2015 requests supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals.

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

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: Rocket, Hydra 70, Flare Infrared (IR) M278 (E37338)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
Flyaway Recurring																
AMMUNITION HARDWARE																
Complete Round	HA1				11121	3132	3.551									
SubTotal Ammo Hardware					**11122**											
Production Support Costs																
Prod/Sys Engineering/Program Management					1180											
Component Eng Spt (Other Gov't Agencies)					1070											
SubTotal Prod. Support					**2250**											
Total:					**13371**											

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Procurement of Ammunition, Army/ 1/ Ammunition		Rocket, Hydra 70, Flare Infrared (IR) M278 (E37338)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Complete Round										
FY 2015	General Dynamics Williston, VT	SS / FFP	AMCOM, Redstone Arsenal, AL	Mar 15	Sep 16	3132	3.551	Y		Apr-13

REMARKS: Sole Source/Firm Fixed Price (SS/FFP)

FY 14 / 15 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
Rocket, Hydra 70, Flare Infrared (IR) M278 (E37338)

Date: February 2015

COST ELEMENTS						Fiscal Year 14												Fiscal Year 15												
MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT				Calendar Year 14												Calendar Year 15									Later
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Complete Round																														
1	FY 15	A	3132	0	3132																		A							3132
Total					3132																									3132
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	General Dynamics, Williston, VT	0	15	25	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	7	22	29
	Reorder	6	3	18	21
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS
Note: QTY EA for Delivery Schedule. Contractor minimum sustainment rate for the total of all variants is 80,000 rockets annually. The production rate shown in the table is a per variant monthly rate x 1000. Minimum production rate for MFR 1 is 300, database rounds down to 0. FY 2015 is a contract option year.

FY 16 / 17 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
Rocket, Hydra 70, Flare Infrared (IR) M278 (E37338)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 16												Fiscal Year 17												Later
									Calendar Year 16												Calendar Year 17									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Complete Round																														
1	FY 15	A	3132	0	3132												2132	1000												0
Total					3132												2132	1000												
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	General Dynamics, Williston, VT	0	15	25	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	7	22	29
	Reorder	6	3	18	21
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS
Note: QTY EA for Delivery Schedule. Contractor minimum sustainment rate for the total of all variants is 80,000 rockets annually. The production rate shown in the table is a per variant monthly rate x 1000. Minimum production rate for MFR 1 is 300, database rounds down to 0. FY 2015 is a contract option year.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
AMMO-Hydra, Aviation Rocket Procurement, Unguided (E37412)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty				16257	109407	125664	56597	67782	42308	29301	Continuing	Continuing
Gross Cost				30.7	136.3	167.0	73.4	89.8	62.1	56.4	Continuing	Continuing
Less PY Adv Proc												
Net Proc P1				30.7	136.3	167.0	73.4	89.8	62.1	56.4	Continuing	Continuing
Plus CY Adv Proc												
Total Proc Cost				30.7	136.3	167.0	73.4	89.8	62.1	56.4	Continuing	Continuing
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C				0.0	0.0	0.0	0.0	0.0	0.0	0.0	Continuing	Continuing

P-40 Breakdown

Area		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Active	Qty	0	0	16257	109407	125664	56597	67782	42308	29301
	Net Proc (P-1)	0.0	0.0	30663.0	136341.0	167004.0	73411.0	89788.0	62071.0	56358.0
National Guard	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reserve	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	Qty	0	0	16257	109407	125664	56597	67782	42308	29301
	Gross Cost	0	0	30663	136341	167004	73411	89788	62071	56358

Description:
This budget line procures all Hydra-70 unguided rocket types in support of operational, training and war reserve requirements. The system provides combat overmatch capability and ensures the availability of munitions to support combat operations. This system of unguided aerial rockets is used by Army aircraft (AH-64D/E Apache, OH-58D Kiowa Warrior and Special Operations aircraft) to perform a number of roles including anti-materiel, anti-personnel, air-to-ground suppression and illumination. This Hydra-70 unguided rocket funding supports the entire Hydra-70 unguided rocket system to include resolution of obsolescence, safety, reliability, weapon integration activities, engineering changes and production issues.

NOTE: QTY EA

Justification:
The Hydra-70 Product Office is the procurement agent for all services, for all variants of 2.75 Rockets. This budget activity includes both training standard items and items that may be used in both training and combat. The Fiscal Year (FY) 2016 procurement supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals. FY 2016 Base

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature AMMO-Hydra, Aviation Rocket Procurement, Unguided (E37412)	
Program Elements for Code B Items:	Code:	Other Related Program Elements:	

procurement dollars in the amount of $30.663 million will procure 16,257 Hydra-70 Rockets. FY 2016 Overseas Contingency Operations (OCO) procurement dollars in the amount of $136,341 million will procure 109,407 Hydra-70 Rockets. The Army intends to convert any price advantage created through contract negotiations, other service procurement and/or Foreign Military Sales (FMS) into an increase of the Army's procurement of Hydra-70 Rockets. Pricing and quantities in FY 2016-2020 is uncertain due to an unknown Mk90 grain price planned for negotiation in FY 2015. The P-40/P-5 estimates are based on forecasted grain pricing and will be updated once a contract has been awarded.

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

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: AMMO-Hydra, Aviation Rocket Procurement, Unguided (E37412)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Flyaway Recurring																
AMMUNITION HARDWARE																
Complete Round								19378K	16257	1191.98	117284K	109407	1072.00	136662K	125664	1087.52
Subtotal:								**19378K**			**117284K**			**136662K**		
Production Support Costs																
Prod/Sys Engineering/Program Management								5577000			9837000			15414K		
Component Eng Spt (Other Gov't Agencies)								5708000			9220000			14928K		
Subtotal:								**11285K**			**19057K**			**30342K**		
Total:								**30663**			**136341**			**167004**		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Procurement of Ammunition, Army/ 1/ Ammunition		AMMO-Hydra, Aviation Rocket Procurement, Unguided (E37412)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Complete Round										
FY 2016 Base	General Dynamics Williston, VT	SS / FFP	Base	Mar 16	Sep 17	16257	1.19	Y		Apr-13
FY 2016 OCO	Gen Dynamics Williston, VT	SS / FFP	OCO	Mar 16	Sep 17	109407	1.07	Y		Apr-13

REMARKS: REMARKS: Sole Source/Firm Fixed Price (SS/FFP)

FY 2016, is contract option year.

FY 16 / 17 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
AMMO-Hydra, Aviation Rocket Procurement, Unguided (E37412)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 16												Fiscal Year 17												Later
									Calendar Year 16												Calendar Year 17									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Complete Round																														
1	FY 16 BASE	A	16257	0	16257						A																		2257	14000
2	FY 16 OCO	A	109407	0	109407						A																		10407	99000
Total					125664																								12664	113000
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	General Dynamics, Williston, VT	300	25000	35000	
2	Gen Dynamics, Williston, VT	300	25000	35000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	7	22	29
	Reorder	6	5	18	23
2	Initial	6	7	22	29
	Reorder	6	5	18	23
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS
Note: QTY EA for Delivery Schedule. Contractor minimum sustainment rate for the total of all variants is 80,000 rockets annually. FY 2016, 2017 and 2018 are contract option years.

FY 18 / 19 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
AMMO-Hydra, Aviation Rocket Procurement, Unguided (E37412)

Date: February 2015

COST ELEMENTS						Fiscal Year 18														Fiscal Year 19									
									Calendar Year 18														Calendar Year 19						
MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Later
Complete Round																													
1	FY 16 BASE	A	16257	2257	14000	2000	2000	2000	1000	1000	1000	1000	1000	1000	1000	1000													0
2	FY 16 OCO	A	109407	10407	99000	9000	9000	9000	9000	9000	9000	9000	9000	9000	9000	9000													0
Total					113000	11000	11000	11000	10000	10000	10000	10000	10000	10000	10000	10000													
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	General Dynamics, Williston, VT	300	25000	35000	
2	Gen Dynamics, Williston, VT	300	25000	35000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	7	22	29
	Reorder	6	5	18	23
2	Initial	6	7	22	29
	Reorder	6	5	18	23
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS
Note: QTY EA for Delivery Schedule. Contractor minimum sustainment rate for the total of all variants is 80,000 rockets annually. FY 2016, 2017 and 2018 are contract option years.

FY 20 / 21 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
AMMO-Hydra, Aviation Rocket Procurement, Unguided (E37412)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 20												Fiscal Year 21												Later
									Calendar Year 20												Calendar Year 21									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Complete Round																														
1	FY 16 BASE	A	16257	16257																										0
2	FY 16 OCO	A	109407	109407																										0
Total																														
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	General Dynamics, Williston, VT	300	25000	35000	
2	Gen Dynamics, Williston, VT	300	25000	35000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	7	22	29
	Reorder	6	5	18	23
2	Initial	6	7	22	29
	Reorder	6	5	18	23
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS
Note: QTY EA for Delivery Schedule. Contractor minimum sustainment rate for the total of all variants is 80,000 rockets annually. FY 2016, 2017 and 2018 are contract option years.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
AMMO-Hydra, Aviation Rocket Procurement, Guided (E37413)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty				99		99	99	95	93	486	Continuing	Continuing
Gross Cost				3.0		3.0	3.1	3.0	3.0	15.8	Continuing	Continuing
Less PY Adv Proc												
Net Proc P1				3.0		3.0	3.1	3.0	3.0	15.8	Continuing	Continuing
Plus CY Adv Proc												
Total Proc Cost				3.0		3.0	3.1	3.0	3.0	15.8	Continuing	Continuing
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C				0.0		0.0	0.0	0.0	0.0	0.0	Continuing	Continuing

P-40 Breakdown

Area		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Active	Qty	0	0	99	0	99	99	95	93	486
	Net Proc (P-1)	0.0	0.0	2990.0	0.0	2990.0	3067.0	3000.0	3000.0	15848.0
National Guard	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reserve	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	Qty	0	0	99	0	99	99	95	93	486
	Gross Cost	0	0	2990	0	2990	3067	3000	3000	15848

Description:
This budget line procures all Hydra-70 Guided Rocket types in support of operational, training and war reserve requirements. The Hydra-70 Guided Rocket will provide increased accuracy over the current 2.75-inch unguided munition, complementing the 30 millimeter cannon (Hughes M230 Chain Gun) and HELLFIRE missile, in precision strikes against lightly armored and soft point targets enabling better conformance to restricted rules of engagement. A laser guidance section for the 2.75 munition will be combined with current Hydra-70 warheads powered by the Mk66 Mod 4 motor. This Hydra-70 Guided Rocket funding supports the entire Hydra-70 Guided Rocket system to include resolution of obsolescence, safety, reliability, weapon integration activities, potential test sets, engineering changes, production issues and guidance section repair kits.

NOTE: QTY EA

Justification:
The Fiscal Year (FY) 2016 procurement provides the Army the potential for achieving a precision engagement capability at a significantly reduced cost across its portfolio of armed helicopter rocket

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature AMMO-Hydra, Aviation Rocket Procurement, Guided (E37413)	
Program Elements for Code B Items:	Code:	Other Related Program Elements:	

and missile munitions. The laser guided rocket is expected to provide an increased number of stowed kills per mission and reduce collateral damage. FY 2016 Base funding in the amount of $2.990 million will procure 99 guidance sections. The Army intends to convert any price advantage created through contract negotiations, other service procurements and/or Foreign Military Sales (FMS) into an increase of the Army's procurement of Hydra-70 Guided Rockets.

Procurement funding is requested in FY 2016-FY 2020 in order to support further evaluation and theater requirements pending a decision on an enduring guided rocket capability.

"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 Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
ROCKET HYDRA 70 ILLUM M257 (E52200)

Program Elements for Code B Items:
ROCKET HYDRA 70 ILLUM M257

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty		5346	1351								Continuing	Continuing
Gross Cost	46.4	28.2	5.7								Continuing	Continuing
Less PY Adv Proc												
Net Proc P1	46.4	28.2	5.7								Continuing	Continuing
Plus CY Adv Proc												
Total Proc Cost	46.4	28.2	5.7								Continuing	Continuing
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C		0.0	0.0								Continuing	Continuing

P-40 Breakdown

Area		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Active	Qty	5346	1351	0	0	0	0	0	0	0
	Net Proc (P-1)	28241.0	5721.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
National Guard	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reserve	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	Qty	5346	1351	0	0	0	0	0	0	0
	Gross Cost	28241	5721	0	0	0	0	0	0	0

Description:
The Hydra-70 family of rockets is used by Army aircraft (AH-64 and OH-58D Kiowa Warrior helicopters) to perform a number of roles including anti-material, anti-personnel, air-to-ground suppression and illumination. The M257 Illuminating warhead is designed to provide battlefield illumination and does not require the use of Infrared (IR) goggles. The M257 flare rocket can be launched from fixed wing or rotary wing aircraft. The M442 warhead fuze initiates the expulsion of the flare payload approximately ten seconds after rocket launch. This items is Code A, approved for service use. This Hydra-70 rocket funding supports the entire Hydra-70 Rocket System to include resolution of obsolescence, safety, reliability, weapon integration activities, engineering changes and production issues.

NOTE: QTY EA

Justification:
The Hydra-70 Product Office is the procurement agent for all services.

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature ROCKET HYDRA 70 ILLUM M257 (E52200)	
Program Elements for Code B Items: ROCKET HYDRA 70 ILLUM M257	Code: A	Other Related Program Elements:	

Beginning in Fiscal Year (FY) 2016, Rocket Hydra 70 Illum M257 will be procured under budget line AMMO-Hydra, Aviation Rocket Procurement, Unguided, APE E37412000.

This is a training standard item used in both training and combat. The FY 2015 requests supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals.

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

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: ROCKET HYDRA 70 ILLUM M257 (E52200)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
Flyaway Recurring																
AMMUNITION HARDWARE																
Complete Round		24827	5346	4.644	4633	1351	3.429									
Subtotal:		**24827**			**4633**											
Production Support Costs																
Prod/Sys Engineering/Program Management		2267			571											
Component Eng Spt (Other Gov't Agencies)		1147			517											
Subtotal:		**3414**			**1088**											
Total:		**28241**			**5721**											

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:
Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature:
ROCKET HYDRA 70 ILLUM M257 (E52200)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
AMMUNITION HARDWARE										
FY 2014	General Dynamics Williston	SS / FFP	AMCOM, Redstone Arsenal, AL	Sep 14	Sep 16			Y		Jul-10
FY 2015	General Dynamics Williston	SS / FFP	AMCOM, Redstone Arsenal, AL	Mar 15	Sep 16			Y		Jul-10

REMARKS:

FY 14 / 15 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
ROCKET HYDRA 70 ILLUM M257 (E52200)

Date: February 2015

COST ELEMENTS						Fiscal Year 14												Fiscal Year 15												
MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT				Calendar Year 14												Calendar Year 15									Later
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Complete Round																														
1	FY 14	A	5346	0	5346												A													5346
1	FY 15	A	1351	0	1351																		A							1351
Total					6697																									6697
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	General Dynamics, Williston	0	15	46	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	7	22	29
	Reorder	6	5	18	23
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 16 / 17 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
ROCKET HYDRA 70 ILLUM M257 (E52200)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 16												Fiscal Year 17												Later
									Calendar Year 16												Calendar Year 17									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Complete Round																														
1	FY 14	A	5346	0	5346												2502	2844												0
1	FY 15	A	1351	0	1351												1351													0
Total					6697												3853	2844												
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	General Dynamics, Williston	0	15	46	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	6	7	22	29
	Reorder	6	5	18	23
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CAD/PAD, All Types (E61000)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	116.3	5.6	5.4	5.6		5.6	5.9	5.4	6.0	6.1		156.4
Less PY Adv Proc												
Net Proc P1	116.3	5.6	5.4	5.6		5.6	5.9	5.4	6.0	6.1		156.4
Plus CY Adv Proc												
Total Proc Cost	116.3	5.6	5.4	5.6		5.6	5.9	5.4	6.0	6.1		156.4
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
Includes Cartridge Actuated Devices (CAD) and Propellant Actuated Devices (PAD) all types.

CAD/PAD are used in various escape and jettison systems on all types of Army aircraft. They are required to support aircraft escape, safety, and jettison systems and mission essential needs. Items are subject to shelf and service life restrictions and, therefore, require replacement at specified intervals.

Justification:
FY 2016 Base Budget supports critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station, and the combined training centers. Test requirements support the development, fielding, safety, and quality assurance of Army munitions and equipment throughout their life-cycle.

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.

The FY 2016 program is required to assure availability of replacement items when needed and avoid grounding aircraft or rendering aircraft partially mission capable.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CAD/PAD, All Other (EA0003)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	116.3	5.6	5.4	5.6		5.6	5.9	5.4	6.0	6.1		156.4
Less PY Adv Proc												
Net Proc P1	116.3	5.6	5.4	5.6		5.6	5.9	5.4	6.0	6.1		156.4
Plus CY Adv Proc												
Total Proc Cost	116.3	5.6	5.4	5.6		5.6	5.9	5.4	6.0	6.1		156.4
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
Includes Cartridge Actuated Devices (CAD) and Propellant Actuated Devices (PAD) all types.

CAD/PAD are used in various escape and jettison systems on all types of Army aircraft. They are required to support aircraft escape, safety, and jettison systems and mission essential needs. Items are subject to shelf and service life restrictions and, therefore, require replacement at specified intervals.

Justification:
FY 2016 Base Budget supports critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station, and the combined training centers. Test requirements support the development, fielding, safety, and quality assurance of Army munitions and equipment throughout their life-cycle.

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.

The FY 2016 program is required to assure availability of replacement items when needed and avoid grounding aircraft or rendering aircraft partially mission capable.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
Demolition Munitions, All Types (E55400)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	404.9	28.1	25.9	9.8	4.0	13.8	17.3	16.5	15.6	13.9		535.9
Less PY Adv Proc												
Net Proc P1	404.9	28.1	25.9	9.8	4.0	13.8	17.3	16.5	15.6	13.9		535.9
Plus CY Adv Proc												
Total Proc Cost	404.9	28.1	25.9	9.8	4.0	13.8	17.3	16.5	15.6	13.9		535.9
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
This budget line includes Demolition Munitions, All Types.

(E45404) The M17E1 Receiver, Radio Frequency Remote Activation Munition System (RF-RAMS) (DODIC MP47) is a one-time use receiver that provides the un-tethered capability to wirelessly function/initiate demolition charges or munitions up to and beyond 5 KM line-of-sight/non line-of-sight, once it receives the correct programmed coded signal from the MK152 RF-RAMS transmitter. The Receiver is programmed in the field by an RF-RAMS Transmitter and subsequently responds only to that transmitter. The M17E1 Receiver is a single use item, which is capable of functioning non electric blasting caps or detonation cord. Ongoing design verification testing of the M17E1 will support an Engineering Change Proposal (ECP) approval in 2QFY15 and the subsequent initial production build in FY15. This item is Code A, approved for service use.

(E50601) Charge Demolition Block Comp C-4 1-1/4 LB M112 is the primary demolition explosive used by the U.S. Army. The M112 Demolition Block is used for general demolition and, in particular, for destruction of captured enemy ammunition. The block demolition charge consists of 1-1/4 pounds of composition C-4 plastic explosive packed in a Mylar-film bag. Pressure sensitive adhesive tape is provided on one of the rectangular surfaces, allowing quick emplacement by the individual soldier on the object to be destroyed. The explosive may be cut and/or removed from its wrapper and hand molded into a desired shape suited to the target. Upon detonation, the shock wave destroys the target by cutting, breaching or cratering. This item is Code A, approved for service use.

(E51300) Charge Demolition Block Cratering 40 pound is a demolition charge designed to destroy roads, bridge abutments, runways, buildings, fortifications and other concrete structures. It uses a low velocity explosive which destroys by a lifting and heaving motion rather than the cutting action of high velocity charges. This item is Code A, approved for service use.

(E51400) Charge Demolition Sheet 50 Foot Roll, M186 is a flexible explosive. It is 3 inches wide and 1/4 inch thick. It can be easily cut and formed into various shapes and is primarily used as a cutting charge. This item is Code A, approved for service use.

(E52500) Cap Blasting Electric M6 is used to initiate high explosives. It is initiated by an electrical charge from a blasting machine or other source of electric power. Blasting cap M6 consists of a base charge of RDX, an intermediate charge of lead azide and an ignition charge of smokeless powder, potassium chlorate and lead salt of dinitro cresol in an aluminum alloy cup. Two 12-foot lead wires, connected by a bridge wire in the ignition charge, extend through a rubber plug assembly in the open end of the cup. This item is Code A, approved for service use.

(E53200) Charge Demolition Shaped M3 40 pound is used to blast craters in paved and unpaved roads and to bore holes in metals, masonry or concrete. It contains a 15-inch stand-off, 29.5 pound

Comp B main charge and a 0.11 pound Comp A3 booster. This item is Code A, approved for service use.

(E54100) Detonating Cord is used to prime and detonate explosive charges. Unlike the time fuze, which burns slowly, detonating cord burns almost instantaneously. It is used to link a series of near simultaneous charges. The Type 1, Class E detonating cord consists of a core of high velocity explosive in a seamless textile tube. The tube is covered with a thin layer of asphalt and sheathed in an outer cover of plastic coated textile. The plastic outer cover is smooth and colored olive drab. This item is Code A, approved for service use.

(E59100) The Cartridge Impulse Electrically Initiated is used in Explosive Ordnance Disposal (EOD) tools and equipment. It is an electrically initiated, gas producing device. It is initiated with an MK1-2 squib in place of the percussion primer. This item is Code A, approved for service use.

(E60200) Cutter Cartridge Actuated 2 Second Delay M21 is a cartridge actuated device that is used in aerial delivery systems for cargo. It severs a reefing line which allows a parachute to fully deploy. The cutter is installed in a mounting bracket which is attached to the parachute. Major components consist of a case, firing pin assembly, lanyard, knife assembly, delay assembly, and cotter pin. This item is Code A, approved for service use.

(E76701) The Cutter, High Explosive MK23 MOD 1, is an Explosive Ordnance Disposal (EOD) tool. It is initiated with a blasting cap and uses an explosive formed penetrator to disable a target munition. This item is restricted in the Army to EOD use only.

(E76702) The Cutter, High Explosive MK24 MOD 1, is an Explosive Ordnance Disposal (EOD) tool. It is initiated with a blasting cap and uses an explosive formed penetrator to disable a target munition. This item is restricted in the Army to EOD use only.

(E76728) MK 788-0, Main Charge Disrupter is a device used to render-safe unexploded ordnance (UXO). Upon initiation, the device attacks and neutralizes the main charge explosive by generating reactions up to and including low-order detonations. It is a non-developmental item (NDI) consisting of an energetic tool (ET), a demolition material interface adapter, and an emplacement stand. The MCD provides EOD with an improved neutralization capability in situations where the use of more traditional methods (attacking the fuzing mechanism or high-order detonation) is not possible or desired. This item is Code B, not approved for service use.

(E78201) The M980 Demolition Charge is a 20 pound, 38 foot roll of flexible explosive. It is 10 inches wide and .083 inches thick. It can be easily cut and formed into various shapes and is primarily used as a cutting charge. This item is Code A, approved for service use.

(E81302) Cap Blasting Non-Elec, W/30 ft Shock Tube is part of the family of Modern Demolition Initiators (MDI). It consists of a blasting cap which is factory sealed to a length of shock tube. The tube is activated using an M81 igniter. A shock wave travels the length of the tube, with a delay measured in milliseconds, and ignites the blasting cap which in turn initiates the main charge. The MDI is not susceptible to electrostatic discharge or Radio Frequency (RF) jamming. The 30 foot length is generally used as a linking charge for a series of demolitions. This item is Code A, approved for service use.

(E81307) Igniter, Time Fuze and Shock Tube, M81 is a device, hand held by the individual Soldier, with a small primer charge that will activate the M700 Time Fuze as well as a shock tube. It is the primary device for all non-electrical demolition initiation. This item is Code A, approved for service use.

(E99800) Anti-Personnel Obstacle Breaching System (APOBS) Training Aid, Inert is a classroom training aid for the APOBS (E72800). It's appearance and weight are identical to the APOBS, but it is entirely non-functional and is only used to demonstrate proper set up of the system prior to firing. This item is Code A, approved for service use.

(E99903) Blast Cap, Non-Elec: 500Ft Minitube, M21 is part of the family of Modern Demolition Initiators (MDI). It consists of an initiating component used to activate standard military explosives and demolition devices. The MDI is not susceptible to electrostatic discharge or Radio Frequency (RF) jamming. This item is Code A, approved for service use.

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature Demolition Munitions, All Types (E55400)	
Program Elements for Code B Items:	Code:	Other Related Program Elements:	

(E99905) Blast Cap, Non-Elec, 1000Ft Minitube, M23 is part of the family of Modern Demolition Initiators (MDI). It consists of an initiating component used to activate standard military explosives and demolition devices. The MDI is not susceptible to electrostatic discharge or Radio Frequency (RF) jamming. This item is Code A, approved for service use.

Justification:
FY 2016 Base and OCO Budgets support critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station and the combined training centers. Test requirements support the development, fielding, safety and quality assurance of Army munitions and equipment throughout their life-cycle.

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.

FY 2016 Base procurement dollars in the amount of $9.751 million supports production of 12 variants of Demolitions.

FY 2016 OCO procurement dollars in the amount of $4.000 million supports production of 1 variant of Demolitions.

(E50601) Charge Demolition Block Comp C-4 1-1/4 LB M112
This is a training standard item used in both training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.
FY 2016 Base procurement dollars in the amount of $1.088 million supports production of 18,318 Demolition Blocks.
FY 2016 OCO procurement dollars in the amount of $4.000 million supports production of 97,832 Demolition Blocks.

(E52500) Cap Blasting Electric M6
This is a training standard item used in both training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.
FY 2016 Base procurement dollars in the amount of $1.583 million supports production of 34,300 blasting caps.

(E54100) Detonating Cord
This is a training standard item used in both training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.
FY 2016 Base procurement dollars in the amount of $1.157 million supports production of 2.509 million feet of Type 1 detonating cord.

(E59100) The Cartridge Impulse Electrically Initiated is used in Explosive Ordnance Disposal (EOD) tools and equipment.
This is a training standard item used in both training and combat. Procurement supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.
FY 2016 Base procurement dollars in the amount of $0.993 million supports production of 8,113 cartridges.

(E76701) The Cutter, High Explosive MK23 MOD 1, is an Explosive Ordnance Disposal (EOD) tool.
This is a training standard item used in both training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.
FY 2016 Base procurement dollars in the amount of $0.750 million supports production of 1,913 cutters.

(E76702) The Cutter, High Explosive MK24 MOD 1, is an Explosive Ordnance Disposal (EOD) tool.
This is a training standard item used in both training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.
FY 2016 Base procurement dollars in the amount of $0.750 million supports production of 942 cutters.

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature Demolition Munitions, All Types (E55400)	
Program Elements for Code B Items:	Code:	Other Related Program Elements:	

(E76728) MK 788-0, Main Charge Disrupter is a device used to render-safe unexploded ordnance (UXO)
This is a training standard item used in both training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals.
FY 2016 Base procurement dollars in the amount of $0.061 million supports procurement of 97 disrupters.

(E78201) The M980 Demolition Charge is a 20 pound, 38 foot roll of flexible explosive.
This is a training standard item used in both training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.
FY 2016 Base procurement dollars in the amount of $1.200 million supports production of 35,290 feet of sheet explosive.

(E81302) Cap Blasting Non-Elec, W/30 ft Shock Tube is part of the family of Modern Demolition Initiators (MDI).
This is a training standard item used in both training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.
FY 2016 Base procurement dollars in the amount of $0.241 million supports production of 3,320 blasting caps.

(E81307) Igniter, Time Fuze and Shock Tube, M81
This is a training standard item used in both training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.
FY 2016 Base procurement dollars in the amount of $0.300 million supports production of 19,058 igniters.

(E99903) Blast Cap, Non-Elec: 500Ft Minitube, M21 is part of the family of Modern Demolition Initiators (MDI).
This is a training standard item used in both training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.
FY 2016 Base procurement dollars in the amount of $0.779 million supports production of 4,605 blasting caps.

(E99905) Blast Cap, Non-Elec, 1000Ft Minitube, M23 is part of the family of Modern Demolition Initiators (MDI).
This is a training standard item used in both training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.
FY 2016 Base procurement dollars in the amount of $0.849 million supports production of 4,031 blasting caps.

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: Demolition Munitions, All Types (E55400)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$
Hardware Recurring																
E45404 RECEIVER, M17E1 RADIO FIRING-REMOTE	MP47				11851K	4	3280.10									
E50601 CHG DEMO BLK COMP C-4 1-1/4 LB M112	M023	14247K	488	29.21	5417000	112	48.30	1088000	18	59.40	4000000	98	40.89	5088000	116	43.81
E51300 CHG DEMO BLK CRATERING 40 LB	M039	1299000	1	1804.17												
E51400 CHG DEMO SHEET 50FT ROLL**	M060	300000	2	124.07												
E52500 CAP BLASTING ELEC M6	M130	1560000	26	60.00	1008000	20	51.45	1583000	34	46.15				1583000	34	46.15
E53200 CHG DEMO SHAPED M3 40 LB	M421	5153000	2	2548.47	2226000	1	2333.33									
E54100 CORD DETONATING TYPE 1**	M456	1304000	2652	0.49	1113000	2686	0.41	1157000	2509	0.46				1157000	2509	0.46
E59100 IMPULSE CTG ELEC LINIT DRG NO LD	SS01							993000	8	122.40				993000	8	122.40
E60200 CUTTER CTG ACTUATED 2 SEC DELAY M21	M500	1839000	3	616.29												
E76701 Cutter HE MK23-0	ML04							750000	2	392.05				750000	2	392.05
E76702 Cutter HE MK24-0	ML05							750000	1	796.18				750000	1	796.18
E76728 DISRUPTER, MAIN CHARGE, MK 788-0	DWDF	150000	1	101.08	59000		746.84	61000		628.87				61000		628.87
E78201 Chg Demo Sheet 38ft Roll (QTY ft)	M980							1200000	35	34.00				1200000	35	34.00
E81302 CAP BLAST NON-ELEC, W/30 FT SHOCK	ML47	185000	5	36.71	186000	5	34.16	241000	3	72.59				241000	3	72.59
E81307 IGNITER, TIME FUZE AND SHOCK TUBE M81	MN08	507000	52	9.78	510000	71	7.23	300000	19	15.74				300000	19	15.74
E99800 APOBS Training Aid, Inert	MN84				1971000		9904.52									
E99903 CAP BLAST NON-ELEC 500Ft MT	MN88	749000	13	57.62	753000	13	59.28	779000	5	169.16				779000	5	169.16
E99905 CAP BLAST NON-ELEC 1000Ft MT	MN90	781000	8	96.18	805000	8	98.76	849000	4	210.62				849000	4	210.62
*** Quantity in eaches**																
**** Qty in thousands of feet**																
Total:		**28074**			**25899**			**9751**			**4000**			**13751**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: RECEIVER, M17E1 RADIO FIRING-REMOTE ACTV(RF-RAMS) (E45404)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty			3613									3613
Gross Cost			11.9									11.9
Less PY Adv Proc												
Net Proc P1			11.9									11.9
Plus CY Adv Proc												
Total Proc Cost			11.9									11.9
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C			0.0									0.0

Description:
The M17E1 Receiver, Radio Frequency Remote Activation Munition System (RF-RAMS) (DODIC MP47) is a one-time use receiver that provides the un-tethered capability to wirelessly function/initiate demolition charges or munitions up to and beyond 5 KM line-of-sight/non line-of-sight, once it receives the correct programmed coded signal from the MK152 RF-RAMS transmitter. The Receiver is programmed in the field by an RF-RAMS Transmitter and subsequently responds only to that transmitter. The M17E1 Receiver is a single use item, which is capable of functioning non electric blasting caps or detonation cord. Ongoing design verification testing of the M17E1 will support an Engineering Change Proposal (ECP) approval in 2QFY15 and the subsequent initial production build in FY15. This item is Code A, approved for service use.

The M85A1 is the inert functional trainer for the M17E1. All funding supports the requirements for the Active, Guard and Reserve components.

Justification:
This item will support both training and combat.

The MP47 is a modification of the MN80 with enhanced safety circuitry and reduced size.

TYPE CLASSIFICATION DATE: June 2001

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: RECEIVER, M17E1 RADIO FIRING-REMOTE ACTV(RF-RAMS) (E45404)	Weapon System Type:	MDAP:	DODIC: MP47	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
COMPLETE ROUND					7804080	3613	2160.00									
SUBTOTAL HARDWARE COST					**7804080**											
Support																
PRODUCTION ENGINEERING					2981920											
PRODUCTION TEST EQUIPMENT					740000											
SUBTOTAL PRODUCTION SUPPORT					**3721920**											
NON-RECURRING COSTS																
FIRST ARTICLE TEST					325000											
SUBTOTAL NON-RECURRING COSTS					**325000**											
Total:					**11851**											

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Procurement of Ammunition, Army/ 1/ Ammunition		RECEIVER, M17E1 RADIO FIRING-REMOTE ACTV(RF-RAMS) (E45404)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
COMPLETE ROUND										
FY 2015	TO BE SELECTED TBS01	WR	PICATINNY ARSENAL, NJ	May 15	Nov 16	3613	2160.00	Y		

REMARKS:

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
RECEIVER, M17E1 RADIO FIRING-REMOTE ACTV(RF-RAMS)
(E45404)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Complete Round																														
1	FY 15	A	3613	0	3613																									3613
Total					3613																									3613
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	TO BE SELECTED, TBS01	125	500	2000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	8	8	18	26
	Reorder	6	6	12	18
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
RECEIVER, M17E1 RADIO FIRING-REMOTE ACTV(RF-RAMS)
(E45404)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Complete Round																														
1	FY 15	A	3613	0	3613		500	500	500	500	500	500	500	113																0
Total					3613		500	500	500	500	500	500	500	113																
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+	MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
1	TO BE SELECTED, TBS01	125	500	2000		1	Initial	8	8	18	26	
							Reorder	6	6	12	18	
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CHG DEMO BLK COMP C-4 1-1/4 LB M112 (E50601)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	293735	487815	112159	18318	97832	116150	121326	114831	89453	84410		1419879
Gross Cost	153.6	14.2	5.4	1.1	4.0	5.1	6.2	6.2	4.9	5.0		200.5
Less PY Adv Proc												
Net Proc P1	153.6	14.2	5.4	1.1	4.0	5.1	6.2	6.2	4.9	5.0		200.5
Plus CY Adv Proc												
Total Proc Cost	153.6	14.2	5.4	1.1	4.0	5.1	6.2	6.2	4.9	5.0		200.5
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0

Description:
Composition C-4 is the primary demolition explosive used by the U.S. Army. The M112 Demolition Block is used for general demolition and, in particular, for destruction of captured enemy ammunition. The block demolition charge consists of 1-1/4 pounds of composition C-4 plastic explosive packed in a Mylar-film bag. Pressure sensitive adhesive tape is provided on one of the rectangular surfaces, allowing quick emplacement by the individual soldier on the object to be destroyed. The explosive may be cut and/or removed from its wrapper and hand molded into a desired shape suited to the target. Upon detonation, the shock wave destroys the target by cutting, breaching or cratering. This item is Code A, approved for service use.

Justification:
This is a training standard item used in both training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.

FY 2016 Base procurement dollars in the amount of $1.088 million supports production of 18,318 Demolition Blocks.

FY 2016 OCO procurement dollars in the amount of $4.000 million supports production of 97,832 Demolition Blocks.

TYPE CLASSIFICATION DATE: 1964

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CHG DEMO BLK COMP C-4 1-1/4 LB M112 (E50601)	Weapon System Type:	MDAP:	DODIC: M023	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
LOAD, ASSEMBLE, PACK (LAP)		3263482	487815	6.69	1160846	112159	10.35	191606	18318	10.46	1023323	97832	10.46	1214929	116150	10.46
COMP C-4 CLASS 3		8808757	643915	13.68	3307437	148050	22.34	557349	24180	23.05	2976631	129138	23.05	3533980	153318	23.05
SUBTOTAL HARDWARE COST		**12072K**			**4468283**			**748955**			**3999954**			**4748909**		
Support																
PRODUCTION ENGINEERING		1702051			888979			309172			41			309213		
QUALITY ASSURANCE		1168			1802			601						601		
SUBTOTAL PRODUCTION SUPPORT		**1703219**			**890781**			**309773**			**41**			**309813**		
NON-RECURRING COSTS																
FIRST ARTICLE TEST		105345			57939			29278						29278		
C4 QUALIFICATION TEST		366191														
SUBTOTAL NON-RECURRING COSTS		**471536**			**57939**			**29278**						**29278**		
Total:		**14246**			**5417**			**1088**			**4000**			**5088**		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:
Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature:
CHG DEMO BLK COMP C-4 1-1/4 LB M112 (E50601)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
LOAD, ASSEMBLE, PACK (LAP)						1816423				
FY 2014	AMERICAN ORDNANCE LLC (IAAP) MIDDLETOWN, IA	C / FFP	ROCK ISLAND ARSENAL, IL	Nov 14	Nov 15	487815	6.69	Y		
FY 2015	AMERICAN ORDNANCE LLC (IAAP) MIDDLETOWN, IA	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 15	Mar 16	112159	10.35	Y		
FY 2016	AMERICAN ORDNANCE LLC (IAAP) MIDDLETOWN, IA	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 16	Mar 17	116150	10.46	Y		
COMP C-4 CLASS 3						2397683				
FY 2014	BAE SYSTEMS ORDNANCE SYSTEMS KINGSPORT, TN	SS / FFP	ROCK ISLAND ARSENAL, IL	Dec 14	May 15	643915	13.68	Y		
FY 2015	BAE SYSTEMS ORDNANCE SYSTEMS KINGSPORT, TN	SS / FFP	ROCK ISLAND ARSENAL, IL	Apr 15	Jul 15	148050	22.34	Y		
FY 2016	BAE SYSTEMS ORDNANCE SYSTEMS KINGSPORT, TN	SS / FFP	ROCK ISLAND ARSENAL, IL	Apr 16	Jul 16	153318	23.05	Y		

REMARKS: The FY15 and FY16 contracts for LAP are Options to the Competitive Contract awarded for FY14.

The FY15 and FY16 contracts for Comp C-4, Class 3, will be Options to the Competitive Contract awarded for FY14.

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CHG DEMO BLK COMP C-4 1-1/4 LB M112 (E50601)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY x1000	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	2006.46	970.68	1035.78			27.75	48.60	48.60	97.20	85.23	97.20	97.20	97.20	97.20	97.20	97.20	96.60											0.00
1	FY 14	A	487.82	0.00	487.82		A												40.65	40.65	40.65	40.65	40.65	40.65	40.65	40.65	40.65	40.65	40.65	40.65
1	FY 15	A	112.16	0.00	112.16						A												37.08	37.09	10.35	3.07	3.07	3.07	3.07	15.36
1	FY 16	A	116.15	0.00	116.15																		A							116.15
1	FY 13	AF	297.30	118.74	178.56		145.80	31.59											0.24	0.93										0.00
1	FY 14	AF	118.71	0.00	118.71		A												9.90	9.89	9.89	9.89	9.89	9.89	9.89	9.89	9.89	9.89	9.89	9.89
1	FY 15	AF	58.09	0.00	58.09						A												4.85	4.84	4.84	4.84	4.84	4.84	4.84	24.20
1	FY 16	AF	50.51	0.00	50.51																		A							50.51
1	FY 13	NAV SEA	95.10	67.26	27.84		17.01	10.47											0.36											0.00
1	FY 14	NSOF	24.20	0.00	24.20		A												2.03	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02	2.02
1	FY 15	NSOF	30.11	0.00	30.11						A												2.51	2.51	2.51	2.51	2.51	2.51	2.51	12.55
Total					2239.93		162.81	69.81	48.60	48.60	97.20	85.23	97.20	97.20	97.20	97.20	97.20	97.20	149.78	53.49	52.56	52.56	97.00	97.00	70.26	62.98	62.98	62.98	62.98	271.31
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	AMERICAN ORDNANCE LLC (IAAP), MIDDLETOWN, IA	14.00	97.00	200.00	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	8	8	18	26
	Reorder	6	6	12	18
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CHG DEMO BLK COMP C-4 1-1/4 LB M112 (E50601)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY x1000	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	2006.46	2006.46																										0.00
1	FY 14	A	487.82	447.16	40.65	40.65																								0.00
1	FY 15	A	112.16	96.80	15.36	3.07	3.07	3.07	3.07	3.07																				0.00
1	FY 16	A	116.15	0.00	116.15						46.50	54.40	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53								0.00
1	FY 13	AF	297.30	297.30																										0.00
1	FY 14	AF	118.71	108.82	9.89	9.89																								0.00
1	FY 15	AF	58.09	33.89	24.20	4.84	4.84	4.84	4.84	4.84																				0.00
1	FY 16	AF	50.51	0.00	50.51						50.51																			0.00
1	FY 13	NAV SEA	95.10	95.10																										0.00
1	FY 14	NSOF	24.20	22.19	2.02	2.02																								0.00
1	FY 15	NSOF	30.11	17.57	12.55	2.51	2.51	2.51	2.51	2.51																				0.00
Total					271.31	62.98	10.42	10.42	10.42	10.42	97.00	54.40	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53								
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	AMERICAN ORDNANCE LLC (IAAP), MIDDLETOWN, IA	14.00	97.00	200.00	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	8	8	18	26
	Reorder	6	6	12	18
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CHG DEMO BLK CRATERING 40 LB (E51300)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	4563	720										5283
Gross Cost	39.5	1.3										40.8
Less PY Adv Proc												
Net Proc P1	39.5	1.3										40.8
Plus CY Adv Proc												
Total Proc Cost	39.5	1.3										40.8
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0										0.0

Description:
The 40 pound cratering charge is a demolition charge designed to destroy roads, bridge abutments, runways, buildings, fortifications and other concrete structures. It uses a low velocity explosive which destroys by a lifting and heaving motion rather than the cutting action of high velocity charges. This item is Code A, approved for service use.

Justification:
This is a training standard item used in both training and combat. Procurement supports annual training and builds a depot level inventory in accordance with Army's procurement goals.

TYPE CLASSIFICATION DATE: 1960

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CHARGE DEMO, (50FT), Sheet Explosive, M186 (E51400)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	135077	2418					16851	6958	45596			206900
Gross Cost	8.1	0.3					1.3	0.7	3.2			13.6
Less PY Adv Proc												
Net Proc P1	8.1	0.3					1.3	0.7	3.2			13.6
Plus CY Adv Proc												
Total Proc Cost	8.1	0.3					1.3	0.7	3.2			13.6
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0					0.0	0.0	0.0			0.0

Description:
The M186 Demolition Charge is a 50 foot roll of flexible explosive. It is 3 inches wide and 1/4 inch thick. It can be easily cut and formed into various shapes and is primarily used as a cutting charge. This item is Code A, approved for service use.

Justification:
This is a training standard item used in both training and combat. Procurement supports annual training and builds a depot level in accordance with Army's procurement goals.

TYPE CLASSIFICATION DATE: 1968

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CAP BLASTING ELEC M6 (E52500)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	3017	26000	19592	34300		34300	34730	34946	34856	34365		221806
Gross Cost	13.7	1.6	1.0	1.6		1.6	1.6	1.6	1.7	1.7		24.4
Less PY Adv Proc												
Net Proc P1	13.7	1.6	1.0	1.6		1.6	1.6	1.6	1.7	1.7		24.4
Plus CY Adv Proc												
Total Proc Cost	13.7	1.6	1.0	1.6		1.6	1.6	1.6	1.7	1.7		24.4
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
The M6 Electric Blasting Cap is used to initiate high explosives. It is initiated by an electrical charge from a blasting machine or other source of electric power. Blasting cap M6 consists of a base charge of RDX, an intermediate charge of lead azide and an ignition charge of smokeless powder, potassium chlorate and lead salt of dinitro cresol in an aluminum alloy cup. Two 12-foot lead wires, connected by a bridge wire in the ignition charge, extend through a rubber plug assembly in the open end of the cup. This item is Code A, approved for service use.

Justification:
This is a training standard item used in both training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.

FY 2016 Base procurement dollars in the amount of $1.583 million supports production of 34,300 blasting caps.

TYPE CLASSIFICATION DATE: January 1960

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CHG DEMO SHAPED M3 40 LB (E53200)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	8787	2022	954									11763
Gross Cost	16.6	5.2	2.2									24.0
Less PY Adv Proc												
Net Proc P1	16.6	5.2	2.2									24.0
Plus CY Adv Proc												
Total Proc Cost	16.6	5.2	2.2									24.0
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0									0.0

Description:
The M3A1 40 pound Shaped Demolition Charge is used to blast craters in paved and unpaved roads and to bore holes in metals, masonry or concrete. It contains a 15-inch stand-off, 29.5 pound Comp B main charge and a 0.11 pound Comp A3 booster. This item is Code A, approved for service use.

Justification:
This is a training standard item used in both training and combat. Procurement supports annual training and builds a depot level inventory in accordance with Army's procurement goals.

TYPE CLASSIFICATION DATE: 1960

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CHG DEMO SHAPED M3 40 LB (E53200)	Weapon System Type:	MDAP:	DODIC: M421	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
LOAD, ASSEMBLE, PACK (LAP)		1562864	2022	772.93	842706	954	883.34									
COMP B TYPE I GRADE A					355651	30528	11.65									
*COMP A-3		589	229	2.57	278	108	2.57									
SUBTOTAL HARDWARE COST		**1563453**			**1198635**											
Support																
PRODUCTION ENGINEERING		667018			445261											
QUALITY ASSURANCE		1269			1786											
SUBTOTAL PRODUCTION SUPPORT		**668287**			**447047**											
NON-RECURRING COSTS																
FIRST ARTICLE TEST		141000														
PRODUCT IMPROVEMENT		200000														
IM QUALIFICATION & TESTING		1800000														
RADFORD AAPREA		779849														
ALT WAX QUAL FOR COMP B					579600											
SUBTOTAL NON-RECURRING COSTS		**2920849**			**579600**											
Total:		**5153**			**2226**											

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:
Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature:
CHG DEMO SHAPED M3 40 LB (E53200)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
LOAD, ASSEMBLE, PACK (LAP)						8787				
FY 2014	DAY & ZIMMERMANN, INC. PARSONS, KS	C / FFP	ROCK ISLAND ARSENAL, IL	Sep 14	Dec 15	2022	772.93	Y		
FY 2015	TO BE SELECTED TBS01	C / FFP	ROCK ISLAND ARSENAL, IL	May 15	Nov 16	954	883.34	Y		
COMP B TYPE I GRADE A										
FY 2015	BAE SYSTEMS ORDNANCE SYSTEMS KINGSPORT, TN	SS / FFP	ROCK ISLAND ARSENAL, IL	Jun 15	Jun 16	30528	11.65	Y		
***COMP B TYPE I GRADE A**										
FY 2014	GOVERNMENT FURNISHED MATERIAL STOCK ISSUE,	GFM	PICATINNY ARSENAL, NJ	Oct 14	Oct 14	64704	10.92			
***COMP A-3**						1018				
FY 2014	GOVERNMENT FURNISHED MATERIAL STOCK ISSUE,	GFM	ROCK ISLAND ARSENAL, IL	Oct 14	Oct 14	229	2.57			
FY 2015	GOVERNMENT FURNISHED MATERIAL STOCK ISSUE,	GFM	ROCK ISLAND ARSENAL, IL	Oct 14	Oct 14	108	2.57			

REMARKS:

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CHG DEMO SHAPED M3 40 LB (E53200)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 14	A	2022	0	2022															487	1000	535								0
2	FY 15	A	954	0	954								A																	954
1	FY 14	AF	513	0	513															513										0
2	FY 15	AF	337	0	337								A																	337
Total					3826															1000	1000	535								1291
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	DAY & ZIMMERMANN, INC., PARSONS, KS	400	1000	2500	
2	TO BE SELECTED, TBS01	400	1000	2500	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	8	8	18	26
	Reorder	6	6	15	21
2	Initial	8	8	18	26
	Reorder	6	6	15	21
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CHG DEMO SHAPED M3 40 LB (E53200)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17													Fiscal Year 18												Later
									Calendar Year 17													Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
LOAD, ASSEMBLE, PACK (LAP)																															
1	FY 14	A	2022	2022																											0
2	FY 15	A	954	0	954		85	79	79	79	79	79	79	79	79	79	79	79													0
1	FY 14	AF	513	513																											0
2	FY 15	AF	337	0	337		29	28	28	28	28	28	28	28	28	28	28	28													0
Total					1291		114	107	107	107	107	107	107	107	107	107	107	107													
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	DAY & ZIMMERMANN, INC., PARSONS, KS	400	1000	2500	
2	TO BE SELECTED, TBS01	400	1000	2500	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	8	8	18	26
	Reorder	6	6	15	21
2	Initial	8	8	18	26
	Reorder	6	6	15	21
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CORD DETONATING TYPE 1 (E54100)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	278565000	2652000	2686222	2508885		2508885	2456336	2844700	3369619	3557374		298640136
Gross Cost	25.3	1.3	1.1	1.2		1.2	1.2	1.4	1.6	1.7		34.7
Less PY Adv Proc												
Net Proc P1	25.3	1.3	1.1	1.2		1.2	1.2	1.4	1.6	1.7		34.7
Plus CY Adv Proc												
Total Proc Cost	25.3	1.3	1.1	1.2		1.2	1.2	1.4	1.6	1.7		34.7
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
Detonating Cord is used to prime and detonate explosive charges. Unlike the time fuze, which burns slowly, detonating cord burns almost instantaneously. It is used to link a series of near simultaneous charges. The Type 1, Class E detonating cord consists of a core of high velocity explosive in a seamless textile tube. The tube is covered with a thin layer of asphalt and sheathed in an outer cover of plastic coated textile. The plastic outer cover is smooth and colored olive drab. This item is Code A, approved for service use.

Justification:
This is a training standard item used in both training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with Army's procurement goals

FY 2016 Base procurement dollars in the amount of $1.157 million supports production of 2.509 million feet of Type 1 detonating cord.

TYPE CLASSIFICATION DATE: 1958

Comments:
One roll equals 1,000 feet

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CARTRIDGE IMPULSE ELECTRICALLY INITIATED DRG NO LD (E59100)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty				8113		8113	8106	8112	8114	8114		40559
Gross Cost				1.0		1.0	1.0	1.0	1.1	1.1		5.2
Less PY Adv Proc												
Net Proc P1				1.0		1.0	1.0	1.0	1.1	1.1		5.2
Plus CY Adv Proc												
Total Proc Cost				1.0		1.0	1.0	1.0	1.1	1.1		5.2
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C				0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
This item is used in Explosive Ordnance Disposal (EOD) tools and equipment. It is an electrically initiated, gas producing device. It is initiated with an MK1-2 squib in place of the percussion primer. This item is Code A, approved for service use.

Justification:
This is a training standard item used in both training and combat. Procurement supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.

FY 2016 Base procurement dollars in the amount of $0.993 million supports production of 8,113 cartridges.

TYPE CLASSIFICATION DATE: EOD Item Navy Configured

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CUTTER CTG ACTUATED 2 SEC DELAY M21 (E60200)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	255	2984										3239
Gross Cost	36.9	1.8										38.8
Less PY Adv Proc												
Net Proc P1	36.9	1.8										38.8
Plus CY Adv Proc												
Total Proc Cost	36.9	1.8										38.8
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.1	0.0										0.0

Description:
The M21 Cutter is a cartridge actuated device that is used in aerial delivery systems for cargo. It severs a reefing line which allows a parachute to fully deploy. The cutter is installed in a mounting bracket which is attached to the parachute. Major components consist of a case, firing pin assembly, lanyard, knife assembly, delay assembly and cotter pin. This item is Code A, approved for service use.

Justification:
This is a training standard item used in both training and combat. Procurement supports annual training and builds a depot level inventory in accordance with Army's procurement goals.

TYPE CLASSIFICATION DATE: 1980

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CUTTER HIGH EXPLOSIVE MK23 MOD 1 (POWDER ACTIVATE) (E76701)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	451			1913		1913			1135			3499
Gross Cost	0.7			0.8		0.8			0.6			2.0
Less PY Adv Proc												
Net Proc P1	0.7			0.8		0.8			0.6			2.0
Plus CY Adv Proc												
Total Proc Cost	0.7			0.8		0.8			0.6			2.0
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0			0.0		0.0			0.0			0.0

Description:
The Cutter, High Explosive MK23 MOD 1, is an Explosive Ordnance Disposal (EOD) tool. It is initiated with a blasting cap and uses an explosive formed penetrator to disable a target munition. This item is restricted in the Army to EOD use only.

Justification:
This is a training standard item used in both training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.

FY 2016 Base procurement dollars in the amount of $0.750 million supports production of 1,913 cutters.

TYPE CLASSIFICATION DATE: N/A EOD Unique

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CUTTER HIGH EXPLOSIVE MK24 MOD 1 (POWDER ACTIVATE) (E76702)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	3272			942		942		2320		2072		8606
Gross Cost	2.2			0.8		0.8		1.7		1.6		6.2
Less PY Adv Proc												
Net Proc P1	2.2			0.8		0.8		1.7		1.6		6.2
Plus CY Adv Proc												
Total Proc Cost	2.2			0.8		0.8		1.7		1.6		6.2
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0			0.0		0.0		0.0		0.0		0.0

Description:
The Cutter, High Explosive MK24 MOD 1, is an Explosive Ordnance Disposal (EOD) tool. It is initiated with a blasting cap and uses an explosive formed penetrator to disable a target munition. This item is restricted in the Army to EOD use only.

Justification:
This is a training standard item used in both training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.

FY 2016 Base procurement dollars in the amount of $0.750 million supports production of 942 cutters.

TYPE CLASSIFICATION DATE: N/A EOD Unique

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: EOD ITEMS FOR PAN DISRUPTER (E76718)

Program Elements for Code B Items:

Code: B

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	4.0											4.0
Less PY Adv Proc												
Net Proc P1	4.0											4.0
Plus CY Adv Proc												
Total Proc Cost	4.0											4.0
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
The Explosive Ordnance Disposal (EOD) items for Percussion Actuated Non-electric (PAN) disrupter items are special 12-gauge cartridges for Standoff Disrupter Improvised Explosive Device (SD-IED) Tool (AKA "PAN Disrupter") that provide the EOD soldier with a set of cartridges specifically designed for disrupting various types of IEDs. Various cartridges enable use against different types of IEDs, such as soft case, pipe bomb, or hard case. These items are Code B, not approved for service use.

Justification:
These are training standard items used in both training and combat by EOD personnel only. Procurement supports annual training and builds a depot level inventory in accordance with Army's procurement goals.

TYPE CLASSIFICATION DATE: EOD Item Navy Configured

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
Disrupter, Main Charge, MK 788-0 (E76728)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	4100	1484	79	97		97	84	93	92	1153		7182
Gross Cost	0.7	0.2	0.1	0.1		0.1	0.1	0.1	0.1	0.2		1.4
Less PY Adv Proc												
Net Proc P1	0.7	0.2	0.1	0.1		0.1	0.1	0.1	0.1	0.2		1.4
Plus CY Adv Proc												
Total Proc Cost	0.7	0.2	0.1	0.1		0.1	0.1	0.1	0.1	0.2		1.4
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
E76728 MK 788-0, Main Charge Disrupter is a device used to render-safe unexploded ordnance (UXO). Upon initiation, the device attacks and neutralizes the main charge explosive by generating reactions up to and including low-order detonations. It is a non-developmental item (NDI) consisting of an energetic tool (ET), a demolition material interface adapter, and an emplacement stand. The MCD provides EOD with an improved neutralization capability in situations where the use of more traditional methods (attacking the fuzing mechanism or high-order detonation) is not possible or desired. This item is Code B, not approved for service use.

Justification:
This is a training standard item used in both training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals.

FY 2016 Base procurement dollars in the amount of $0.061 million supports procurement of 97 disrupters.

TYPE CLASSIFICATION DATE: EOD Item Navy Configured - No TC Date

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CHARGE DEMO (38FT) Sheet Explosive, PBXW-202 (E78201)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	206			35290		35290	34576	33876				103948
Gross Cost	4.1			1.2		1.2	1.2	1.2				7.7
Less PY Adv Proc												
Net Proc P1	4.1			1.2		1.2	1.2	1.2				7.7
Plus CY Adv Proc												
Total Proc Cost	4.1			1.2		1.2	1.2	1.2				7.7
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0			0.0		0.0	0.0	0.0				0.0

Description:
The M980 Demolition Charge is a 20 pound, 38 foot roll of flexible explosive. It is 10 inches wide and .083 inches thick. It can be easily cut and formed into various shapes and is primarily used as a cutting charge. This item is Code A, approved for service use.

Justification:
This is a training standard item used in both training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.

FY 2016 Base procurement dollars in the amount of $1.200 million supports production of 35,290 feet of sheet explosive.

TYPE CLASSIFICATION DATE: N/A EOD Unique

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CAP BLASTING NON-ELEC, W/30 FT SHOCK TUBE (E81302)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	6148	5040	5445	3320		3320	4644	4679	4620	4695		38591
Gross Cost	6.2	0.2	0.2	0.2		0.2	0.2	0.3	0.3	0.3		7.8
Less PY Adv Proc												
Net Proc P1	6.2	0.2	0.2	0.2		0.2	0.2	0.3	0.3	0.3		7.8
Plus CY Adv Proc												
Total Proc Cost	6.2	0.2	0.2	0.2		0.2	0.2	0.3	0.3	0.3		7.8
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
This item is part of the family of Modern Demolition Initiators (MDI). It consists of a blasting cap which is factory sealed to a length of shock tube. The tube is activated using an M81 igniter. A shock wave travels the length of the tube, with a delay measured in milliseconds, and ignites the blasting cap which in turn initiates the main charge. The MDI is not susceptible to electrostatic discharge or Radio Frequency (RF) jamming. The 30 foot length is generally used as a linking charge for a series of demolitions. This item is Code A, approved for service use.

Justification:
This is a training standard item used in both training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.

FY 2016 Base procurement dollars in the amount of $0.241 million supports production of 3,320 blasting caps.

TYPE CLASSIFICATION DATE: April 1996

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
IGNITER, TIME FUZE AND SHOCK TUBE M81 (E81307)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	52635	51840	70578	19058		19058	22741	18993	9606	12768		258219
Gross Cost	15.9	0.5	0.5	0.3		0.3	0.3	0.3	0.3	0.3		18.4
Less PY Adv Proc												
Net Proc P1	15.9	0.5	0.5	0.3		0.3	0.3	0.3	0.3	0.3		18.4
Plus CY Adv Proc												
Total Proc Cost	15.9	0.5	0.5	0.3		0.3	0.3	0.3	0.3	0.3		18.4
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
The M81 Igniter is a device, hand held by the individual Soldier, with a small primer charge that will activate the M700 Time Fuze as well as a shock tube. It is the primary device for all non-electrical demolition initiation. This item is Code A, approved for service use.

Justification:
This is a training standard item used in both training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.

FY 2016 Base procurement dollars in the amount of $0.300 million supports production of 19,058 igniters.

TYPE CLASSIFICATION DATE: April 1996

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: APOBS Training Aid, Inert (E99800)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty			199									199
Gross Cost			2.0									2.0
Less PY Adv Proc												
Net Proc P1			2.0									2.0
Plus CY Adv Proc												
Total Proc Cost			2.0									2.0
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C			0.0									0.0

Description:
The Anti-Personnel Obstacle Breaching System (APOBS) Trainer is a classroom training aid for the APOBS (E72800). It's appearance and weight are identical to the APOBS, but it is entirely non-functional and is only used to demonstrate proper set up of the system prior to firing. Training with APOBS Trainers will increase to enable a reduction in training with live APOBS in order to reduce overall training costs. This item is Code A, approved for service use.

Justification:
This is a training unique item not used in combat. Procurement supports annual training and builds a depot level inventory in accordance with Army's procurement goals.

TYPE CLASSIFICATION DATE: July 2001

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
Blast Cap, Non-Elec: 500Ft Minitube, M21 (E99903)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	5237	13000	12703	4605		4605	4016	4027	3933	3511		51032
Gross Cost	11.3	0.7	0.8	0.8		0.8	0.8	0.8	0.8	0.8		16.9
Less PY Adv Proc												
Net Proc P1	11.3	0.7	0.8	0.8		0.8	0.8	0.8	0.8	0.8		16.9
Plus CY Adv Proc												
Total Proc Cost	11.3	0.7	0.8	0.8		0.8	0.8	0.8	0.8	0.8		16.9
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
The M21 is part of the family of Modern Demolition Initiators (MDI). It consists of an initiating component used to activate standard military explosives and demolition devices. The MDI is not susceptible to electrostatic discharge or Radio Frequency (RF) jamming. This item is Code A, approved for service use.

Justification:
This is a training standard item used in both training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.

FY 2016 Base procurement dollars in the amount of $0.779 million supports production of 4,605 blasting caps.

TYPE CLASSIFICATION DATE: April 1996

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
Blast Cap, Non-Elec, 1000Ft Minitube, M23 (E99905)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	5201	8120	8151	4031		4031	3365	3427	3356	3019		38670
Gross Cost	13.7	0.8	0.8	0.8		0.8	0.9	0.9	0.9	0.9		19.6
Less PY Adv Proc												
Net Proc P1	13.7	0.8	0.8	0.8		0.8	0.9	0.9	0.9	0.9		19.6
Plus CY Adv Proc												
Total Proc Cost	13.7	0.8	0.8	0.8		0.8	0.9	0.9	0.9	0.9		19.6
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
The M23 is part of the family of Modern Demolition Initiators (MDI). It consists of an initiating component used to activate standard military explosives and demolition devices. The MDI is not susceptible to electrostatic discharge or Radio Frequency (RF) jamming. This item is Code A, approved for service use.

Justification:
This is a training standard item used in both training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.

FY 2016 Base procurement dollars in the amount of $0.849 million supports production of 4,031 blasting caps.

TYPE CLASSIFICATION DATE: April 1996

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
Grenades, All Types (E34000)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	1216.7	36.2	23.8	20.0		20.0	27.6	26.7	27.4	28.8		1407.2
Less PY Adv Proc												
Net Proc P1	1216.7	36.2	23.8	20.0		20.0	27.6	26.7	27.4	28.8		1407.2
Plus CY Adv Proc												
Total Proc Cost	1216.7	36.2	23.8	20.0		20.0	27.6	26.7	27.4	28.8		1407.2
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
This budget line includes Grenades, All Types.

(E31900)FUZE GRENADE HAND PRAC M228
Fuze Grenade Hand Practice M228 is a pyrotechnic delay-igniting fuze (delay time of 4 to 5.5 seconds) for use with the M69 practice grenade body. The assembled grenade is identical in size, shape and weight to the M67 fragmentation hand grenade, and is used to learn and practice grenade throwing skills. The fuze contains a primer and a pyrotechnic delay column. A striker, striker spring, safety lever, safety pin with pull ring, safety clip, and igniter assembly are assembled to the body.

(E32000)GRENADE HAND FRAG DELAY M67
Grenade Hand Fragmentation Delay M67 consists of a 2.5-inch diameter steel sphere that is designed to burst into numerous fragments when detonated. The grenade body is filled with 5.4 ounces of high explosive, Composition B. Each grenade is fitted with an M213 fuze that initiates the explosive charge 4 to 5.5 seconds after release of the safety lever. The M67 Hand Grenade provides the Warfighter with the capability to conduct pre-mobilization training and the capability to conduct close combat operations.

(E34001)GRENADE HAND SMOKE GREEN M18
Grenade Hand Smoke Green M18 is used by the Warfighter for ground-to-air or ground-to-ground signaling while conducting training and combat operations. Each grenade will emit smoke for 50 to 90 seconds. The grenade body is made of thin sheet metal, filled with starter patches and a green smoke composition. The Hand Grenade Fuze M201A1 is a pyrotechnic delay-igniting fuze. The body contains a primer, first-fire mix, pyrotechnic delay column, and ignition mixture. Assembled to the body are a striker, striker spring, safety lever, and safety pin with pull ring.

(E34002)GRENADE HAND SMOKE YELLOW M18
Grenade Hand Smoke Yellow M18 is used by the Warfighter for ground-to-air or ground-to-ground signaling while conducting training and combat operations. Each grenade will emit smoke for 50 to 90 seconds. The grenade body is made of thin sheet metal, filled with starter patches and a yellow smoke composition. The Hand Grenade Fuze M201A1 is a pyrotechnic delay-igniting fuze. The body contains a primer, first-fire mix, pyrotechnic delay column, and ignition mixture. Assembled to the body are a striker, striker spring, safety lever, and safety pin with pull ring.

(E34003)GRENADE HAND SMOKE RED M18
Grenade Hand Smoke Red M18 is used by the Warfighter for ground-to-air or ground-to-ground signaling while conducting training and combat operations. Each grenade will emit smoke for 50 to 90 seconds. The grenade body is made of thin sheet metal, filled with starter patches and a red smoke composition. The Hand Grenade Fuze M201A1 is a pyrotechnic delay-igniting fuze. The

body contains a primer, first-fire mix, pyrotechnic delay column and ignition mixture. Assembled to the body are a striker, striker spring, safety lever, and safety pin with pull ring.

(E34004)GRENADE HAND SMOKE VIOLET M18
Grenade Hand Smoke Violet M18 is used by the Warfighter for ground-to-air or ground-to-ground signaling while conducting training and combat operations. Each grenade will emit smoke for 50 to 90 seconds. The grenade body is made of thin sheet metal, filled with starter patches and a violet smoke composition. The Hand Grenade Fuze M201A1 is a pyrotechnic delay-igniting fuze. The body contains a primer, first-fire mix, pyrotechnic delay column and ignition mixture. Assembled to the body are a striker, striker spring, safety lever, and safety pin with pull ring. This item is Code A, approved for service use.

(E69300)GRENADE HAND SMOKE WHITE M83
Grenade Hand Smoke (White) M83 provides the Warfighter the capability to generate white smoke for screening activities while conducting small unit operations. It is also used for ground-to-air signaling. This grenade is the tactical replacement for the M8 HC Smoke Grenade, which was found to be carcinogenic. The duration of smoke screen or signal is 25 to 70 seconds, average burn time. The grenade body is a cylinder of thin sheet metal. It is filled with non-toxic smoke mixture topped with a starter patch. The Hand Grenade Fuze M201A1 is a pyrotechnic delay-igniting fuze. The body contains a primer, first-fire mix, pyrotechnic delay column, and ignition mixture. Assembled to the body are a striker, striker spring, safety lever, and safety pin with pull ring. This item is Code A, approved for service use.

Justification:
FY 2016 Base Budget supports critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station, and the combined training centers. Test requirements support the development, fielding, safety, and quality assurance of Army munitions and equipment throughout their life-cycle.

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.

The FY 2016 Base procurement dollars in the amount of $19.993 million supports procurement of six variants of Grenades.

(E31900)FUZE GRENADE HAND PRAC M228
This is a training unique item not used in combat. FY 2016 procurement supports annual training and builds a depot level in accordance with Army's procurement goals. FY 2016 Base procurement dollars in the amount of $2.592 million supports the Recapitalization of 540,575 fuzes.

(E32000)GRENADE HAND FRAG DELAY M67
This is a training standard item used in both training and combat. FY 2016 procurement supports annual training and builds a war reserve inventory in accordance with Army's procurement goals. FY 2016 Base procurement dollars in the amount of $8.238 million supports the procurement of 105,854 grenades.

(E34001)GRENADE HAND SMOKE GREEN M18
FY 2016 Base Budget supports critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station, and the combined training centers. Test requirements support the development, fielding, safety, and quality assurance of Army munitions and equipment throughout their life-cycle. This is a training standard item used in both training and combat. FY 2016 procurement supports annual training and builds a war reserve inventory in accordance with Army's procurement goals. FY 2016 Base procurement dollars in the

amount of $2.790 million supports the procurement of 48,557 grenades.

(E34002)GRENADE HAND SMOKE YELLOW M18
FY 2016 Base Budget supports critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station, and the combined training centers. Test requirements support the development, fielding, safety, and quality assurance of Army munitions and equipment throughout their life-cycle. This is a training standard item used in both training and combat. FY 2016 procurement supports annual training and builds war reserve inventory in accordance with Army's procurement goals. FY 2016 Base procurement dollars in the amount of $1.800 million supports the procurement of 29,596 grenades.

(E34004)GRENADE HAND SMOKE VIOLET M18
FY 2016 Base Budget supports critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station, and the combined training centers. Test requirements support the development, fielding, safety, and quality assurance of Army munitions and equipment throughout their life-cycle. This is a training standard item used in both training and in combat. FY 2016 procurement supports annual training and builds a war reserve inventory in accordance with Army's procurement goals. FY 2016 Base procurement dollars in the amount of $0.700 million supports the procurement of 11,051 grenades.

(E69300)GRENADE HAND SMOKE WHITE M83
This is a training standard item used in both training and combat. FY 2016 procurement supports annual training and builds a war reserve inventory in accordance with Army's procurement goals. FY 2016 Base procurement dollars in the amount of $3.873 million supports the procurement of 83,051 grenades.

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: Grenades, All Types (E34000)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
E31900 FUZE GRENADE HAND PRAC M228	G878	3068568			2531600			2592689						2592689		
E32000 GRENADE HAND FRAG DELAY M67	g881	15939K	427213	37.31	9936000	125344	79.27	8238000	105854	77.82				8238000	105854	77.82
E34001 GRENADE HAND SMOKE GREEN M18	G940	3642000	85466	42.61	2677000	53662	49.89	2790000	48557	57.46				2790000	48557	57.46
E34002 GRENADE HAND SMOKE YELLOW M18	G945	3221000	67869	47.46	2450000	46187	53.05	1800000	29596	60.82				1800000	29596	60.82
E34003 GRENADE HAND SMOKE RED M18	G950	1088000	22936	47.44	821000	14644	56.06									
E34004 GRENADE HAND SMOKE VIOLET M18	G955	2550000	53712	47.48	1282000	23205	55.25	700000	11051	63.34				700000	11051	63.34
E69300 GRENADE HAND SMOKE (WHITE) M83	g982	6733000	211597	31.82	4053000	105053	38.58	3873000	83051	46.63				3873000	83051	46.63
***QUANTITY IN EACHES**																
Total		**36242K**			**23751K**			**19993K**						**19993K**		
Total:		**36242**			**23751**			**19994**						**19994**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
FUZE GRENADE HAND PRAC M228 (E31900)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	705165						140474	137412	131689	138122		1252862
Gross Cost	253.7	3.1	2.5	2.6		2.6	2.5	2.5	2.6	2.6		272.1
Less PY Adv Proc												
Net Proc P1	253.7	3.1	2.5	2.6		2.6	2.5	2.5	2.6	2.6		272.1
Plus CY Adv Proc												
Total Proc Cost	253.7	3.1	2.5	2.6		2.6	2.5	2.5	2.6	2.6		272.1
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0						0.0	0.0	0.0	0.0		0.0

P-40 Breakdown

Area		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Active	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	2486.0	2051.0	1049.5	0.0	1049.0	2027.0	2028.0	2078.0	2142.0
National Guard	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	491.0	405.0	207.5	0.0	207.0	400.0	401.0	410.0	423.0
Reserve	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	92.0	76.0	39.0	0.0	39.0	75.0	75.0	77.0	79.0
Total	Qty	0	0	0	0	0	0	0	0	0
	Gross Cost	3069	2532	1296	0	1295	2502	2504	2565	2644

Description:
The M228 Hand Grenade Practice Fuze is a pyrotechnic delay-igniting fuze (delay time of 4 to 5.5 seconds) for use with the M69 practice grenade body. The assembled grenade is identical in size, shape and weight to the M67 fragmentation hand grenade, and is used to learn and practice grenade throwing skills. The fuze contains a primer and a pyrotechnic delay column. A striker, striker spring, safety lever, safety pin with pull ring, safety clip, and igniter assembly are assembled to the body. This item is Code A, approved for service use.

Justification:
This is a training unique item not used in combat.

FY 2016 procurement supports annual training and builds a depot level in accordance with Army's procurement goals.

FY 2016 Base procurement dollars in the amount of $2.592 million supports the Recapitalization of 540,575 fuzes.

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature FUZE GRENADE HAND PRAC M228 (E31900)	
Program Elements for Code B Items:	Code: A	Other Related Program Elements:	

TYPE CLASSIFICATION DATE: 1971

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: GRENADE HAND FRAG DELAY M67 (E32000)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	235903	427213	125344	105854		105854	267978	265968	265820	265521		1959601
Gross Cost	18.4	15.9	9.9	8.2		8.2	14.0	14.2	14.5	14.7		109.9
Less PY Adv Proc												
Net Proc P1	18.4	15.9	9.9	8.2		8.2	14.0	14.2	14.5	14.7		109.9
Plus CY Adv Proc												
Total Proc Cost	18.4	15.9	9.9	8.2		8.2	14.0	14.2	14.5	14.7		109.9
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

P-40 Breakdown

Area		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Active	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	12911.0	8048.0	6673.0	0.0	6673.0	11340.0	11474.0	11724.0	11920.0
National Guard	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	2550.0	1590.0	1318.0	0.0	1318.0	2240.0	2267.0	2316.0	2354.0
Reserve	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	478.0	298.0	247.0	0.0	247.0	420.0	425.0	434.0	441.0
Total	Qty	0	0	0	0	0	0	0	0	0
	Gross Cost	15939	9936	8238	0	8238	14000	14166	14474	14715

Description:

The M67 Hand Grenade consists of a 2.5-inch diameter steel sphere that is designed to burst into numerous fragments when detonated. The grenade body is filled with 5.4 ounces of high explosive, Composition B. Each grenade is fitted with an M213 fuze that initiates the explosive charge 4 to 5.5 seconds after release of the safety lever. The M67 Hand Grenade provides the Warfighter with the capability to conduct pre-mobilization training and the capability to conduct close combat operations. This item is Code A, approved for service use.

Justification:

This is a training standard item used in both training and combat. FY 2016 procurement supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.

FY 2016 Base procurement dollars in the amount of $8.238 million supports the procurement of 105,854 grenades, engineering activities to eliminate a Single Point Failure (SPF) for the M42 percussion primer, and Engineering activities to address the Insensitive Munition (IM) requirement on the M67 Grenade.

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature GRENADE HAND FRAG DELAY M67 (E32000)	
Program Elements for Code B Items:	Code: A	Other Related Program Elements:	

TYPE CLASSIFICATION DATE: 1970

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: GRENADE HAND FRAG DELAY M67 (E32000)	Weapon System Type:	MDAP:	DODIC: G881	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
COMPLETE GRENADE		13402K	427213	31.37	5681682	125344	45.33	4310375	105854	40.72				4310375	105854	40.72
SUBTOTAL HARDWARE COST		**13402K**			**5681844**			**4310375**						**4310375**		
Support																
PRODUCTION ENGINEERING		2511567			2721130			2320790						2320790		
QUALITY ASSURANCE		24761			32701			7140						7140		
SUBTOTAL PRODUCTION SUPPORT		**2536328**			**2753832**			**2327929**						**2327929**		
NON-RECURRING COSTS																
INSENSITIVE MUNITION					1500000			800000						800000		
M42 PRIMER								800000						800000		
SUBTOTAL NON-RECURRING COSTS					**1500000**			**1600000**						**1600000**		
Total:		**15939**			**9936**			**8238**						**8238**		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:
Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature:
GRENADE HAND FRAG DELAY M67 (E32000)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
COMPLETE GRENADE										
FY 2014	DAY & ZIMMERMANN LONE STAR TEXARKANA, TX	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 14	Sep 15	427213	31.37	Y		
FY 2015	TO BE SELECTED TBS01	C / FFP	ROCK ISLAND ARSENAL, IL	May 15	May 17	125344	45.33	Y		
FY 2016	TO BE SELECTED TBS01	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 16	Sep 17	105854	40.72	Y		

REMARKS: FY 2015 will be a new competitive FFP contract and FY 2016 will an option.

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
GRENADE HAND FRAG DELAY M67 (E32000)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
COMPLETE GRENADE																														
1	FY 13	A	456650	156150	300500	21990			93390	93390	55020	30100																		0
2	FY 13	A	170070	0	170070								46170	55020	54720	14160														0
2	FY 14	A	427213	0	427213												44363	43150	43963	50000	50000	50000	50000	50000	45737					0
3	FY 15	A	125344	0	125344								A																	125344
3	FY 16	A	105854	0	105854																		A							105854
2	FY 13	AF	4590	0	4590											4590														0
2	FY 14	AF	15177	0	15177												4570	4570	6037											0
3	FY 15	AF	1154	0	1154								A																	1154
3	FY 16	AF	2705	0	2705																		A							2705
1	FY 13	MC	297120	247650	49470	5670			90			34860	8850																	0
2	FY 13	MC	65850	0	65850										38820	27030														0
2	FY 13	NSOF	9330	0	9330											9330														0
2	FY 14	NSOF	3347	0	3347												1067	2280												0
Total					1280604	27660			93480	93390	55020	64960	55020	55020	93540	55110	50000	50000	50000	50000	50000	50000	50000	50000	45737					235057
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	D & Z DEFENSE SYS DIV LONE, TEXARKANA, TX	30000	50000	100000	
2	DAY & ZIMMERMANN LONE STAR, TEXARKANA, TX	30000	50000	100000	
3	TO BE SELECTED, TBS01	30000	50000	100000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	8	8	24	32
	Reorder	6	6	18	24
2	Initial	8	8	24	32
	Reorder	6	6	18	24
3	Initial	8	8	24	32
	Reorder	6	6	18	24
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
GRENADE HAND FRAG DELAY M67 (E32000)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
COMPLETE GRENADE																														
1	FY 13	A	456650	456650																										0
2	FY 13	A	170070	170070																										0
2	FY 14	A	427213	427213																										0
3	FY 15	A	125344	0	125344								42043	44000	39301															0
3	FY 16	A	105854	0	105854												8845	8819	8819	8819	8819	8819	8819	8819	8819	8819	8819	8819		0
2	FY 13	AF	4590	4590																										0
2	FY 14	AF	15177	15177																										0
3	FY 15	AF	1154	0	1154								1154																	0
3	FY 16	AF	2705	0	2705												2705													0
1	FY 13	MC	297120	297120																										0
2	FY 13	MC	65850	65850																										0
2	FY 13	NSOF	9330	9330																										0
2	FY 14	NSOF	3347	3347																										0
Total					235057								43197	44000	39301		11550	8819	8819	8819	8819	8819	8819	8819	8819	8819	8819	8819		
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	D & Z DEFENSE SYS DIV LONE, TEXARKANA, TX	30000	50000	100000	
2	DAY & ZIMMERMANN LONE STAR, TEXARKANA, TX	30000	50000	100000	
3	TO BE SELECTED, TBS01	30000	50000	100000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	8	8	24	32
	Reorder	6	6	18	24
2	Initial	8	8	24	32
	Reorder	6	6	18	24
3	Initial	8	8	24	32
	Reorder	6	6	18	24
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: GRENADE HAND SMOKE GREEN M18 (E34001)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	75285	85466	53662	48557		48557	50042	49808	51407	67451		481678
Gross Cost	153.6	3.6	2.7	2.8		2.8	2.9	3.0	3.1	4.1		175.8
Less PY Adv Proc												
Net Proc P1	153.6	3.6	2.7	2.8		2.8	2.9	3.0	3.1	4.1		175.8
Plus CY Adv Proc												
Total Proc Cost	153.6	3.6	2.7	2.8		2.8	2.9	3.0	3.1	4.1		175.8
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

P-40 Breakdown

Area		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Active	Qty	0	0	19615	0	19615	40462	40241	41544	55223
	Net Proc (P-1)	0.0	0.0	1130.0	0.0	1130.0	2329.0	2419.0	2533.0	3337.0
National Guard	Qty	0	0	3875	0	3875	7992	7949	8206	10908
	Net Proc (P-1)	0.0	0.0	223.0	0.0	223.0	460.0	478.0	500.0	659.0
Reserve	Qty	0	0	727	0	727	1499	1490	1539	2045
	Net Proc (P-1)	0.0	0.0	42.0	0.0	42.0	86.0	90.0	94.0	124.0
Total	Qty	0	0	24217	0	24217	49953	49680	51289	68176
	Gross Cost	0	0	1395	0	1395	2875	2987	3127	4120

Description:

The M18 Green Smoke Hand Grenade is used by the Warfighter for ground-to-air or ground-to-ground signaling while conducting training and combat operations. Each grenade will emit smoke for 50 to 90 seconds. The grenade body is made of thin sheet metal, filled with starter patches and a green smoke composition. The Hand Grenade Fuze M201A1 is a pyrotechnic delay-igniting fuze. The body contains a primer, first-fire mix, pyrotechnic delay column, and ignition mixture. Assembled to the body are a striker, striker spring, safety lever, and safety pin with pull ring. This item is Code A, approved for service use.

Justification:

FY 2016 Base Budget supports critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station, and the combined training centers. Test requirements support the development, fielding, safety, and quality assurance of Army munitions and equipment throughout their life-cycle.

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature GRENADE HAND SMOKE GREEN M18 (E34001)	
Program Elements for Code B Items:	Code: A	Other Related Program Elements:	

This is a training standard item used in both training and combat.

FY 2016 procurement supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.

FY 2016 Base procurement dollars in the amount of $2.790 million supports the procurement of 48,557 grenades.

TYPE CLASSIFICATION DATE: 1943

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
GRENADE HAND SMOKE YELLOW M18 (E34002)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	38877	67869	46187	29596		29596	30248	29511	29638	30028		301954
Gross Cost	80.1	3.2	2.5	1.8		1.8	1.8	1.9	1.9	1.9		95.1
Less PY Adv Proc												
Net Proc P1	80.1	3.2	2.5	1.8		1.8	1.8	1.9	1.9	1.9		95.1
Plus CY Adv Proc												
Total Proc Cost	80.1	3.2	2.5	1.8		1.8	1.8	1.9	1.9	1.9		95.1
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

P-40 Breakdown

Area		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Active	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	2609.0	1984.0	729.0	0.0	729.0	1487.0	1516.0	1546.0	1575.0
National Guard	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	515.0	392.0	144.0	0.0	144.0	294.0	300.0	305.0	311.0
Reserve	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	97.0	74.0	27.0	0.0	27.0	55.0	56.0	57.0	58.0
Total	Qty	0	0	0	0	0	0	0	0	0
	Gross Cost	3221	2450	900	0	900	1836	1872	1908	1944

Description:
The M18 Yellow Smoke Hand Grenade is used by the Warfighter for ground-to-air or ground-to-ground signaling while conducting training and combat operations. Each grenade will emit smoke for 50 to 90 seconds. The grenade body is made of thin sheet metal, filled with starter patches and a yellow smoke composition. The Hand Grenade Fuze M201A1 is a pyrotechnic delay-igniting fuze. The body contains a primer, first-fire mix, pyrotechnic delay column, and ignition mixture. Assembled to the body are a striker, striker spring, safety lever, and safety pin with pull ring. This item is Code A, approved for service use.

Justification:
FY 2016 Base Budget supports critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station, and the combined training centers. Test requirements support the development, fielding, safety, and quality assurance of Army munitions and equipment throughout their life-cycle.

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature GRENADE HAND SMOKE YELLOW M18 (E34002)	
Program Elements for Code B Items:	Code: A	Other Related Program Elements:	

This is a training standard item used in both training and combat.

FY 2016 procurement supports annual training and builds war reserve inventory in accordance with Army's procurement goals.

FY 2016 Base procurement dollars in the amount of $1.800 million supports the procurement of 29,596 grenades.

TYPE CLASSIFICATION DATE: 1943

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: GRENADE HAND SMOKE RED M18 (E34003)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	10438	22936	14644									48018
Gross Cost	42.2	1.1	0.8									44.1
Less PY Adv Proc												
Net Proc P1	42.2	1.1	0.8									44.1
Plus CY Adv Proc												
Total Proc Cost	42.2	1.1	0.8									44.1
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0									0.0

Description:
The M18 Red Smoke Hand Grenade is used by the Warfighter for ground-to-air or ground-to-ground signaling while conducting training and combat operations. Each grenade will emit smoke for 50 to 90 seconds. The grenade body is made of thin sheet metal, filled with starter patches and a red smoke composition. The Hand Grenade Fuze M201A1 is a pyrotechnic delay-igniting fuze. The body contains a primer, first-fire mix, pyrotechnic delay column and ignition mixture. Assembled to the body are a striker, striker spring, safety lever, and safety pin with pull ring. This item is Code A, approved for service use.

Justification:
FY 2016 Base Budget supports critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station, and the combined training centers. Test requirements support the development, fielding, safety, and quality assurance of Army munitions and equipment throughout their life-cycle.

This is a training standard item used in both training and combat.

FY 2016 request supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.

TYPE CLASSIFICATION DATE: Early 1950's

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: GRENADE HAND SMOKE VIOLET M18 (E34004)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	22647	53712	23205	11051		11051	11263	11021	11065	11207		155171
Gross Cost	48.3	2.6	1.3	0.7		0.7	0.7	0.7	0.7	0.8		55.8
Less PY Adv Proc												
Net Proc P1	48.3	2.6	1.3	0.7		0.7	0.7	0.7	0.7	0.8		55.8
Plus CY Adv Proc												
Total Proc Cost	48.3	2.6	1.3	0.7		0.7	0.7	0.7	0.7	0.8		55.8
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

P-40 Breakdown

Area		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Active	Qty	0	0	4563	0	4563	9267	9121	9151	9156
	Net Proc (P-1)	0.0	0.0	283.5	0.0	283.0	579.0	590.0	601.0	612.0
National Guard	Qty	0	0	901	0	901	1830	1802	1808	1808
	Net Proc (P-1)	0.0	0.0	56.0	0.0	56.0	114.0	116.0	119.0	121.0
Reserve	Qty	0	0	169	0	169	343	338	339	339
	Net Proc (P-1)	0.0	0.0	10.5	0.0	10.0	21.0	22.0	22.0	23.0
Total	Qty	0	0	5633	0	5633	11440	11261	11298	11303
	Gross Cost	0	0	350	0	349	714	728	742	756

Description:

The M18 Violet Smoke Hand Grenade is used by the Warfighter for ground-to-air or ground-to-ground signaling while conducting training and combat operations. Each grenade will emit smoke for 50 to 90 seconds. The grenade body is made of thin sheet metal, filled with starter patches and a violet smoke composition. The Hand Grenade Fuze M201A1 is a pyrotechnic delay-igniting fuze. The body contains a primer, first-fire mix, pyrotechnic delay column and ignition mixture. Assembled to the body are a striker, striker spring, safety lever, and safety pin with pull ring. This item is Code A, approved for service use.

Justification:

FY 2016 Base Budget supports critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station, and the combined training centers. Test requirements support the development, fielding, safety, and quality assurance of Army munitions and equipment throughout their life-cycle.

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature GRENADE HAND SMOKE VIOLET M18 (E34004)	
Program Elements for Code B Items:	Code: A	Other Related Program Elements:	

This is a training standard item used in both training and in combat.

FY 2016 procurement supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.

FY 2016 Base procurement dollars in the amount of $0.700 million supports the procurement of 11,051 grenades.

TYPE CLASSIFICATION DATE: 1943

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
GRENADE HAND SMOKE (WHITE) M83 (E69300)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	2260	211597	105053	83051		83051	95065	92785	93823	96014		779648
Gross Cost	20.5	6.7	4.1	3.9		3.9	4.3	4.4	4.5	4.6		53.1
Less PY Adv Proc												
Net Proc P1	20.5	6.7	4.1	3.9		3.9	4.3	4.4	4.5	4.6		53.1
Plus CY Adv Proc												
Total Proc Cost	20.5	6.7	4.1	3.9		3.9	4.3	4.4	4.5	4.6		53.1
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

P-40 Breakdown

Area		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Active	Qty	0	0	36754	0	36754	76773	74760	75605	76111
	Net Proc (P-1)	0.0	0.0	1690.5	0.0	1690.0	3500.0	3588.0	3677.0	3766.0
National Guard	Qty	0	0	7260	0	7260	15165	14767	14934	15034
	Net Proc (P-1)	0.0	0.0	334.0	0.0	334.0	692.0	709.0	726.0	744.0
Reserve	Qty	0	0	1362	0	1362	2843	2769	2800	2819
	Net Proc (P-1)	0.0	0.0	62.5	0.0	62.0	130.0	133.0	136.0	139.0
Total	Qty	0	0	45376	0	45376	94781	92296	93339	93964
	Gross Cost	0	0	2087	0	2086	4322	4430	4539	4649

Description:
The M83 Smoke Hand Grenade provides the Warfighter the capability to generate white smoke for screening activities while conducting small unit operations. It is also used for ground-to-air signaling. This grenade is the tactical replacement for the M8 HC Smoke Grenade, which was found to be carcinogenic. The duration of smoke screen or signal is 25 to 70 seconds, average burn time. The grenade body is a cylinder of thin sheet metal. It is filled with non-toxic smoke mixture topped with a starter patch. The Hand Grenade Fuze M201A1 is a pyrotechnic delay-igniting fuze. The body contains a primer, first-fire mix, pyrotechnic delay column, and ignition mixture. Assembled to the body are a striker, striker spring, safety lever, and safety pin with pull ring. This item is Code A, approved for service use.

Justification:
FY 2016 Base Budget supports critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station, and the combined training centers.

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature GRENADE HAND SMOKE (WHITE) M83 (E69300)	
Program Elements for Code B Items:	Code: A	Other Related Program Elements:	

Test requirements support the development, fielding, safety, and quality assurance of Army munitions and equipment throughout their life-cycle.

This is a training standard item used in both training and combat.

FY 2016 procurement supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.

FY 2016 Base procurement dollars in the amount of $3.873 million supports the procurement of 83,051 grenades.

TYPE CLASSIFICATION DATE: 1994

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: GRENADE HAND SMOKE (WHITE) M83 (E69300)	Weapon System Type:	MDAP:	DODIC: G982	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
LOAD, ASSEMBLE, PACK (LAP)		4312347	211597	20.38	2158839	105053	20.55	1757359	83051	21.16				1757359	83051	21.16
FUZE HAND GRENADE M201A1		1067295	220061	4.85	606365	109255	5.55	782539	86373	9.06				782539	86373	9.06
GRENADE, METAL PARTS SET					229541	120811	1.90	212983	95508	2.23				212983	95508	2.23
SUBTOTAL HARDWARE COST		**5379643**			**2994745**			**2752881**						**2752881**		
Support																
PRODUCTION ENGINEERING		1344511			1047836			1106987						1106987		
QUALITY ASSURANCE		8845			10516			11607						11607		
SUBTOTAL PRODUCTION SUPPORT		**1353356**			**1058352**			**1118594**						**1118594**		
Total:		**6733**			**4054**			**3872**						**3872**		

Exhibit P-5a, Budget Procurement History and Planning

Date: February 2015

Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature: GRENADE HAND SMOKE (WHITE) M83 (E69300)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
LOAD, ASSEMBLE, PACK (LAP)						301920				
FY 2014	PINE BLUFF ARSENAL PINE BLUFF, AR	PO	ROCK ISLAND ARSENAL, IL	Mar 14	Jun 15	211597	20.38	Y		
FY 2015	PINE BLUFF ARSENAL PINE BLUFF, AR	PO	ROCK ISLAND ARSENAL, IL	Mar 15	Jun 16	105053	20.55	Y		
FY 2016	PINE BLUFF ARSENAL PINE BLUFF, AR	PO	ROCK ISLAND ARSENAL, IL	Mar 16	Jun 17	83051	21.16	Y		
FUZE HAND GRENADE M201A1						313997				
FY 2014	CHEMRING ORDNANCE, INC. PERRY, FL	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 14	Mar 15	220061	4.85	Y		
FY 2015	TO BE SELECTED TBS01	C / FFP	ROCK ISLAND ARSENAL, IL	May 15	May 16	109255	5.55	Y		
FY 2016	TO BE SELECTED TBS01	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 16	Mar 17	86373	9.06	Y		
GRENADE, METAL PARTS SET						347208				
FY 2015	TO BE SELECTED TBS02	C / FFP	ROCK ISLAND ARSENAL, IL	May 15	May 16	120811	1.90	Y		
FY 2016	TO BE SELECTED TBS02	C / FFP	ROCK ISLAND ARSENAL, IL	Mar 16	Dec 16	95508	2.23	Y		
***GRENADE, METAL PARTS SET**										
FY 2014	GOVERNMENT FURNISHED MATERIAL STOCK ISSUE,	GFM	ROCK ISLAND ARSENAL, IL	Oct 14	Oct 14	243337	1.70			

REMARKS: FUZE HAND GRENADE M201A1 FY2015 LAP will be a purchase order (PO) to Pine Bluff Arsenal in FY 2015 and FY 2016.

The Fuze procurement will be a new competitive FPP contract in FY 2015 with options for FY 2016.

The Metal Part procurement will be a new competitive FPP contract in FY 2015 with options for FY 2016.

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
GRENADE HAND SMOKE (WHITE) M83 (E69300)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	301920	219357	82563							82563																		0
1	FY 14	A	211597	0	211597									80000	80000	37488	14109													0
1	FY 15	A	105053	0	105053						A															80000	25053			0
1	FY 16	A	83051	0	83051																		A							83051
1	FY 13	MC	82416	0	82416								82416																	0
1	FY 15	MC	28453	0	28453						A															28453				0
Total					593133							82563	82416	80000	80000	37488	14109									108453	25053			83051
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	PINE BLUFF ARSENAL, PINE BLUFF, AR	60000	112000	268000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	8	8	18	26
	Reorder	6	6	15	21
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS
All M18/M83 Smoke Grenades are produced on the same assembly line. Production rates and leadtimes apply for the family of Smoke Grenades. The order of production by color is changed based on need.

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
GRENADE HAND SMOKE (WHITE) M83 (E69300)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
LOAD, ASSEMBLE, PACK (LAP)																														
1	FY 13	A	301920	301920																										0
1	FY 14	A	211597	211597																										0
1	FY 15	A	105053	105053																										0
1	FY 16	A	83051	0	83051									83051																0
1	FY 13	MC	82416	82416																										0
1	FY 15	MC	28453	28453																										0
Total					83051									83051																
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	PINE BLUFF ARSENAL, PINE BLUFF, AR	60000	112000	268000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	8	8	18	26
	Reorder	6	6	15	21
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS
All M18/M83 Smoke Grenades are produced on the same assembly line. Production rates and leadtimes apply for the family of Smoke Grenades. The order of production by color is changed based on need.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
Signals, All Types (E46900)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	680.0	15.6	12.1	9.8	8.0	17.8	26.1	14.0	15.3	15.3		796.2
Less PY Adv Proc												
Net Proc P1	680.0	15.6	12.1	9.8	8.0	17.8	26.1	14.0	15.3	15.3		796.2
Plus CY Adv Proc												
Total Proc Cost	680.0	15.6	12.1	9.8	8.0	17.8	26.1	14.0	15.3	15.3		796.2
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
This budget line includes Signals, All Types.

(E49100) Flare, AC Countermeasure, M206 Magnesium Teflon IR
The M206 flares are part of a family of advanced IR decoy flares designed for use by Army helicopters and fixed wing aircraft to meet advanced threats in current and future operational environments. This flare is a Magnesium Teflon Viton flare. When used together with the M212, a spectrally matched flare, and the M211, a pyrophoric alloy material payload that reacts with air to emit intense IR radiation, it provides protection against a wide range of surface to air threats. This item is Code A, approved for service use.

(E88900) Flare AC Cntermeasure M211 Pyrophoric Msl IR Decoy
These flares are part of a family of advanced infrared (IR) decoy flares designed for use by Army helicopters and fixed wing aircraft to meet advanced threats in current and future operational environments. The M211 uses a special high surface area metal foil, which rapidly oxidizes when exposed to oxygen. When one of the flares is dispensed from the host aircraft, the special pyrophoric material payload reacts with air to emit intense IR radiation that is not visible to the naked eye. The IR radiation diverts heat-seeking missiles away from the aircraft. When used together with the M212, a spectrally matched flare, and the M206, a Magnesium Teflon Viton flare, the flares provide protection against a wide range of surface to air threats. This item is Code A, approved for service use.

(E44600) Signal Kit Personnel Distress Red FP AP/25S-5
The Personnel Distress Signal Kit (Red) is primarily used by downed airmen or others exposed to emergency escape and evasion situations. There are seven (7) red signals in a Kit, one (1) hand fired launcher, and one (1) bandoleer assembly. The signals are propelled by a rocket motor with a time delay and are capable of penetrating foliage. This item is Code A, approved for service use.

(E46400) Signal, Hand Held Red Star Cluster M158
The Family of Hand Held Signals are individually launched pyrotechnics used for signaling and illumination. The payload is launched by a small, fin stabilized rocket and reaches a height of 725 feet. The M158 is the red star cluster signal used primarily as a distress signal. The payload is a cluster of five flares that burn for approximately 10 seconds. This item is Code A, approved for service use.

(E46500) Signal, Hand Held White Star Cluster M159
The Family of Hand Held Signals are individually launched pyrotechnics used for signaling and illumination. The payload is launched by a small, fin stabilized rocket and reaches a height of 725

feet. The M159 is a white star cluster used primarily for signaling. The payload is a cluster of five flares that burn for approximately 10 seconds. This item is Code A, approved for service use.

(E46700) Signal, Hand Held Red Parachute Flare M126A1
The Family of Hand Held Signals are individually launched pyrotechnics used for signaling and illumination. The payload is launched by a small, fin stabilized rocket and reaches a height of 725 feet. The M126A1 is a red parachute flare used primarily as a distress signal. The flare burns for approximately 30 seconds. This item is Code A, approved for service use.

(E46800) Signal, Hand Held White Parachute Flare M127
The Family of Hand Held Signals are individually launched pyrotechnics used for signaling and illumination. The payload is launched by a small, fin stabilized rocket and reaches a height of 725 feet. The M127A1 is a white parachute flare used primarily for illumination. The flare burns for approximately 30 seconds. This item is Code A, approved for service use.

(E47000) Signal, Hand Held Green Star Cluster M125A1
The Family of Hand Held Signals which are individually launched pyrotechnics used for signaling and illumination. The payload is launched by a small, fin stabilized rocket and reaches a height of 725 feet. M125A1 is a green star cluster signal used for signaling and illuminating missions. The payload is a cluster of five flares that burn for approximately 10 seconds. This item is Code A, approved for service use.

(E48300) Signal, Hand Held Green Parachute Flare M195
The Family of Hand Held Signals are individually launched pyrotechnics used for signaling and illumination. The payload is launched by a small, fin stabilized rocket and reaches a height of 725 feet. The M195 is a green parachute flare used primarily for signaling. The flare burns for approximately 30 seconds. This item is Code A, approved for service use.

(E62900) SMOKE POT PRACTICE M8
The M8 Smoke Pot is a five-gallon metal pail containing about 25 pounds of environmentally acceptable smoke mixture. It is initiated by a pyrotechnic delay igniting fuze. After ignition and about a 25-second delay, a dense smoke cloud is produced for screening purposes to conceal troop, vehicle, or other march movements. It is deployed in a similar manner as the service smoke pots, M4 series and M5. It is used by the individual Soldier in squad, company and battalion units. This item is Code A, approved for service use.

(E42010) Flares And Markers, Watercraft
The marker is launched from high-speed aircraft or helicopters in either day or night to mark the course of enemy submarines in antisubmarine warfare operations. They can be used for any type of air to sea surface marking that are referenced by smoke and flame. This item is Code A, approved for service use.

(E57605) CTG, 25.4mm, Decoy,Chaff,RR170 (w/Mk1 impulse ctg)
The RR170 is part of a family of advanced Radar Frequency (RF) chaff decoys designed for use by both rotary and fixed wing Army aircraft to defeat advance threats in current and future operational environments. The RR170 payload is made up of strands of aluminum coated glass fibers and loaded into a plastic outer case. When chaff is dispensed, it generates a reflected return signal which obstructs/confuses enemy radar and prevents Army aircraft detection. When used together, the RR170 and M839, provides protection against a wide range of surface-to-air missile (SAM) threats. This item is Code A, approved for service use.

Justification:
FY 2016 Base Budget supports critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station, and the combined training centers. Test requirements support the development, fielding, safety, and quality assurance of Army munitions and equipment throughout their life-cycle.

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.

FY 2016 Base procurement dollars in the amount of $9.761 million supports production of 6 variants of Signals.

FY 2016 OCO procurement dollars in the amount of $8.000 million supports production of 2 variants of Signals.

E42010 - FLARES AND MARKERS, WATERCRAFT
This is a training standard item used in both training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.
FY 2016 Base procurement dollars in the amount of $1.000 million supports the procurement of 2,753 markers.

E46400 - Signal, Hand Held Red Star Cluster M158
This is a training standard item used in both training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army procurement goals.
FY 2016 Base procurement dollars in the amount of $1.539 million supports the procurement of 17,409 Signals.

E46800 - Signal, Hand Held White Parachute Flare M127A1
This is a training standard item used both training and combat. The request supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.
FY 2016 Base procurement dollars in the amount of $2.490 million supports the procurement of 28,412 Signals.

E49100 - Flare, AC Countermeasure, M206 Magnesium Teflon IR
This is a training standard item used in both training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.
FY 2016 Base procurement dollars in the amount of $2.232 million supports the procurement of 54,260 flares.
FY 2016 OCO procurement dollars in the amount of $2.000 million supports the procurement of 55,111 flares.

E57605 - CTG, 25.4mm, Decoy,Chaff,RR170 (w/Mk1 impulse ctg)
This is a training standard item used in both training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.
FY 2016 Base procurement dollars in the amount of $0.500 million supports the procurement of 26,595 decoys.

E88900 - Flare AC Cntermeasure M211 Pyrophoric Msl IR Decoy
This is a training standard item used in both training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.
FY 2016 Base procurement dollars in the amount of $2.000 million supports the procurement of 9,935 flares.
FY 2016 OCO procurement dollars in the amount of $6.000 million supports the procurement of 49,091 flares.

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: Signals, All Types (E46900)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
E45800 SIG SMOKE & ILLUM MK124 MOD 0	L283															
E46400 SIG HAND HELD RED STAR CLSTR M158	L306	1047000						1538956	17409	88.40				1538956	17409	88.40
E46500 SIG HAND HELD WHITE STAR CLUSTER	L307	620000														
E46700 SIG HAND HELD RED PARACHUTE FLARE	L311	491000														
E46800 SIG HAND HELD WHITE PARACHUTE FLR	L312							2490028	28412	87.64				2490028	28412	87.64
E47000 SIG HAND HELD GREEN STAR CLUSTER	L314	1010000														
E49500 FUSEE WARNING RR RED 20 MIN M72	L508															
E48300 SIG HAND HELD GREEN PARACHUTE FLR	L305	357000														
E74600 SIG KIT PERS DISTRESS MK 79 MOD 0	L118															
E74700 SIGNAL KIT MK135 MOD 1																
E42900 SMOKE POT (HC) GROUND M5																
E42010 FLARES AND MARKERS, WATERCRAFT	L580				984999	2728	361.07	1000000	2753	363.24				1000000	2753	363.24
E46988 FLARE AC COUNTERMEASURE, XM216	LA59															
E43000 SMOKE POT FLOATING M4A2																
E49100 FLARE AC COUNTERMEASURE, M206	l410	2000000	60225	33.21	2083855	55304	37.68	2231714	54260	41.13	1999978	55111	36.29	4231692	109371	41.13
E47500 SIG SMOKE, PCHT, GRN , M128																
E49105 CARTRIDGE, IMPULSE, BBU-35/B	MG62															
E62900 SMOKE POT PRACTICE M8	K511	4000000	3424	1168.22	2957001	1999	1479.24									
E49200 FLARE SURFACE TRIP SERIES	L495															
E57600 CTG 25.4MM DECOY M839 F/M130 FLR	A965															
E57605 CARTRIDGE, CHAFF RR-170A/AL	ly07							499986	26595	18.80				499986	26595	18.80
E57700 CTC IMPLUSE M796	MD73															
E82800 FLARE TRACKING IR MK33																
E88900 FLARE AC COUNTERMEASURE M211	la14	6000000	43841	136.86	5970814	39194	152.34	2000015	9935	201.31	5999902	49091	122.22	7999917	59026	201.31
E41602 DISPENSER RIOT CONTROL CR M36																
E44600 SIGNAL KIT PERSONNEL DISTRESS RED FP	L119	84000	800	105.00	85000	500	170.00									
Total:		**15609**			**12082**			**9761**			**8000**			**17761**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
FLARES AND MARKERS, WATERCRAFT (E42010)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty			2728	2753		2753	8155	2729	2726	2726		21817
Gross Cost			1.0	1.0		1.0	2.3	1.1	1.1	1.1		7.7
Less PY Adv Proc												
Net Proc P1			1.0	1.0		1.0	2.3	1.1	1.1	1.1		7.7
Plus CY Adv Proc												
Total Proc Cost			1.0	1.0		1.0	2.3	1.1	1.1	1.1		7.7
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C			0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
The marker is launched from high-speed aircraft or helicopters in either day or night to mark the course of enemy submarines in antisubmarine warfare operations. They can be used for any type of air to sea surface marking that are referenced by smoke and flame. This item is Code A, approved for service use.

Justification:
This is a training standard item used in both training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.

FY 2016 Base procurement dollars in the amount of $1.000 million supports the procurement of 2,753 markers.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
SIGNAL KIT PERSONNEL DISTRESS RED FP (E44600)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty		800	498						2783			4081
Gross Cost	35.9	0.1	0.1						0.5			36.5
Less PY Adv Proc												
Net Proc P1	35.9	0.1	0.1						0.5			36.5
Plus CY Adv Proc												
Total Proc Cost	35.9	0.1	0.1						0.5			36.5
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C		0.0	0.0						0.0			0.0

Description:
The Personnel Distress Signal Kit (Red) is primarily used by downed airmen or others exposed to emergency escape and evasion situations. There are seven (7) red signals in a Kit, one (1) hand fired launcher, and one (1) bandoleer assembly. The signals are propelled by a rocket motor with a time delay and are capable of penetrating foliage. This item is Code A, approved for service use.

Justification:
This is a training standard item used in both training and combat. The request supports annual training and builds a war reserve inventory in accordance with the Army procurement goals.

TYPE CLASSIFICATION DATE: 1972

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
Signal, Hand Held Red Star Cluster M158 (E46400)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty		13127		17409		17409		12871	13007	12466		68880
Gross Cost	34.0	1.0		1.5		1.5		1.1	1.2	1.2		40.0
Less PY Adv Proc												
Net Proc P1	34.0	1.0		1.5		1.5		1.1	1.2	1.2		40.0
Plus CY Adv Proc												
Total Proc Cost	34.0	1.0		1.5		1.5		1.1	1.2	1.2		40.0
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C		0.0		0.0		0.0		0.0	0.0	0.0		0.0

Description:
The Family of Hand Held Signals are individually launched pyrotechnics used for signaling and illumination. The payload is launched by a small, fin stabilized rocket and reaches a height of 725 feet. The M158 is the red star cluster signal used primarily as a distress signal. The payload is a cluster of five flares that burn for approximately 10 seconds. This item is Code A, approved for service use.

Justification:
This is a training standard item used in both training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army procurement goals.

FY 2016 Base procurement dollars in the amount of $1.539 million supports the procurement of 17,409 Signals.

TYPE CLASSIFICATION DATE: 1983

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
Signal, Hand Held White Star Cluster M159 (E46500)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty		6392					7398		7653			21443
Gross Cost	30.8	0.6					0.7		0.7			32.7
Less PY Adv Proc												
Net Proc P1	30.8	0.6					0.7		0.7			32.7
Plus CY Adv Proc												
Total Proc Cost	30.8	0.6					0.7		0.7			32.7
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C		0.0					0.0		0.0			0.0

Description:
The Family of Hand Held Signals are individually launched pyrotechnics used for signaling and illumination. The payload is launched by a small, fin stabilized rocket and reaches a height of 725 feet. The M159 is a white star cluster used primarily for signaling. The payload is a cluster of five flares that burn for approximately 10 seconds. This item is Code A, approved for service use.

Justification:
This is a training standard item used in both training and in combat. The request supports annual training and builds a war reserve inventory in accordance with the Army procurement goals.

TYPE CLASSIFICATION DATE: 1983

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
Signal, Hand Held Red Parachute Flare M126A1 (E46700)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty								5096		4928		10024
Gross Cost	20.8	0.5						0.5		0.5		22.3
Less PY Adv Proc												
Net Proc P1	20.8	0.5						0.5		0.5		22.3
Plus CY Adv Proc												
Total Proc Cost	20.8	0.5						0.5		0.5		22.3
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C								0.0		0.0		0.0

Description:
The Family of Hand Held Signals are individually launched pyrotechnics used for signaling and illumination. The payload is launched by a small, fin stabilized rocket and reaches a height of 725 feet. The M126A1 is a red parachute flare used primarily as a distress signal. The flare burns for approximately 30 seconds. This item is Code A, approved for service use.

Justification:
This is a training standard item used in both training and combat. The request supports annual training and builds a war reserve inventory in accordance with the Army procurement goals.

TYPE CLASSIFICATION DATE: 1983

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
Signal, Hand Held White Parachute Flare M127A1 (E46800)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty				28412		28412	28732	29279	26065	25394		137882
Gross Cost	135.7			2.5		2.5	2.5	2.6	2.3	2.4		148.0
Less PY Adv Proc												
Net Proc P1	135.7			2.5		2.5	2.5	2.6	2.3	2.4		148.0
Plus CY Adv Proc												
Total Proc Cost	135.7			2.5		2.5	2.5	2.6	2.3	2.4		148.0
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C				0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
The Family of Hand Held Signals are individually launched pyrotechnics used for signaling and illumination. The payload is launched by a small, fin stabilized rocket and reaches a height of 725 feet. The M127A1 is a white parachute flare used primarily for illumination. The flare burns for approximately 30 seconds. This item is Code A, approved for service use.

Justification:
This is a training standard item used both training and combat. The request supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.

FY 2016 Base procurement dollars in the amount of $2.490 million supports the procurement of 28,412 Signals.

TYPE CLASSIFICATION DATE: 1983

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
Signal, Hand Held Green Star Cluster M125A1 (E47000)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty		12661					7360		8201			28222
Gross Cost	51.0	1.0					0.6		0.7			53.3
Less PY Adv Proc												
Net Proc P1	51.0	1.0					0.6		0.7			53.3
Plus CY Adv Proc												
Total Proc Cost	51.0	1.0					0.6		0.7			53.3
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C		0.0					0.0		0.0			0.0

Description:
The Family of Hand Held Signals which are individually launched pyrotechnics used for signaling and illumination. The payload is launched by a small, fin stabilized rocket and reaches a height of 725 feet. M125A1 is the green star cluster signal used primarily for signaling and illuminating missions. The payload is a cluster of five flares that burn for approximately 10 seconds. This item is Code A, approved for service use.

Justification:
This is a training standard item used in both training and combat. The request supports annual training and builds a war reserve inventory in accordance with the Army procurement goals.

TYPE CLASSIFICATION DATE: 1983

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
Signal, Hand Held Green Parachute Flare M195 (E48300)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty		4309					2509			3318		10136
Gross Cost	16.8	0.4					0.2			0.3		17.7
Less PY Adv Proc												
Net Proc P1	16.8	0.4					0.2			0.3		17.7
Plus CY Adv Proc												
Total Proc Cost	16.8	0.4					0.2			0.3		17.7
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C		0.0					0.0			0.0		0.0

Description:
The Family of Hand Held Signals are individually launched pyrotechnics used for signaling and illumination. The payload is launched by a small, fin stabilized rocket and reaches a height of 725 feet. The M195 is a green parachute flare used primarily for signaling. The flare burns for approximately 30 seconds. This item is Code A, approved for service use.

Justification:
This is a training standard item used in both training and combat. The request supports annual training and builds a war reserve inventory in accordance with the Army procurement goals.

TYPE CLASSIFICATION DATE: 1983

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
Flare, AC Countermeasure, M206 Magnesium Teflon IR (E49100)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty		60225	55304	54260	55111	109371	89709	89495	88921	107559		600584
Gross Cost	66.6	2.0	2.1	2.2	2.0	4.2	3.7	3.8	3.9	4.8		91.1
Less PY Adv Proc												
Net Proc P1	66.6	2.0	2.1	2.2	2.0	4.2	3.7	3.8	3.9	4.8		91.1
Plus CY Adv Proc												
Total Proc Cost	66.6	2.0	2.1	2.2	2.0	4.2	3.7	3.8	3.9	4.8		91.1
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0

Description:
The M206 flares are part of the advanced IR decoy flares designed for use by Army helicopters and fixed wing aircraft to meet advanced threats in current and future operational environments. This flare is a Magnesium Teflon Viton flare. When used together with the M212, a spectrally matched flare, and the M211, a pyrophoric alloy material payload that reacts with air to emit intense IR radiation, it provides protection against a wide range of Man-portable Air Defense Systems (MANPADS). This item is Code A, approved for service use.

Justification:
This is a training standard item used in both training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.

FY 2016 Base procurement dollars in the amount of $2.232 million supports 54,260 flares.

FY 2016 OCO procurement dollars in the amount of $2.000 million supports 55,111 flares.

TYPE CLASSIFICATION: 1978

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
FUSEE WARNING RR RED 20 MIN M72 (E49500)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty							23630					23630
Gross Cost	0.4						0.2					0.6
Less PY Adv Proc												
Net Proc P1	0.4						0.2					0.6
Plus CY Adv Proc												
Total Proc Cost	0.4						0.2					0.6
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C							0.0					0.0

Description:
COTS item. Item is a red railroad or highway flare and available commercially. The purpose of the M72 is to outline emergency airfield boundaries under poor visibility conditions, as well as for recognition and signaling along railroads rights-of-way. This item is Code A, approved for service use.

Justification:
This is a training standard item used in both training and combat. The request supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG, 25.4mm, Decoy,Chaff,RR170 (w/Mk1 impulse ctg) (E57605)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty				26595		26595		38344		36855		101794
Gross Cost				0.5		0.5		0.8		0.8		2.0
Less PY Adv Proc												
Net Proc P1				0.5		0.5		0.8		0.8		2.0
Plus CY Adv Proc												
Total Proc Cost				0.5		0.5		0.8		0.8		2.0
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C				0.0		0.0		0.0		0.0		0.0

Description:
The RR170 is part of a family of advanced Radar Frequency (RF) chaff decoys designed for use by both rotary and fixed wing Army aircraft to defeat advance threats in current and future operational environments. The RR170 payload is made up of strands of aluminum coated glass fibers and loaded into a plastic outer case. When chaff is dispensed, it generates a reflected return signal which obstructs/confuses enemy radar and prevents Army aircraft detection. When used together, the RR170 and M839, provides protection against a wide range of surface-to-air missile (SAM) threats. This item is Code A, approved for service use.

Justification:
This is a training standard item used in both training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.

FY 2016 Base procurement dollars in the amount of $0.500 million supports the procurement of 26,595 decoys.

TYPE CLASSIFICATION DATE: Prior to 1980

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
SMOKE POT PRACTICE M8 (E62900)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	2562	3424	2005				10246					18237
Gross Cost	42.2	4.0	3.0				11.0					60.2
Less PY Adv Proc												
Net Proc P1	42.2	4.0	3.0				11.0					60.2
Plus CY Adv Proc												
Total Proc Cost	42.2	4.0	3.0				11.0					60.2
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0				0.0					0.0

Description:
The M8 Smoke Pot is a five-gallon metal pail containing about 25 pounds of environmentally acceptable smoke mixture. It is initiated by a pyrotechnic delay igniting fuze. After ignition and about a 25-second delay, a dense smoke cloud is produced for screening purposes to conceal troop, vehicle, or other march movements. It is deployed in a similar manner as the service smoke pots, M4 series and M5. It is used by the individual Soldier in squad, company and battalion units. This item is Code A, approved for service use.

Justification:
This is a training standard item used in both training and combat. The request supports annual training and builds a war reserve inventory in accordance with the Army procurement goals.

TYPE CLASSIFICATION DATE: 1994

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
Flare AC Cntermeasure M211 Pyrophoric Msl IR Decoy (E88900)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty		43841	39194	9935	49091	59026	24134	24307	24448	24649		239599
Gross Cost	2.3	6.0	6.0	2.0	6.0	8.0	4.0	4.1	4.2	4.3		38.9
Less PY Adv Proc												
Net Proc P1	2.3	6.0	6.0	2.0	6.0	8.0	4.0	4.1	4.2	4.3		38.9
Plus CY Adv Proc												
Total Proc Cost	2.3	6.0	6.0	2.0	6.0	8.0	4.0	4.1	4.2	4.3		38.9
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0

Description:
These flares are part of the advanced infrared (IR) decoy/flares design, which are dispensed from Army aircraft to protect against advanced Man-portable Air Defense Systems (MANPADS) in current and future operational environments. The M211 uses a special high surface area metal foil, which rapidly oxidizes when exposed to oxygen. When one of the flares is dispensed from the host aircraft, the special pyrophoric material payload reacts with air to emit intense IR radiation that is not visible to the naked eye. The IR radiation diverts heat-seeking missiles away from the aircraft. When used together with the M212, a spectrally matched flare, and the M206, a Magnesium Teflon Viton flare, the flares provide protection against a wide range MANPADS. This item is Code A, approved for service use.

Justification:
This is a training standard item used in both training and combat. FY 2016 request supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.

FY 2016 Base procurement dollars in the amount of $2.000 million supports the procurement of 9,935 flares.

FY 2016 OCO procurement dollars in the amount of $6.000 million supports the procurement of 49,091 flares.

TYPE CLASSIFICATION DATE: November 2002

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: Flare AC Cntermeasure M211 Pyrophoric Msl IR Decoy (E88900)	Weapon System Type:	MDAP:	DODIC: LA14	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
COMPLETE FLARE		5288586	43841	120.63	5430000	39194	138.54	1214319	9935	122.23	6000000	49091	122.22	7214319	59026	122.22
SUBTOTAL HARDWARE COST		**5288540**			**5429937**			**1214355**			**5999902**			**7214158**		
Support																
PRODUCTION ENGINEERING		561414			541000			785681						785681		
SUBTOTAL PRODUCTION SUPPORT		**561414**			**541000**			**785681**						**785681**		
NON-RECURRING COSTS																
FIRST ARTICLE TEST		150000														
SUBTOTAL NON-RECURRING COSTS		**150000**														
Total:		**6000**			**5971**			**2000**			**6000**			**8000**		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:
Procurement of Ammunition, Army/ 1/ Ammunition

Weapon System Type:

P-1 Line Item Nomenclature:
Flare AC Cntermeasure M211 Pyrophoric Msl IR Decoy (E88900)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
COMPLETE FLARE						254833				
FY 2014	TO BE SELECTED TBS01	C / FFP	PICATINNY ARSENAL, NJ	May 15	Aug 16	43841	120.63	Y		
FY 2015	TO BE SELECTED TBS01	C / FFP	PICATINNY ARSENAL, NJ	May 15	Aug 16	39194	138.54	Y		
FY 2016	TO BE SELECTED TBS01	C / FFP	PICATINNY ARSENAL, NJ	Mar 16	Mar 17	59026	122.22	Y		

REMARKS: Type Classified: November 2002. New contract will be restricted to NTIB. FY 2014 and FY 2015 awards will be combined to facilitate a transition from single source to multiple sources, while achieving the most economical price.

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
Flare AC Cntermeasure M211 Pyrophoric Msl IR Decoy (E88900)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
COMPLETE FLARE																														
2	FY 13	A	308252	300969	7283	6797												486												0
1	FY 14	A	43841	0	43841								A															3700	3700	36441
1	FY 15	A	39194	0	39194								A															2300	2336	34558
1	FY 16	A	59026	0	59026																		A							59026
Total					149344	6797												486										6000	6036	130025
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	TO BE SELECTED, TBS01	5000	6000	80000	
2	ALLOY SURFACES COMPANY INC., ASTON, PA	5000	6000	80000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	8	8	15	23
	Reorder	6	6	12	18
2	Initial	8	8	15	23
	Reorder	6	6	12	18
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

FY 17 / 18 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
Flare AC Cntermeasure M211 Pyrophoric Msl IR Decoy (E88900)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 17												Fiscal Year 18												Later
									Calendar Year 17												Calendar Year 18									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
COMPLETE FLARE																														
2	FY 13	A	308252	308252																										0
1	FY 14	A	43841	7400	36441	3700	3700	3700	3700	3700	3666	3600	3600	3600	3500															0
1	FY 15	A	39194	4636	34558	2400	2400	2400	2400	2400	2300	2300	2300	2300	2300															11058
1	FY 16	A	59026	0	59026						4800	4800	4800	4800	4800	5000	5000	5000	4935	4900	4900	5291								0
Total					130025	6100	6100	6100	6100	6100	10766	10700	10700	10700	10600	5000	5000	5000	4935	4900	4900	5291								11058
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+
1	TO BE SELECTED, TBS01	5000	6000	80000	
2	ALLOY SURFACES COMPANY INC., ASTON, PA	5000	6000	80000	

MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct
1	Initial	8	8	15	23
	Reorder	6	6	12	18
2	Initial	8	8	15	23
	Reorder	6	6	12	18
	Initial				
	Reorder				
	Initial				
	Reorder				
	Initial				
	Reorder				

REMARKS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
Simulators, All Types (E51200)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	283.4	5.2	11.6	9.7		9.7	12.6	14.5	14.6	15.0		366.7
Less PY Adv Proc												
Net Proc P1	283.4	5.2	11.6	9.7		9.7	12.6	14.5	14.6	15.0		366.7
Plus CY Adv Proc												
Total Proc Cost	283.4	5.2	11.6	9.7		9.7	12.6	14.5	14.6	15.0		366.7
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
This budget line includes Simulators, All Types.

(E49700) M115A2 Artillery Ground Burst Simulator is a hand thrown device that is used in training to simulate battlefield noise and effects (shell in flight and ground explosion) during troop maneuvers. The simulator has a 6-10 second delay followed by a 2-4 second whistle ending with a flash and loud report; the surface danger zone is 35 meters. This item is Code A, approved for service use.

(E50200) M116A1 Hand Grenade Simulator is a hand-thrown device and is used in training to simulate battlefield noise and effects during troop maneuvers. It has a 5 to 10 second delay and a 15 meter surface danger zone. This item is Code A, approved for service use.

(E70600) M22 Anti-Tank Weapon Effect Signature Simulator (ATWESS) Guided Missile (GM) Rocket Simulator is used to simulate the TOW, DRAGON or VIPER, including report, flash and smoke through use of an adapter. It is compatible with the Multiple Integrated Laser Engagement System (MILES). This item is Code A, approved for service use.

(E88200) Simulator Antitank M27 The M27 is the SAGGER missile simulator. The Antitank Guided Missile Signature Simulator (ATGMSS) is used during live fire training exercises to simulate enemy antitank missile. The ATGMSS consists of a paper tube body with polyurethane foam nose and tail cone. The rocket motor is in cylindrical form within the paper tube. A hole is provided in the tail section for a guide rod on the simulator. The ATGMSS is inserted onto a launcher with the guide rod of the launcher going through the tail cone guide hole. An Electric Match (M79) is inserted into the missile. The electric match ignites the rocket motor and the simulator travels approximately 1500 meters down range. This item is Code A, approved for service use.

(E88404) Simulators, Non-standard, Special Effects for CTCs Black smoke cartridge to simulate target kill. This item is launched with Omega 60 Force on target. This item is in development which is part of the Special Use Ammo Family. After Development, this item will be Code A, approved for service use.

Justification:
FY 2016 Base Budget supports critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station and the combined training centers. Test requirements support the development, fielding, safety and quality assurance of Army munitions and equipment throughout their life-cycle.

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature Simulators, All Types (E51200)	
Program Elements for Code B Items:	Code:	Other Related Program Elements:	

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.

FY 2016 Base procurement dollars in the amount of $9.749 million supports production of three variants of simulators.

E49700 - SIMULATOR PROJ GND BURST M115A2
This is a training unique item not used in combat. FY 2016 request supports annual training and builds a depot level in accordance with Army's procurement goals.
FY 2016 Base procurement dollars in the amount of $3.365 million supports production of 135,368 Ground Burst Simulators.

E50200 - SIMULATOR HAND GRENADE M116A1
This is a training unique item not used in combat. FY 2016 request supports annual training and builds a depot level in accordance with Army's procurement goals.
FY 2016 Base procurement dollars in the amount of $4.884 million supports production of 226,813 hand grenade simulators.

E70600 - SIMULATOR ANTITANK GM RKT M22 (ATWESS)
This is a training unique item not used in combat. FY 2016 request supports annual training and builds a depot level in accordance with Army's procurement goals.
FY 2016 Base procurement dollars in the amount of $1.500 million supports production of 9,256 Anti-Tank simulators.

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: Simulators, All Types (E51200)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
E50200 SIMULATOR HAND GRENADE M116A1	L601	2615000	12050	217.01	3961000	192288	20.60	4884000	226813	21.53				4884000	226813	21.53
E88404 SIM, NON STD, SPECIAL EFFECTS	LA71				1380000											
E49700 SIMULATOR PROJ GND BURST M115A2	L594	2159000	87900	24.56	3242000	138491	23.41	3365000	135368	24.86				3365000	135368	24.86
E70600 SIM ANTITANK GM RKT M22 (ATWESS)	L367	454000			1084000	12250	88.49	1500000	11993	125.07				1500000	11993	125.07
E88200 SIMULATOR ANTITANK M27	L715				1971000											
Total:		**5228**			**11638**			**9749**						**9749**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: SIMULATOR PROJ GND BURST M115A2 (E49700)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty		87900	138491	135368		135368	141705	253478	249085	253434		1259461
Gross Cost	105.8	2.2	3.2	3.4		3.4	3.4	6.2	6.2	6.4		136.8
Less PY Adv Proc												
Net Proc P1	105.8	2.2	3.2	3.4		3.4	3.4	6.2	6.2	6.4		136.8
Plus CY Adv Proc												
Total Proc Cost	105.8	2.2	3.2	3.4		3.4	3.4	6.2	6.2	6.4		136.8
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
The M115A2 Artillery Ground Burst Simulator is a hand thrown device that is used in training to simulate battlefield noise and effects (shell in flight and ground explosion) during troop maneuvers. The simulator has a 6-10 second delay followed by a 2-4 second whistle ending with a flash and loud report; the surface danger zone is 35 meters. This item is Code A, approved for service use.

Justification:
This is a training unique item not used in combat. FY 2016 request supports annual training and builds a depot level in accordance with Army's procurement goals.

FY 2016 Base procurement dollars in the amount of $3.365 million supports production of 135,368 Ground Burst Simulators.

TYPE CLASSIFICATION DATE: 1962

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
SIMULATOR HAND GRENADE M116A1 (E50200)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty		127050	192288	226813		226813	247867	251080	252750	253362		1551210
Gross Cost	78.0	2.6	4.0	4.9		4.9	5.2	5.3	5.4	5.5		110.9
Less PY Adv Proc												
Net Proc P1	78.0	2.6	4.0	4.9		4.9	5.2	5.3	5.4	5.5		110.9
Plus CY Adv Proc												
Total Proc Cost	78.0	2.6	4.0	4.9		4.9	5.2	5.3	5.4	5.5		110.9
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
The M116A1 Hand Grenade Simulator is a hand-thrown device and is used in training to simulate battlefield noise and effects during troop maneuvers. It has a 5 to 10 second delay and a 15 meter surface danger zone. This item is Code A, approved for service use.

Justification:
This is a training unique item not used in combat. FY 2016 request supports annual training and builds a depot level in accordance with Army's procurement goals.

FY 2016 Base procurement dollars in the amount of $4.884 million supports production of 226,813 hand grenade simulators.

TYPE CLASSIFICATION DATE: 1960

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: SIMULATOR ANTITANK GM RKT M22 (ATWESS) (E70600)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty			12050	9256		9256	37561	37763	37901			134531
Gross Cost	40.1	0.5	1.1	1.5		1.5	1.9	1.9	2.0	2.1		51.0
Less PY Adv Proc												
Net Proc P1	40.1	0.5	1.1	1.5		1.5	1.9	1.9	2.0	2.1		51.0
Plus CY Adv Proc												
Total Proc Cost	40.1	0.5	1.1	1.5		1.5	1.9	1.9	2.0	2.1		51.0
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C			0.0	0.0		0.0	0.0	0.0	0.0			0.0

Description:
The M22 Anti-Tank Weapon Effect Signature Simulator (ATWESS) Guided Missile (GM) Rocket Simulator is used to simulate the TOW, DRAGON or VIPER, including report, flash and smoke through use of an adapter. It is compatible with the Multiple Integrated Laser Engagement System (MILES). This item is Code A, approved for service use.

Justification:
This is a training unique item not used in combat. FY 2016 request supports annual training and builds a depot level in accordance with Army's procurement goals.

FY 2016 Base procurement dollars in the amount of $1.500 million supports production of 9,256 Anti-Tank simulators.

TYPE CLASSIFICATION DATE: 1984

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
SIMULATOR ANTITANK M27 (E88200)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty			10495									10495
Gross Cost	3.8		2.0									5.7
Less PY Adv Proc												
Net Proc P1	3.8		2.0									5.7
Plus CY Adv Proc												
Total Proc Cost	3.8		2.0									5.7
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C			0.0									0.0

Description:
The M27 is the SAGGER missile simulator. The Antitank Guided Missile Signature Simulator (ATGMSS) is used during live fire training exercises to simulate enemy antitank missile. The ATGMSS consists of a paper tube body with polyurethane foam nose and tail cone. The rocket motor is in cylindrical form within the paper tube. A hole is provided in the tail section for a guide rod on the simulator. The ATGMSS is inserted onto a launcher with the guide rod of the launcher going through the tail cone guide hole. An Electric Match (M79) is inserted into the missile. The Electric Match ignites the rocket motor and the simulator travels approximately 1500 meters down range. This item is Code A, approved for service use.

Justification:
This is a training unique item not used in combat. The request supports annual training and builds a war reserve inventory in accordance with the Army procurement goals.

TYPE CLASSIFICATION DATE: 1992

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
SIMULATORS, NON-STANDARD, SPECIAL EFFECTS FOR CTCS (E88404)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty			10495									10495
Gross Cost			1.4				1.5	1.0	1.0	1.1		6.0
Less PY Adv Proc												
Net Proc P1			1.4				1.5	1.0	1.0	1.1		6.0
Plus CY Adv Proc												
Total Proc Cost			1.4				1.5	1.0	1.0	1.1		6.0
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C			0.0									0.0

Description:
Black smoke cartridge to simulate target kill. This item is launched with Omega 60 Force on target. This item is in development which is part of the Special Use Ammo Family. After Development, this item will be Code A, approved for service use.

Justification:
This is a training unique item not used in combat. The request supports annual training and builds a war reserve inventory in accordance with the Army procurement goals.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
Ammo Components, All Types (EB0016)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	740.0	11.7	3.6	3.5		3.5	13.6	12.2	9.9	10.1		804.8
Less PY Adv Proc												
Net Proc P1	740.0	11.7	3.6	3.5		3.5	13.6	12.2	9.9	10.1		804.8
Plus CY Adv Proc												
Total Proc Cost	740.0	11.7	3.6	3.5		3.5	13.6	12.2	9.9	10.1		804.8
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
This budget line includes all Ammo Components/Support Items.

Justification:
These components support FY 2016 Special Tests, First Article Test, Renovation of Field Stocks and Proof of Acceptance Tests and are used in both training and combat ammunition.

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: Ammo Components, All Types (EB0016)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
Flyaway Recurring																
EA0450 COMPONENTS FOR SPECIAL TESTS		1713														
EA050COMPONENTS AND RENO OF FIELD STOCKS		7748			2010			4845						4845		
EA1200WEAPONS COM/SPT OF PROOF/ACPT TEST		2239			1584			1676						1676		
Total:		**11700**			**3594**			**6521**						**6521**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
COMPONENTS FOR SPECIAL TESTS (EA0450)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	47.0	1.7										48.7
Less PY Adv Proc												
Net Proc P1	47.0	1.7										48.7
Plus CY Adv Proc												
Total Proc Cost	47.0	1.7										48.7
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
COMPONENTS FOR SPECIAL TESTS

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
COMPONENTS AND RENOVATION OF FIELD STOCK (EA0500)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	639.8	7.7	2.0	1.8		1.8	11.9	10.8	8.5	8.7		691.3
Less PY Adv Proc												
Net Proc P1	639.8	7.7	2.0	1.8		1.8	11.9	10.8	8.5	8.7		691.3
Plus CY Adv Proc												
Total Proc Cost	639.8	7.7	2.0	1.8		1.8	11.9	10.8	8.5	8.7		691.3
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
Funds procure components and support the renovation of ammunition items currently in the Army inventory. Items support worldwide ammunition requirements in order to maintain the inventory in a serviceable status ready for issue to the troops.

Justification:
The FY 2016 procurement dollars support renovation efforts required to bring stocks that have entered an unserviceable/unsafe condition back to an issuable condition. The alternative is to fill requirements with new procurement and incur DEMIL costs to clear the inventory of unserviceable assets. It is much more cost effective to correct most stockpile deficiencies through renovation than through new procurement and the resulting DEMIL requirements.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
WEAPON COMP IN SPT OF PROOF/ACPT TESTING (EA1200)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	53.3	2.2	1.6	1.7		1.7	1.7	1.4	1.4	1.5		64.8
Less PY Adv Proc												
Net Proc P1	53.3	2.2	1.6	1.7		1.7	1.7	1.4	1.4	1.5		64.8
Plus CY Adv Proc												
Total Proc Cost	53.3	2.2	1.6	1.7		1.7	1.7	1.4	1.4	1.5		64.8
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
This funding line procures weapons and weapons components required by the U.S. Army Test and Evaluation Command (ATEC) in support of ammunition testing at Aberdeen Test Center (ATC), Aberdeen Proving Ground, MD and Yuma Test Center (YTC), Yuma Proving Ground, AZ. These components are requisitioned from the Army Stock Fund on a reimbursable basis.

Justification:
FY 2016 Base procurement dollars in the amount of $1.676 million support procurement of weapons components including gun mounts, gun tubes, breech assemblies, and other main weapon components. These weapon components are required to support proof and acceptance testing at ATC and YTC. Without these components, the Army would be unable to conduct the testing required to accept ammunition end items into its inventory

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
Non-Lethal Ammunition, All Types (E91901)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	21.9	7.4		1.7		1.7	9.2	2.6		0.3		43.1
Less PY Adv Proc												
Net Proc P1	21.9	7.4		1.7		1.7	9.2	2.6		0.3		43.1
Plus CY Adv Proc												
Total Proc Cost	21.9	7.4		1.7		1.7	9.2	2.6		0.3		43.1
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
This budget line item procures Non-Lethal Ammunition, All Types.

(E86401) CTG 12 GA NL, EXT RG, MARK XM1116
The XM1116 is a 12 gauge low velocity cartridge fired from a standard, 3 inch chamber, manually operated shotgun. It utilizes a drag stabilized Bean Bag design with fluorescent green marking powder to deliver a strong, non-penetrating blow to the body. This cartridge has an effective range of approximately 30 to 50 meters. This item is Code B, not approved for service use.

(E89000) CTG, 40MM NL (SPONGE GRN) M1006
The 40MM Non-Lethal munition, M1006, is a sponge grenade that is launched from M203 Grenade Launcher without any modifications to the weapon. The M1006 has been designed to incapacitate a targeted individual with non-lethal blunt trauma from 10 to 50 meters. The cartridge incorporates a propulsion system that utilizes smokeless powder. The projectile is made from polyolafin foam and the body utilizes thermoplastic polyester. This item is Code "A" approved for service use.

(E89002) CTG, 40MM AIRBURST F M203 XM1112
The Cartridge 40 Millimeter Airburst for M203 M1112 is intended to have an effective range between 35 to 300 meters. It contains a proximity fuze with programmable option. It is intended to deliver multiple non-lethal effects: flash-blindness, temporary hearing shift. The XM1112 is intended to deliver consistent non-lethal effects regardless of range setting. It will have a user settable delay option for room clearing. It is fully compatible with existing 40 millimeter M203/M320 weapons platforms without any modifications. The XM1112 will deliver non-lethal effects lasting at least 20 seconds. This item is Code B, not approved for service use.

(E85115) HAND BODY PRAC STUN GRN M102
The M102 Reusable Hand Grenade Body is a re-useable practice body for the M84 Stun Hand Grenade. Once assembled in the field with an M240 fuze, the device simulates the M84 Stun Grenade for training. This item is Code A, approved for service use.

(E91505) CTG NL FIRING DEVICE: TASER, XP25
The Cartridge, NL Firing Device is a 25-foot single shot fired from the Launched Electrode Stun Device (LESD), which is a hand held device used for Electro-Muscular Incapacitation (EMI). This cartridge is a conducted energy weapon that delivers an incapacitating electrical shock capable of arcing through 2 inches of clothing. Maximum effective range is 15 feet. This item is Code A, approved for service use.

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature Non-Lethal Ammunition, All Types (E91901)	
Program Elements for Code B Items:	Code:	Other Related Program Elements:	

Justification:
FY 2016 Base Budget supports critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station, and the combined training centers. Test requirements support the development, fielding, safety, and quality assurance of Army munitions and equipment throughout their life-cycle.

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.

FY 2016 Base procurement dollars in the amount of $1.700 million supports production of four variants of Non-Lethal Ammo.

(E86401) CTG 12 GA NL, EXT RG, MARK XM1116
This is a training standard item used in both training and combat. Procurement supports annual training and builds a war reserve inventory in accordance with Army's procurement goals. FY 2016 Base procurement dollars in the amount of $0.500 million supports a propellant producibility study and engineering activities in support of production.

(E89000) CTG, 40MM NL (SPONGE GRN) M1006
This is a training unique item not used in combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army procurement goals. FY 2016 Base procurement dollars in the amount of $0.400 million supports production of 881 CTG 40MM NL munitions.

(E89002) CTG, 40MM AIRBURST F M203 XM1112
This is a training standard item used in both training and combat. Procurement supports annual training and builds a war reserve inventory in accordance with the Army procurement goals. FY 2016 Base procurement dollars in the amount of $0.500 million will be utilized for engineering activities in support of production.

(E91505) CTG NL FIRING DEVICE: TASER, XP25
This is a training standard item used in both training and combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army procurement goals. FY 2016 Base Procurement dollars in the amount of $0.300 million supports the procurement of 5,536 LESD Cartridges.

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: Non-Lethal Ammunition, All Types (E91901)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
E86401 CTG 12 GA NL, EXT RG, MARK XM1116	AC02							500000						500000		
E89000 CTG, 40MM NL (SPONGE GRN) M1006	BA06							400000	881	454.03				400000	881	454.03
E89002 CTG, 40MM AIRBURST F M203 XM1112	BA39	6927000	5675	1220.56				500000						500000		
E85115 HAND BODY PRAC STUN GRN M102	GG18	278000														
E91505 CTG NL FIRING DEVICE:TASER, XP25	JN17	161000	2200	73.18				300000	5536	54.19				300000	5536	54.19
Total:		**7366**						**1700**						**1700**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
Grenade, Hand,Body,PracticeStun(NL)Reloadable M102 (E85115)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	20						17184					17204
Gross Cost	1.3	0.3					1.0					2.6
Less PY Adv Proc												
Net Proc P1	1.3	0.3					1.0					2.6
Plus CY Adv Proc												
Total Proc Cost	1.3	0.3					1.0					2.6
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.1						0.0					0.0

Description:
The M102 Reusable Hand grenade Body is a re-useable practice body for the M84 Stun Hand Grenade. Once assembled in the field with an M240 fuze, the device simulates the M84 Stun Grenade for training. This item is Code A, approved for service use.

Justification:
This is a training unique item not used in combat. Procurement supports annual training and builds a war reserve inventory in accordance with the Army procurement goals.

TYPE CLASSIFICATION DATE: June 2005

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG, 12 GA, NON-LETH, EXT RG, MARKING M1116 series (E86401)

Program Elements for Code B Items:

Code: B

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	747											747
Gross Cost	3.5			0.5		0.5	0.9	0.1				5.0
Less PY Adv Proc												
Net Proc P1	3.5			0.5		0.5	0.9	0.1				5.0
Plus CY Adv Proc												
Total Proc Cost	3.5			0.5		0.5	0.9	0.1				5.0
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0											0.0

P-40 Breakdown

Area		FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020
Active	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	0.0	0.0	405.0	0.0	405.0	745.0	65.0	0.0	0.0
National Guard	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	0.0	0.0	80.0	0.0	80.0	147.0	13.0	0.0	0.0
Reserve	Qty	0	0	0	0	0	0	0	0	0
	Net Proc (P-1)	0.0	0.0	15.0	0.0	15.0	28.0	2.0	0.0	0.0
Total	Qty	0	0	0	0	0	0	0	0	0
	Gross Cost	0	0	500	0	500	920	80	0	0

Description:
The XM1116 is a 12 gauge low velocity cartridge fired from a standard, 3 inch chamber, manually operated shotgun. It utilizes a drag stabilized Bean Bag design with fluorescent green marking powder to deliver a strong, non-penetrating blow to the body. This cartridge has an effective range of approximately 30 to 50 meters. This item is Code B, not approved for service use.

Justification:
This is a training standard item used in both training and combat. Procurement supports annual training and builds a war reserve inventory in accordance with Army's procurement goals.

FY 2016 Base procurement dollars in the amount of $0.500 million supports a propellant producibility study and engineering activities in support of production.

TYPE CLASSIFICATION DATE: 3rd Quarter FY 2015

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG 40MM NON-LETHAL (SPONGE GRENADE-PT TGT) M1006 (E89000)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	751			881		881	72471	30616				104719
Gross Cost	12.6			0.4		0.4	1.2	0.8			Continuing	Continuing
Less PY Adv Proc												
Net Proc P1	12.6			0.4		0.4	1.2	0.8			Continuing	Continuing
Plus CY Adv Proc												
Total Proc Cost	12.6			0.4		0.4	1.2	0.8			Continuing	Continuing
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0			0.0		0.0	0.0	0.0			Continuing	Continuing

Description:
The 40MM Non-Lethal munition, M1006, is a sponge grenade that is launched from M203 Grenade Launcher without any modifications to the weapon. The M1006 has been designed to incapacitate a targeted individual with non-lethal blunt trauma from 10 to 50 meters. The cartridge incorporates a propulsion system that utilizes smokeless powder. The projectile is made from polyolafin foam and the body utilizes thermoplastic polyester. This item is Code "A" approved for service use.

Justification:
This is a training standard item used in both training and combat. The FY 2016 request supports annual training and builds a war reserve inventory in accordance with the Army procurement goals.

FY 2016 Base procurement dollars in the amount of $0.400 million supports production of 881 CTG 40MM NL munitions.

Type Classification Date: Standard, March 1999.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG 40MM, NON-LETHAL, XM1112, TAC AIRBURST F/M-203 (E89002)

Program Elements for Code B Items:

Code: B

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	4	5675					8460	862				15001
Gross Cost	4.0	6.9		0.5		0.5	6.1	1.4				18.9
Less PY Adv Proc												
Net Proc P1	4.0	6.9		0.5		0.5	6.1	1.4				18.9
Plus CY Adv Proc												
Total Proc Cost	4.0	6.9		0.5		0.5	6.1	1.4				18.9
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												0.0

Description:
The XM1112 Airburst Non Lethal Munition is a low velocity 40mm non-lethal flash/bang cartridge with an effective range between 35 to 300 meters. It utilizes a proximity fuze to initiate a payload approximately 5 meters away from the target when set in proximity mode. The XM1112 provides a significant increase in effective range over currently fielded 40mm non-lethal munitions, while providing consistent non-lethal effects regardless of engagement range. A user settable Delay mode will be used for urban operations. It is fully compatible with existing 40 millimeter M203/M320 weapons platforms without any modifications. The XM1112 will deliver non-lethal effects lasting at least 30 seconds. This item is Code B, not approved for service use.

Justification:
This is a training standard item used in both training and combat. Procurement supports annual training and builds a war reserve inventory in accordance with the Army procurement goals.

FY 2016 Base procurement dollars in the amount of $0.500 million will be utilized for engineering activities in support of production.

TYPE CLASSIFICATION DATE: 3rd Quarter FY 2015

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: CTG 40MM, NON-LETHAL, XM1112, TAC AIRBURST F/M-203 (E89002)	Weapon System Type:	MDAP:	DODIC: BA39	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$	Each	$	$	Each	$	$	Each	$	$	Each	$	$	Each	$
Hardware Recurring																
COMPLETE ROUND		5737879	5675	1011.08												
SUBTOTAL HARDWARE COST		**5737879**														
Support																
PRODUCTION ENGINEERING		1189094						500000						500000		
SUBTOTAL PRODUCTION SUPPORT		**1189094**						**500000**						**500000**		
Total:		**6927**						**500**						**500**		

Exhibit P-5a, Budget Procurement History and Planning

Date:
February 2015

Appropriation/Budget Activity/Serial No:	Weapon System Type:	P-1 Line Item Nomenclature:
Procurement of Ammunition, Army/ 1/ Ammunition		CTG 40MM, NON-LETHAL, XM1112, TAC AIRBURST F/M-203 (E89002)

WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost $000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
COMPLETE ROUND						4000				
FY 2014	TO BE SELECTED TBS01	C / FFP	PICATINNY ARSENAL, NJ	Mar 15	Mar 16	5675	1011.08	Y		

REMARKS:

FY 15 / 16 Exhibit P-21, BUDGET PRODUCTION SCHEDULE

P-1 ITEM NOMENCLATURE
CTG 40MM, NON-LETHAL, XM1112, TAC AIRBURST F/M-203 (E89002)

Date: February 2015

COST ELEMENTS

MFR	FY	SERV	PROC QTY Each	ACCEP PRIOR TO 1 OCT	BAL DUE AS OF 1 OCT	Fiscal Year 15												Fiscal Year 16												Later
									Calendar Year 15												Calendar Year 16									
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
Complete Round																														
1	FY 14	A	5675	0	5675						A												5675							0
Total					5675																		5675							
						OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	

MFR	Name - Location	PRODUCTION RATES MIN	1-8-5	MAX	Reached D+	MFR		ADMIN LEAD TIME Prior 1 Oct	After 1 Oct	MFR After 1 Oct	TOTAL After 1 Oct	REMARKS
1	TO BE SELECTED, TBS01	50000	50000	100000		1	Initial	8	8	15	23	
							Reorder	6	6	12	18	
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					
							Initial					
							Reorder					

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG, NL FIRING DEVICE: TASER, XP25 f/X26E Taser (E91505)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	17	2200		5536		5536		5268		5026		18047
Gross Cost	0.5	0.2		0.3		0.3		0.3		0.3		1.5
Less PY Adv Proc												
Net Proc P1	0.5	0.2		0.3		0.3		0.3		0.3		1.5
Plus CY Adv Proc												
Total Proc Cost	0.5	0.2		0.3		0.3		0.3		0.3		1.5
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0		0.0		0.0		0.0		0.0		0.0

Description:
This item is a 25-foot single shot fired from the Launched Electrode Stun Device (LESD), which is a hand held device used for Electro-Muscular Incapacitation (EMI). This cartridge is a conducted energy weapon that delivers an incapacitating electrical shock capable of arcing through 2 inches of clothing. Maximum effective range is 15 feet. This item is Code A, approved for service use.

Justification:
This is a training standard item used in both training and combat. The FY 2016 procurement supports annual training and builds a war reserve inventory in accordance with the Army procurement goals.

FY 2016 Base Procurement dollars in the amount of $0.300 million supports the procurement of 5,536 LESD Cartridges.

TYPE CLASSIFICATION DATE: August 2011

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: Items Less Than $5 Million (AMMO) (EA0055)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	153.0	12.4	8.3	6.2		6.2	12.2	11.6	9.1	9.3		222.0
Less PY Adv Proc												
Net Proc P1	153.0	12.4	8.3	6.2		6.2	12.2	11.6	9.1	9.3		222.0
Plus CY Adv Proc												
Total Proc Cost	153.0	12.4	8.3	6.2		6.2	12.2	11.6	9.1	9.3		222.0
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:

This budget line includes Miscellaneous Ammunition Items Under $5 million.

(E03001)CTG, CAL .30 BLANK is used for ceremonial purposes and training in the M1 Garand rifles. It can be identified by the absence of a bullet and a crimped casemouth. This item is Code A, approved for service use.

(E01700)CTG CAL .22 LR MATCH F/PISTOL is used in .22 caliber Remington Model 40X-H1 rifles for military marksmanship training. This item is Code A, approved for service use.

(E00400)CTG 12 GAUGE #9 SHOT is a 12 gauge 2 3/4 inch round with 1 1/8 ounces of #9 shot (approximately 575 pellets .080 inch in diameter) and is used for training and target competition. This cartridge is used in Mossberg 500 Military Series and the Remington 870 shotguns. This item is Code A, approved for service use.

(E03701)CTG .300 Winchester Magnum (WinMag) MK248 procurement supports the XM2010 Enhanced Sniper Rifle (ESR). It consists of an Open Tip Match (OTM) bullet, brass cartridge case, large rifle lead-styphnate primer, and smokeless small arms propellant. This item is Code A, approved for service use.

(E42400)RIOT CONTROL AGENT CS CAPSULE is an item used to train soldiers in the use of gas masks. The white CS vaporizes when in contact with a hot surface and the CS gas that is produced causes tearing of the eyes and coughing when in contact with the soldier. Using this item, the soldier can determine if he is using the gas mask properly and gain confidence in the use of his gas mask. The capsules are packaged in cans of 50 capsules each. Extra packing dunnage is added to the cans in order to keep the capsules from moving and breaking in transport. This item is Code A, approved for service use.

(E99101)SPECIAL TRAINING AMMO includes Special Training Ammo.

(EA0600) AMMUNITION PROGRAM SUPPORT includes ammunition program support.

(EA0960) USAMTU FT BENNING budget line funds USAMTU FT Benning.

Justification:

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature Items Less Than $5 Million (AMMO) (EA0055)	
Program Elements for Code B Items:	Code:	Other Related Program Elements:	

FY 2016 Base Budget supports critical Army Title 10 war reserve/operational, training, and test requirements IAW DoD Instruction 3000.04 (Munitions Requirements Process) and AR 5-13 (Total Army Munitions Requirements Process and Prioritization System). War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station, and the combined training centers. Test requirements support the development, fielding, safety, and quality assurance of Army munitions and equipment throughout their life-cycle.

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.

The FY 2016 base procurement dollars in the amount $9.385 million supports procurement of six variants.

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 1 / Ammunition	P-1 Line Item Nomenclature: Items Less Than $5 Million (AMMO) (EA0055)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$	$000	x1000	$
Hardware Recurring																
E03001 CTG, CAL .30 BLANK	a222	3419000	11037	0.31	2557000	7346	0.35									
E01700 CTG CAL .22 LR MATCH F/PISTOL	A091	250000	1646	0.15	246000	1494	0.16	200000	1151	0.17				200000	1151	0.17
E00300 CARTRIDGE 12 GAUGE SHOTGUN 7 1/2 CHIL	a014															
E03701 CTG CAL .300 WIN MAG, MK248 MOD 0	A191				684000	506	1.35	300000	247	1.21				300000	247	1.21
E99101 SPECIAL TRAINING AMMO		1881000			1879000			2044000						2044000		
EA0600 AMMUNITION PROGRAM SUPPORT		3725000			1378000			5178000						5178000		
EA0960 USAMTU FT BENNING		1548000			1593000			1663000						1663000		
E00400 CTG 12 GAUGE #9 SHOT	a017	100000	363	0.28												
E42400 RIOT CONTROL AGENT CS CAPSULE		1500000	2044	0.73												
Total:		**12423**			**8337**			**9385**						**9385**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG 12 GAUGE #9 SHOT (E00400)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	6308000	362723										6670723
Gross Cost	2.1	0.1										2.2
Less PY Adv Proc												
Net Proc P1	2.1	0.1										2.2
Plus CY Adv Proc												
Total Proc Cost	2.1	0.1										2.2
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0										0.0

Description:
CTG 12 GAUGE #9 SHOT is a 12 gauge 2 3/4 inch round with 1 1/8 ounces of #9 shot (approximately 575 pellets .080 inch in diameter) and is used for training and target competition. This cartridge is used in Mossberg 500 Military Series and the Remington 870 shotguns. This item is Code A, approved for service use.

Justification:
(E00400) CTG 12 GAUGE #9 SHOT is a training unique item not used in combat. The FY 2016 procurement supports annual training and builds a depot level in accordance with the Army's procurement goals.

Comments:
TYPE CLASSIFICATION DATE: November 1975

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG CAL .22 LR MATCH F/RIFLE (E01700)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	31999000	1646239	1494175	1151468		1151468	539590	555332	561414	1318236		39265454
Gross Cost	6.7	0.3	0.2	0.2		0.2	0.1	0.1	0.1	0.2		8.0
Less PY Adv Proc												
Net Proc P1	6.7	0.3	0.2	0.2		0.2	0.1	0.1	0.1	0.2		8.0
Plus CY Adv Proc												
Total Proc Cost	6.7	0.3	0.2	0.2		0.2	0.1	0.1	0.1	0.2		8.0
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
The Cartridge, Caliber .22 Long Rifle Match is used in .22 caliber Remington Model 40X-H1 rifles for military marksmanship training. This item is Code A, approved for service use.

Justification:
(E01700) CTG CAL .22 LR MATCH F/PISTOL is a training standard item. The FY 2016 request supports annual training and builds a depot level in accordance with the Army's procurement goals. FY 2016 Base procurement dollars in the amount of $0.200 million supports the procurement of 1.151 million .22 LR MATCH cartridges.

Comments:
TYPE CLASSIFICATION DATE: April 1988

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: CTG, CAL .30 BLANK (E03001)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	66465000	11036549	7346034				3786328	4098610				92732521
Gross Cost	24.3	3.4	2.6				1.3	1.4				33.0
Less PY Adv Proc												
Net Proc P1	24.3	3.4	2.6				1.3	1.4				33.0
Plus CY Adv Proc												
Total Proc Cost	24.3	3.4	2.6				1.3	1.4				33.0
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0	0.0				0.0	0.0				0.0

Description:
CTG, CAL .30 BLANK is used for ceremonial purposes and training in the M1 Garand rifles. It can be identified by the absence of a bullet and a crimped casemouth. This item is Code A, approved for service use.

Justification:
(E03001) CTG, CAL .30 BLANK is a training unique item used in ceremonies. The FY 2016 procurement supports annual training and builds a depot level in accordance with the Army's procurement goals.

Comments:
TYPE CLASSIFICATION DATE: 1917

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
CTG, CAL .300 WIN MAG, MK 248 w/MODs (7.62x67MM) (E03701)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	3601000		506279	247494		247494	247475	248176	247106	248305		5345835
Gross Cost	12.0		0.7	0.3		0.3	0.3	0.3	0.3	0.3		14.2
Less PY Adv Proc												
Net Proc P1	12.0		0.7	0.3		0.3	0.3	0.3	0.3	0.3		14.2
Plus CY Adv Proc												
Total Proc Cost	12.0		0.7	0.3		0.3	0.3	0.3	0.3	0.3		14.2
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0

Description:
CTG .300 Winchester Magnum (WinMag) MK248 procurement supports the XM2010 Enhanced Sniper Rifle (ESR). It consists of an Open Tip Match (OTM) bullet, brass cartridge case, large rifle lead-styphnate primer, and smokeless small arms propellant. This item is Code A, approved for service use.

Justification:
(E03701) CTG .300 Winchester Magnum MK248 is a training standard item used in both training and combat. The FY 2016 procurement supports annual training and builds a war reserve inventory in accordance with the Army's procurement goals. FY 2016 Base procurement dollars in the amount of $0.300 million supports the procurement of 0.247 million .300 Winchester Magnum cartridges.

Comments:
TYPE CLASSIFICATION DATE: 2 OCTOBER 2012

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature: RIOT CONTROL AGENT CS CAPSULE (E42400)

Program Elements for Code B Items:

Code: A

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty	960	2522833										2523793
Gross Cost	2.8	1.5										4.3
Less PY Adv Proc												
Net Proc P1	2.8	1.5										4.3
Plus CY Adv Proc												
Total Proc Cost	2.8	1.5										4.3
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C	0.0	0.0										0.0

Description:
(E42400) Riot Control Agent CS Capsule is an item used to train soldiers in the use of gas masks. The white CS vaporizes when in contact with a hot surface and the CS gas that is produced causes tearing of the eyes and coughing when in contact with the soldier. Using this item, the soldier can determine if he is using the gas mask properly and gain confidence in the use of his gas mask. The capsules are packaged in cans of 50 capsules each. Extra packing dunnage is added to the cans in order to keep the capsules from moving and breaking in transport. This item is Code A, approved for service use.

Justification:
This is a training unique item not used in combat.

TYPE CLASSIFICATION DATE: TO BE DETERMINED

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
Special Training Ammo: (E99101)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	28.7	1.9	1.9	0.8		0.8	2.3	2.1	2.1	2.1		41.9
Less PY Adv Proc												
Net Proc P1	28.7	1.9	1.9	0.8		0.8	2.3	2.1	2.1	2.1		41.9
Plus CY Adv Proc												
Total Proc Cost	28.7	1.9	1.9	0.8		0.8	2.3	2.1	2.1	2.1		41.9
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
Includes Special Training Ammo

Justification:
FY 2016 funds will procure non-standard munitions and energetic materials to support the training of US Army troops in accordance with HQDA G3 approved authorizations.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
AMMUNITION PROGRAM SUPPORT (EA0600)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	43.3	3.7	1.4	3.5		3.5	6.3	5.9	4.8	4.9		73.7
Less PY Adv Proc												
Net Proc P1	43.3	3.7	1.4	3.5		3.5	6.3	5.9	4.8	4.9		73.7
Plus CY Adv Proc												
Total Proc Cost	43.3	3.7	1.4	3.5		3.5	6.3	5.9	4.8	4.9		73.7
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
AMMUNITION PROGRAM SUPPORT

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
USAMTU FT BENNING (EA0960)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	32.7	1.5	1.6	1.4		1.4	1.9	1.8	1.7	1.8		44.5
Less PY Adv Proc												
Net Proc P1	32.7	1.5	1.6	1.4		1.4	1.9	1.8	1.7	1.8		44.5
Plus CY Adv Proc												
Total Proc Cost	32.7	1.5	1.6	1.4		1.4	1.9	1.8	1.7	1.8		44.5
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
This budget line item funds USAMTU FT BENNING

Justification:
FY 2016 request supports the procurement of non-standard munitions and energetic materials to support marksmanship training throughout the US. Army, in accordance with HQDA G3 approved authorizations.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
Ammunition Peculiar Equipment (EA0575)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	292.7	11.6	14.9	17.8		17.8	18.1	18.4	18.7	19.0		411.2
Less PY Adv Proc												
Net Proc P1	292.7	11.6	14.9	17.8		17.8	18.1	18.4	18.7	19.0		411.2
Plus CY Adv Proc												
Total Proc Cost	292.7	11.6	14.9	17.8		17.8	18.1	18.4	18.7	19.0		411.2
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
The Ammunition Peculiar Equipment (APE) program provides support for ammunition operations including surveillance, demilitarization (demil), maintenance, renovation, modification, packaging, and preservation per Army Regulation 700-20, Ammunition Peculiar Equipment. APE is developed, acquired, and supervised through the Single Manager for Conventional Ammunition per DoD Instruction 5160.68. APE provides unique, low-density equipment items specifically designed, fabricated, procured, tested, and adopted for use in worldwide United States (US) military ammunition depot operations on conventional ammunition. APE maintains a central source of standard, modern, safe, efficient, reliable, and environmentally acceptable equipment for ammunition operations. This equipment is different from production line plant equipment as it disassembles ammunition items into components, sorts and removes hazardous materials to reduce human interaction and improves personnel safety. Maintenance APE is also designed to perform cleaning and renovation functions on ammunition subjected to deterioration effects (rust, corrosion, weathering, etc) during its storage life. APE supporting surveillance is key to stockpile sampling and functional testing of the items to assure readiness for combat or training. Demilitarization APE is similar to maintenance APE, but must go further in disassembly to destroy hazardous components, sort and reclaim salvageable parts or metals.

Justification:
FY 2016 Base procurement dollars in the amount of $17.811 million will support APE that must be on-hand to perform ammunition depot operations for conventional ammunition. These operations cannot be accomplished if the required APE is not supplied in a timely manner. The equipment is loaned to worldwide locations for the accomplishment of depot-type operations based on the ammunition requirements. APE is required to support the Ammunition Stockpile Reliability Program, Surveillance Program, equipment for worldwide maintenance and demil, prepositioned ships, and Government-Owned, Contractor-Operated plants as Government Furnished Equipment for ammunition depot operations at those locations. The APE assets maintain and verify the quality of the ammunition stockpile, thereby saving the cost of purchasing new replacement ammunition. APE proficiently executes the ammunition demil mission to safely perform or support disassembly, destruction, or removal processes with an emphasis on recycling, re-utilization and preserving demil assets in a manner that supports ammunition sustainment, safety and environmental compliance.

The APE program provides essential major parts and equipment upgrades at the Demilitarization Facility (DEFAC) in the Republic of Korea (ROK). A Memorandum of Agreement (MOA) was signed on 4 November 2011 by US Forces Korea and the ROK Ministry of National Defense, which permits the demilitarization of US titled munitions at this facility. The DEFAC provides an environmentally safe means of demil for both US and ROK titled munitions, and the demil of US titled munitions at the DEFAC avoids significant retrograde shipment costs. Current DEFAC operations involve the meltout/demil of US titled munitions for one year from July 2014 to June 2015, and demil ROK titled munitions the following year switching back to US assets in July 2016.

The program provides global support to the US Military Services for ammunition sustainment and demil operations, including deployment, operations and support of the Ammunition Supply Point (ASP) suites. The ASP suites include APE, which will increase the efficiency of the receipt, inspection and issuance of ammunition to the warfighter. Deployment of APE to support ASP suites will increase efficiencies for ammunition sustainment operations by reducing logistics burdens and related risks. This allows for better primary mission readiness, enhanced hazardous operations

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 1 / Ammunition		P-1 Item Nomenclature Ammunition Peculiar Equipment (EA0575)	
Program Elements for Code B Items:	Code:	Other Related Program Elements:	

safety and more efficient operating conditions requiring less ammunition retrograde/demil by providing capability to preserve ammunition assets.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
First Destination Transportation (AMMO) (EA0550)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	903.4	14.3	14.3	14.7		14.7	15.0	15.2	15.5	15.9		1008.3
Less PY Adv Proc												
Net Proc P1	903.4	14.3	14.3	14.7		14.7	15.0	15.2	15.5	15.9		1008.3
Plus CY Adv Proc												
Total Proc Cost	903.4	14.3	14.3	14.7		14.7	15.0	15.2	15.5	15.9		1008.3
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
Transportation funds are required to support the distribution of Army ammunition end items and components (Interim Transportation). Distribution originates from and to CONUS and OCONUS manufacturing plants/contractors, and/or assembly points, e.g., Army Ammunition Plants (AAPs), Arsenals; Defense Contract Management Centers to include Off Shore Procurement Contractors shipping under F.O.B Origin terms. Requirements are either destined for CONUS depots for acceptance into the Army Supply System, to CONUS Customers, to CONUS Arsenals, and to ports of embarkation in support of the Call Forward Program, i.e., Training, War Reserves or the Overseas Contingency Operations (OCO).

Justification:
FY 2016 request supports centrally funded distribution of Army ammunition end items and components (Interim Transportation).

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
Closeout Liabilities (EA8500)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	0.3	0.1	0.1									0.5
Less PY Adv Proc												
Net Proc P1	0.3	0.1	0.1									0.5
Plus CY Adv Proc												
Total Proc Cost	0.3	0.1	0.1									0.5
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
Funding will pay contract termination cost and operational loses/claims at ammunition plants.

Justification:
Procurement dollars are required to pay contingent liabilities such as contract termination cost, e.g., unfunded pension liabilities, severance pay, and other claims approved by the Army Contract Review Board (ACRB).

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 1 / Ammunition

P-1 Item Nomenclature
Closeout Liabilities -- LAP Competition (EA8561)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	0.3	0.1	0.1									0.5
Less PY Adv Proc												
Net Proc P1	0.3	0.1	0.1									0.5
Plus CY Adv Proc												
Total Proc Cost	0.3	0.1	0.1									0.5
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
Funding will pay contract termination cost and operational loses/claims at ammunition plants.

Justification:
Procurement dollars are required to pay contingent liabilities such as contract termination cost, e.g., unfunded pension liabilities, severance pay, and inventory at ammunition plants, and other claims approved by the Army Contract Review Board (ACRB).

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 2 / Ammunition production base support

P-1 Item Nomenclature
Provision of Industrial Facilities (EP1000)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	6972.0	242.3	148.1	221.7		221.7	222.4	221.1	171.2	177.0		8375.7
Less PY Adv Proc												
Net Proc P1	6972.0	242.3	148.1	221.7		221.7	222.4	221.1	171.2	177.0		8375.7
Plus CY Adv Proc												
Total Proc Cost	6972.0	242.3	148.1	221.7		221.7	222.4	221.1	171.2	177.0		8375.7
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
This budget line provides funding for modernization efforts at Government-Owned, Contractor-Operated Army Ammunition Plants and commercial facilities, including replacement of obsolete or worn production equipment, correction of deficiencies and upgrade of infrastructures. The Provision of Industrial Facilities (PIF) budget line also establishes, augments and improves ammunition production capabilities through strategic modernization efforts, expands production capacity, maintains environmental compliance, and improves quality of work environment and safety at ammunition plants, as well as emergency modernization and associated construction to address production disruptions at various sites.

This budget line provides funding for preservation, storage and movement of real property facilities and equipment required for anticipated future requirements at active and inactive Army ammunition installations, also known as Layaway of Industrial Facilities (LIF) activities. Funding will also support consolidation of laid-away production equipment and redistribution of production equipment that cannot be stored on-site. Laid-away efforts will also include retaining critical operational and technical knowledge of production equipment, such as engineering designs, process data and control manufacturing practices. Efforts will also include safety-related decontamination, disposal and demolition of production equipment and facilities, and environmental site assessments.

Procurement funds will also support the Maintenance of Inactive Facilities (MIF) to include utilities, buildings, plant equipment, special tooling, and special test equipment being retained to support future production requirements. Additional efforts include support of associated MIF costs such as grounds maintenance, fire protection, equipment security, and administrative support.

Justification:
FY 2016 Base procurement dollars in the amount of $221.703 million support modernization projects to include construction of a Nitric Acid Concentrator/Sulfuric Acid Concentrator (NAC/SAC) facility at Holston Army Ammunition Plant (AAP), upgrades to the small caliber production lines at Lake City AAP, continued procurement and installation of necessary equipment supporting the central fire alarm/mass warning system at Iowa AAP, upgrades to critical containment dikes at Radford AAP, and modernization upgrades at Scranton AAP. Funds will support critical work environmental projects, including improvements for personnel safety and health, and efforts to maintain environmental compliance at the ammunition plants. Funds will also provide engineering support of industrial facilities, pre-design efforts for future-year modernization projects and procurement efforts at Aberdeen and Yuma Test Centers to include production acceptance tests for various ammunition end items.

FY 2016 Base procurement dollars also support the protection and preservation of industrial facilities at active and inactive Army ammunition installations and equipment that is no longer required for current production but must be retained for future peacetime or emergency production needs to include the first phase of the stabilization and layaway of Area A at Holston AAP. LIF efforts also include reducing the industrial base footprint by demolishing facilities and disposing equipment no longer required at the Army ammunition installations.

Exhibit P-40, Budget Item Justification Sheet			Date: February 2015
Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army / 2 / Ammunition production base support		P-1 Item Nomenclature Provision of Industrial Facilities (EP1000)	
Program Elements for Code B Items:	Code:	Other Related Program Elements:	

FY 2016 Base procurement dollars also support MIF efforts at active and inactive ammunition installations.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 2 / Ammunition production base support

P-1 Item Nomenclature
INDUSTRIAL FACILITIES (EP1200)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	5794.0	219.2	137.2	205.2		205.2	205.2	203.5	153.3	158.8		7076.5
Less PY Adv Proc												
Net Proc P1	5794.0	219.2	137.2	205.2		205.2	205.2	203.5	153.3	158.8		7076.5
Plus CY Adv Proc												
Total Proc Cost	5794.0	219.2	137.2	205.2		205.2	205.2	203.5	153.3	158.8		7076.5
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
This budget line provides funding for modernization efforts at Government-Owned, Contractor-Operated Army Ammunition Plants (AAPs) and commercial facilities, including replacement of obsolete or worn production equipment, correction of deficiencies and upgrade of infrastructures. The budget line also establishes, augments and improves ammunition production capabilities through strategic modernization efforts, expands production capacity, maintains environmental compliance, and improves quality of work environment and safety at ammunition plants, as well as emergency modernization and associated construction to address production disruptions at various sites.

Justification:
FY 2016 Base procurement dollars in the amount of $205.202 million support modernization projects to include construction of a Nitric Acid Concentrator/Sulfuric Acid Concentrator (NAC/SAC) facility at Holston Army Ammunition Plant (AAP), upgrades to the small caliber production lines at Lake City AAP, continued procurement and installation of necessary equipment supporting the central fire alarm/mass warning system at Iowa AAP, upgrades to critical containment dikes at Radford AAP, and modernization upgrades at Scranton AAP. Funds will support critical work environmental projects, including improvements for personnel safety and health, and efforts to maintain environmental compliance at the ammunition plants. Funds will also provide engineering support of industrial facilities, pre-design efforts for future-year modernization projects and procurement efforts at Aberdeen and Yuma Test Centers to include production acceptance tests for various ammunition end items.

Exhibit P-40C, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army/2/Ammunition production base support

P-1 Item Nomenclature
INDUSTRIAL FACILITIES (EP1200)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

Location	Project Title	Project	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016	FY 2017
Holston Army Ammunition Plant	Modernize B235 Filter Press, Ph 2	5153295		2645				
Holston Army Ammunition Plant	Industrial Wastewater Settling and Equalization Basin #1	5153296		11411				
Holston Army Ammunition Plant	Holston Landfill Expansion (Design)	5153579		407				
Holston Army Ammunition Plant	Sewer and Industrial Wastewater Conditioning	5153668		564				
Holston Army Ammunition Plant	Insensitive Munitions (IM) Weak Nitric Acid Recovery (NAC/SAC)	5163673			108593		108593	
Holston Army Ammunition Plant	Building G-4, Infrastructure Improvements	5143676	9790					
Holston Army Ammunition Plant	Magazine Vent Replacement	5163683			3480		3480	
Holston Army Ammunition Plant	Material Transfer Improvements for Building J-3	5153747		1178				
Holston Army Ammunition Plant	Install Additional Anoxic Basins (Building 221)	51X3757	9723	8565				
Holston Army Ammunition Plant	Install Additional Wastewater Treatment, 3rd Clarifier	5143759	9746					
Holston Army Ammunition Plant	Install Additional Anoxic Wastewater Treatment, 4th Clarifier	5163760		8841				
Holston Army Ammunition Plant	Install Additional Anoxic Basins 5E and 6E (Building 235)	5153761		5503				
Holston Army Ammunition Plant	Design of Industrial Wastewater Treatment Facility	5143769	5089					
Holston Army Ammunition Plant	Upgrade PCS7 Network	5163786			3002		3002	
Holston Army Ammunition Plant	Feasibility Study of Treated Water in Explosive Manufacturing	5163787			323		323	
Holston Army Ammunition Plant	Modernization of Lacquer Preparation Facility	5163972			952		952	
Iowa Army Ammunition Plant	Rehabilitate Road F North and Line 3	5143583	2162					

Exhibit P-40C, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army/2/Ammunition production base support

P-1 Item Nomenclature
INDUSTRIAL FACILITIES (EP1200)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

Location	Project Title	Project	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016	FY 2017
	Roads							
Iowa Army Ammunition Plant	Rebuild Restrooms and Break Rooms, Line 3A Production Area	5143630	571					
Iowa Army Ammunition Plant	Upgrade Restrooms, Line 3 Production Area	5143632	414					
Iowa Army Ammunition Plant	Line 3A Melt Pour Loader	5143687	3116					
Iowa Army Ammunition Plant	Projectile Preheat Oven, Line 3A	5153688		1735				
Iowa Army Ammunition Plant	Central Fire Alarm/Reporting System	51X3692	2425		5149		5149	
Iowa Army Ammunition Plant	Line 3A Explosive Scrap Melter	5143700	2369					
Iowa Army Ammunition Plant	Plant Wide Mass Warning System	5163743			1491		1491	
Iowa Army Ammunition Plant	General Road Improvements (Roads D and E)	5153745		2139				
Iowa Army Ammunition Plant	Replace Chemical and Explosives Laboratory	5153746		3282				
Iowa Army Ammunition Plant	Upgrade Insensitive Munitions Explosive (IMX) Wastewater Treatment, Line 3A	5153766		4076				
Iowa Army Ammunition Plant	Main Heating Plant Upgrade and Maximum Achievable Control Technology (MACT) Compliance	5143770	6534					
Iowa Army Ammunition Plant	Line 3A Distributed Natural Gas Boiler System	5153773		6751				
Iowa Army Ammunition Plant	Asbestos Abatement and Removal	5143910	7737					
Iowa Army Ammunition Plant	Construct 100kW Fuel Cell Pilot Facility	5155029		6360				
Iowa Army Ammunition Plant	Ultraviolet (UV) Deluge System Upgrade, Line 3A	5165333			588		588	
Lake City Army Ammunition Plant	Small Caliber Modernization, Production Line Upgrades	51X3356		2791	14702		14702	
Lake City Army Ammunition Plant	Conductive Flooring Replacement/Asbestos Removal (Buildings 1, 2 and 3)	5143615	2100					
Lake City Army Ammunition	Hard Road Surface Recapitalization	5143645	5065					

Exhibit P-40C, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army/2/Ammunition production base support

P-1 Item Nomenclature
INDUSTRIAL FACILITIES (EP1200)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

Location	Project Title	Project	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016	FY 2017
Plant								
Lake City Army Ammunition Plant	Structural Upgrades (Buildings 1, 2, 3, and 35)	5163708			3607		3607	
Lake City Army Ammunition Plant	Building 16 Aerator Upgrade, Water Well Replacement	5163715			7582		7582	
Lake City Army Ammunition Plant	Structural Upgrades (Buildings 8, 11, and 16)	5153758		2939				
Lake City Army Ammunition Plant	Exterior Steam Main Supports	5163778			1231		1231	
Lake City Army Ammunition Plant	Building 15 Reverse Osmosis System	5163779			437		437	
Lake City Army Ammunition Plant	Building 15 Programmable Logic Control (PLC) and Economizer Upgrade	5163780			1458		1458	
Lake City Army Ammunition Plant	Building 3 East Charging Wing Heating, Ventilation and Air Conditioning (HVAC) Upgrade	5163781			1102		1102	
Lake City Army Ammunition Plant	Building Management System / Metering Upgrade	5163782			4074		4074	
Lake City Army Ammunition Plant	Install Occupational Safety and Health Administration (OSHA) Guarding	5153933		9165				
Radford Army Ammunition Plant	Construct New Nitrocellulose (NC) Facility	51X2736	11681	7000	12631		12631	
Radford Army Ammunition Plant	Plant Operations, Request for Equitable Adjustment (REA)/Major Maintenance	5143407	15165					
Radford Army Ammunition Plant	Telephone Line Upgrades	5153478		1295				
Radford Army Ammunition Plant	Electrical Distribution System Upgrades	5153557		2022				
Radford Army Ammunition Plant	Upgrade Pumps, Water Plant (Building 409)	5143566	2601					
Radford Army Ammunition Plant	Upgrade Settling Basins (Building 409)	5163572			5282		5282	

Exhibit P-40C, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army/2/Ammunition production base support

P-1 Item Nomenclature
INDUSTRIAL FACILITIES (EP1200)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

Location	Project Title	Project	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016	FY 2017
Radford Army Ammunition Plant	Energetic Waste Incinerator (EWI) Facility Upgrades	5153723		6885				
Radford Army Ammunition Plant	Construct New Powerhouse Facility	5143724	84200					
Radford Army Ammunition Plant	Strong Nitric Acid (SNA) Tank Replacement	51X3727	2125	17173				
Radford Army Ammunition Plant	Acid Area Improvements	51X3735		6580	7164		7164	
Radford Army Ammunition Plant	Acid Sewer Treatment Upgrade	5153738			5282		5282	
Radford Army Ammunition Plant	Workplace Safety	5153753		4764				
Radford Army Ammunition Plant	Plant Wide Dike Upgrades	5163755		5179				
Radford Army Ammunition Plant	New Solvent Area Chiller	5153764		1037				
Radford Army Ammunition Plant	Solvent Propellant Manufacturing Facility (Preliminary Design)	5153816		921				
Scranton Army Ammunition Plant	Electrical Upgrades	5162985			4669		4669	
Scranton Army Ammunition Plant	Modernization of Flexible Machining Cell	5143013	6431					
Scranton Army Ammunition Plant	Rehabilitate Subway Floor and Arches	5143550	1107					
Scranton Army Ammunition Plant	Replace Waste Treatment Facility, Production Shop	5143702	778					
Scranton Army Ammunition Plant	External Wall Repairs (Mattes Ave/River Street) and Structural Repairs	5163704			3505		3505	
Scranton Army Ammunition Plant	Quick Die Change for Press Lines	5143707	2230					
Scranton Army Ammunition Plant	Saw Area Transformation	5143719	750					

Exhibit P-40C, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army/2/Ammunition production base support

P-1 Item Nomenclature
INDUSTRIAL FACILITIES (EP1200)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

Location	Project Title	Project	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016	FY 2017
Scranton Army Ammunition Plant	Upgrade Nitrogen Gas Supply System	5143720	700					
Scranton Army Ammunition Plant	Boiler for Bonderizers	5143722	622					
Scranton Army Ammunition Plant	Replace Forge Shop Exterior Wall Siding	5143731	724					
Scranton Army Ammunition Plant	Rehabilitate Storm Water Collection and Treatment System	5143732	673					
Scranton Army Ammunition Plant	Replace and Upgrade Shell Rotating Band Welders	5143767	7126					
Scranton Army Ammunition Plant	New Small Batch Heat Treat	5143771	5343					
Scranton Army Ammunition Plant	New Rough Turn Lathes	5143772	1924					
Scranton Army Ammunition Plant	Modernize Forge Shop Exhaust	5143917	2488					
Scranton Army Ammunition Plant	Relocate 800 lb/hr Induction Heater	5165048			260		260	
Scranton Army Ammunition Plant	Relocate Rough Turn Lathes & Welders to the Subway	5165049			260		260	
Scranton Army Ammunition Plant	Retrofit Erie IV Press for Nosing Capability	5165050			1039		1039	
Scranton Army Ammunition Plant	Forge Shop Addition and Flex Cell Relocation	5165051			1299		1299	
Various Army Ammunition Plants	Engineering in Support of Provision of Industrial Facilities	5XX3046	3263	4453	4558		4558	
Yuma Proving Ground / Aberdeen Test Center	Replace Test Instrumentation in Production Acceptance Testing (Ammunition)	5XX5060	2449	1525	1482		1482	
Total Industrial Facilities			219,221	137,186	205,202	0	205,202	0

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Modernize B235 Filter Press, Ph 2

3. End Item Supported Model
Research Development Explosives (RDX), High Melt Explosives (HMX)

4. Project Number: 5153295

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs		460				
B. Equipment Costs*		712				
C. Equipment Installation Costs		1067				
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs		406				
Total Costs		2645				

H. Facility

1. Name: Holston Army Ammunition Plant
2. Location: Kingsport, Tennessee
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Dec/ 2015
3. Initial Project:	Sep/ 2015
4. Final Project Award:	Sep/ 2015
5. Construction Complete:	Apr/ 2016
6. Equipment Installation Complete:	Dec/ 2016
7. Prove Out Begins:	Jan/ 2017
8. Prove Out Complete:	Apr/ 2017

Narrative Explanation:
Procurement dollars in the amount of $2.645 million support modernization of the B235 Filter Press which is used to remove solid waste from the wastewater stream at Holston Army Ammunition Plant. Project will replace an existing rusted and degraded filter press with a newer technology belt filter press.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Industrial Wastewater Settling and Equalization Basin #1

3. End Item Supported Model
Research & Development Explosives (RDX), High Melt Explosives (HMX)

4. Project Number: 5153296

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs		7013				
B. Equipment Costs*		1944				
C. Equipment Installation Costs		1237				
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs		125				
G. Other Costs		1092				
Total Costs		11411				

H. Facility

1. Name: Holston Army Ammunition Plant
2. Location: Kingsport, Tennessee
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Jul/ 2015
3. Initial Project:	Sep/ 2015
4. Final Project Award:	Sep/ 2015
5. Construction Complete:	Sep/ 2016
6. Equipment Installation Complete:	Mar/ 2017
7. Prove Out Begins:	Apr/ 2017
8. Prove Out Complete:	May/ 2017

Narrative Explanation:
Procurement dollars in the amount of $11.411 million support modernization effort to provide Holston Army Ammunition Plant (AAP) with a primary settling and equalization basin. The basin will provide settling, storage, wasteload distribution, and operational reliability for the Industrial Waste Water Treatment Facility. This effort will increase Holston AAP's capacity to treat industrial waste water and maintain compliance with the Clean Water Act.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Holston Landfill Expansion (Design)

3. End Item Supported Model
Research Development Explosives (RDX), High Melt Explosives (HMX), IMX

4. Project Number: 5153579

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*						
C. Equipment Installation Costs						
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs		407				
G. Other Costs						
Total Costs		407				

H. Facility

1. Name: Holston Army Ammunition Plant
2. Location: Kingsport, Tennessee
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Dec/ 2015
2. Final Design Complete:	Dec/ 2015
3. Initial Project:	Mar/ 2015
4. Final Project Award:	Mar/ 2015
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Not Applicable
7. Prove Out Begins:	Not Applicable
8. Prove Out Complete:	Not Applicable

Narrative Explanation:
Procurement dollars in the amount of $0.407 million support design of the landfill expansion at Holston Army Ammunition Plant. The design will support future landfill expansion to maintain compliance with Tennessee Department of Environment and Conservation – Division of Solid Waste Management.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Sewer and Industrial Wastewater Conditioning

3. End Item Supported Model
Research & Development Explosives (RDX), High Melt Explosives (HMX)

4. Project Number: 5153668

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*						
C. Equipment Installation Costs						
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs		35				
G. Other Costs		529				
Total Costs		564				

H. Facility

1. Name: Holston Army Ammunition Plant
2. Location: Kingsport, Tennessee
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Not Applicable
3. Initial Project:	Apr/ 2015
4. Final Project Award:	Apr/ 2015
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Not Applicable
7. Prove Out Begins:	Not Applicable
8. Prove Out Complete:	Not Applicable

Narrative Explanation:
Procurement dollars in the amount of $0.564 million support sewer diagnostic and field investigation to assess the condition of the industrial and sanitary wastewater pipelines at Holston Army Ammunition Plant. This engineering survey will identify defects in the wastewater pipelines and infiltration/inflow sources and recommend infrastructure upgrades to maintain safety and environmental compliance.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Insensitive Munitions (IM) Weak Nitric Acid Recovery (NAC/SAC)

3. End Item Supported Model
IM Explosives (IMX)-101, IMX-104, Picatinny Arsenal Expl (PAX)

4. Project Number: 5163673

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs			38586		38586	
B. Equipment Costs*			46623		46623	
C. Equipment Installation Costs			10376		10376	
D. Contractor Support Costs			6392		6392	
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs			250		250	
G. Other Costs			6366		6366	
Total Costs			108593		108593	

H. Facility

1. Name: Holston Army Ammunition Plant
2. Location: Kingsport, Tennessee
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones

	Month & Year
1. Concept Design Complete:	Jul/ 2014
2. Final Design Complete:	Jul/ 2015
3. Initial Project:	Sep/ 2013
4. Final Project Award:	Jan/ 2016
5. Construction Complete:	Jul/ 2018
6. Equipment Installation Complete:	Jul/ 2018
7. Prove Out Begins:	Nov/ 2018
8. Prove Out Complete:	Jan/ 2019

Narrative Explanation:
FY 2016 Base procurement dollars in the amount of $108.593 million support construction of a Nitric Acid Concentrator / Sulfuric Acid Concentrator (NAC/SAC) facility at Holston Army Ammunition Plant (AAP). This facility will recover the spent acid used in IM Explosives (IMX)-101, IMX-104 manufacturing and other Dinitroanisole and Nitrotriazalone IMX bases. This project will provide Holston AAP with the capability to reconcentrate spent nitric acid in order to avoid ammonia nitrate waste disposal costs. Additionally, the new facility mitigates a critical supply chain issue in the production of strong nitric acid within the National Technology and Industrial Base.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Building G-4, Infrastructure Improvements

3. End Item Supported Model
Dinitroanisole (DNAN), Nitrotriazalone (NTO)

4. Project Number: 5143676

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs	4862					
B. Equipment Costs*	2359					
C. Equipment Installation Costs	1656					
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs	125					
G. Other Costs	788					
Total Costs	9790					

H. Facility

1. Name: Holston Army Ammunition Plant
2. Location: Kingsport, Tennessee
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Mar/ 2015
3. Initial Project:	Aug/ 2014
4. Final Project Award:	Aug/ 2014
5. Construction Complete:	Aug/ 2017
6. Equipment Installation Complete:	Aug/ 2017
7. Prove Out Begins:	Aug/ 2017
8. Prove Out Complete:	Nov/ 2017

Narrative Explanation:
Procurement dollars in the amount of $9.790 million support modernization of the Nitroguanidine (NQ) Recrystallization process in building G-4 at Holston Army Ammunition Plant. Antiquated processing equipment, obsolete instrumentation controls and out-dated processing methods are incapable of satisfying future production requirements. This project also includes modernization of the building infrastructure, safety improvements and maintains environmental compliance. NQ is a critical ingredient in the production of insensitive munitions explosives.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Magazine Vent Replacement

3. End Item Supported Model
Research Development Explosives (RDX), High Melt Explosives (HMX)

4. Project Number: 5163683

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs			2148		2148	
B. Equipment Costs*			295		295	
C. Equipment Installation Costs			442		442	
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs			595		595	
Total Costs			3480		3480	

H. Facility

1. Name: Holston Army Ammunition Plant
2. Location: Kingsport, Tennessee
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Oct/ 2016
2. Final Design Complete:	Oct/ 2016
3. Initial Project:	Apr/ 2016
4. Final Project Award:	Apr/ 2016
5. Construction Complete:	Oct/ 2017
6. Equipment Installation Complete:	Nov/ 2017
7. Prove Out Begins:	Nov/ 2017
8. Prove Out Complete:	Apr/ 2018

Narrative Explanation:
FY 2016 Base procurement dollars in the amount of $3.480 million support purchase and installation of new magazine vents at Holston Army Ammunition Plant. This project will enhance earth covering for each magazine and meet the requirements in Army Technical Manual 38-410, Storage and Handling of Hazardous Materials.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Material Transfer Improvements for Building J-3

3. End Item Supported Model
Research & Development Explosives (RDX), High Melt Explosives (HMX)

4. Project Number: 5153747

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs		848				
B. Equipment Costs*		86				
C. Equipment Installation Costs		124				
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs		120				
Total Costs		1178				

H. Facility

1. Name: Holston Army Ammunition Plant
2. Location: Kingsport, Tennessee
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Sep/ 2015
3. Initial Project:	Mar/ 2015
4. Final Project Award:	Mar/ 2015
5. Construction Complete:	Sep/ 2015
6. Equipment Installation Complete:	Nov/ 2015
7. Prove Out Begins:	Nov/ 2015
8. Prove Out Complete:	Nov/ 2015

Narrative Explanation:
Procurement dollars in the amount of $1.178 million support effort to design, purchase and install equipment to improve explosives material transfer to and from Building J-3 at Holston Army Ammunition Plant. This effort will also support purchase of auxiliary equipment and provide necessary utilities and repairs to allow explosive materials to be efficiently transferred to and from the process building.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Install Additional Anoxic Basins (Building 221)

3. End Item Supported Model
Research&Development Expl(RDX),High Melt Expl(HMX),Insensitive Mun Exp(IMX)

4. Project Number: 51X3757

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*	2965	2299				
C. Equipment Installation Costs	5946	5444				
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs	70	165				
G. Other Costs	742	657				
Total Costs	9723	8565				

H. Facility

1. Name: Holston Army Ammunition Plant
2. Location: Kingsport, Tennessee
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones — **Month & Year**

1. Concept Design Complete: Not Applicable
2. Final Design Complete: Dec/ 2015
3. Initial Project: Sep/ 2014
4. Final Project Award: Aug/ 2015
5. Construction Complete: Not Applicable
6. Equipment Installation Complete: Dec/ 2017
7. Prove Out Begins: Jan/ 2018
8. Prove Out Complete: Apr/ 2018

Narrative Explanation:
Procurement dollars in the amount of $8.565 million support second phase to increase the treatment capacity of nitrates and RDX at Holston Army Ammunition Plant's Wastewater Treatment Facility. The implementation of this project will ensure compliance with the National Pollutant Discharge Elimination System permit. This effort will also include upgrades to supporting infrastructure such as pumps, agitators, piping, power and control systems.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Install Additional Wastewater Treatment, 3rd Clarifier

3. End Item Supported Model
Research&Development Expl(RDX),High Melt Expl(HMX),Insensitive Mun Exp(IMX)

4. Project Number: 5143759

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs	3763					
B. Equipment Costs*	2960					
C. Equipment Installation Costs	1490					
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs	110					
G. Other Costs	1423					
Total Costs	9746					

H. Facility

1. Name: Holston Army Ammunition Plant
2. Location: Kingsport, Tennessee
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Nov/ 2014
2. Final Design Complete:	Jul/ 2015
3. Initial Project:	Nov/ 2014
4. Final Project Award:	Nov/ 2014
5. Construction Complete:	Apr/ 2017
6. Equipment Installation Complete:	Apr/ 2017
7. Prove Out Begins:	May/ 2017
8. Prove Out Complete:	Jul/ 2017

Narrative Explanation:
Procurement dollars in the amount of $9.746 million support effort to install a third clarifier, with associated equipment and controls, at Holston Army Ammunition Plant's Industrial Wastewater Treatment Facility. The existing two clarifiers operate at maximum capacity; this effort will provide biological solids settling capacity and operational flexibility within the treatment facility. The implementation of an additional clarifier will ensure compliance the National Pollutant Discharge Elimination System permit and avoid production interruption at Holston Army Ammunition Plant.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Install Additional Anoxic Wastewater Treatment, 4th Clarifier

3. End Item Supported Model
Research Development Explosives (RDX), High Melt Explosives (HMX), IMX

4. Project Number: 5163760

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*		2562				
C. Equipment Installation Costs		4761				
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs		500				
G. Other Costs		1018				
Total Costs		8841				

H. Facility

1. Name: Holston Army Ammunition Plant
2. Location: Kingsport, Tennessee
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Dec/ 2016
3. Initial Project:	Sep/ 2015
4. Final Project Award:	Sep/ 2015
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Mar/ 2018
7. Prove Out Begins:	Apr/ 2018
8. Prove Out Complete:	Jul/ 2018

Narrative Explanation:
Procurement dollars in the amount of $8.841 million support installation of a fourth clarifier, with associated pumps, piping, power and controls, at the Holston Army Ammunition Plant. This equipment will be installed at the Industrial Wastewater Treatment Facility (IWWTF). The implementation of this clarifier at the IWWTF is required to meet the wastewater treatment capacity to ensure compliance with the National Pollutant Discharge Elimination System permit.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Install Additional Anoxic Basins 5E and 6E (Building 235)

3. End Item Supported Model
Research & Development Explosives (RDX), High Melt Explosives (HMX)

4. Project Number: 5153761

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs		3154				
B. Equipment Costs*		680				
C. Equipment Installation Costs		1019				
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs		75				
G. Other Costs		575				
Total Costs		5503				

H. Facility

1. Name: Holston Army Ammunition Plant
2. Location: Kingsport, Tennessee
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Nov/ 2015
3. Initial Project:	Aug/ 2015
4. Final Project Award:	Aug/ 2015
5. Construction Complete:	Mar/ 2018
6. Equipment Installation Complete:	Mar/ 2018
7. Prove Out Begins:	Apr/ 2018
8. Prove Out Complete:	Jul/ 2018

Narrative Explanation:
Procurement dollars in the amount of $5.503 million support the installation of two additional anoxic treatment cells at Holston Army Ammunition Plant's Wastewater Treatment Facility. The implementation of this project will ensure compliance with the National Pollutant Discharge Elimination System permit.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Design of Industrial Wastewater Treatment Facility

3. End Item Supported Model
Research&Development Expl(RDX),High Melt Expl(HMX),Insensitive Mun Exp(IMX)

4. Project Number: 5143769

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*						
C. Equipment Installation Costs						
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs	143					
G. Other Costs	4946					
Total Costs	5089					

H. Facility

1. Name: Holston Army Ammunition Plant
2. Location: Kingsport, Tennessee
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Apr/ 2017
3. Initial Project:	Apr/ 2015
4. Final Project Award:	Apr/ 2015
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Not Applicable
7. Prove Out Begins:	Not Applicable
8. Prove Out Complete:	Not Applicable

Narrative Explanation:
Procurement dollars in the amount of $5.089 million support the design of a modernized Industrial Waste Water Treatment Facility (IWWTF) to treat nitrates, RDX and other biological wastewater at Holston Army Ammunition Plant. This project will include design details for aerobic and anaerobic treatment expansion, clarifiers, equalization basins, a belt filter press and multimedia filters. This project will ensure compliance with the National Pollutant Discharge Elimination System permit.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Upgrade PCS7 Network

3. End Item Supported Model
Research Development Explosives (RDX), High Melt Explosives (HMX), IMX

4. Project Number: 5163786

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*			1224		1224	
C. Equipment Installation Costs			1137		1137	
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs			75		75	
G. Other Costs			566		566	
Total Costs			3002		3002	

H. Facility

1. Name: Holston Army Ammunition Plant
2. Location: Kingsport, Tennessee
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Jul/ 2016
3. Initial Project:	May/ 2016
4. Final Project Award:	May/ 2016
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Apr/ 2017
7. Prove Out Begins:	Apr/ 2017
8. Prove Out Complete:	Apr/ 2017

Narrative Explanation:
FY 2016 Base procurement dollars in the amount of $3.002 million support upgrades to control system computer workstations in various production buildings at Holston Army Ammunition Plant. The computer systems will be replaced with commercial-off-the-shelf systems that will enhance information assurance.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Feasibility Study of Treated Water in Explosive Manufacturing

3. End Item Supported Model
Research Development Explosives (RDX), High Melt Explosives (HMX), IMX

4. Project Number: 5163787

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*						
C. Equipment Installation Costs						
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs			35		35	
G. Other Costs			288		288	
Total Costs			323		323	

H. Facility

1. Name: Holston Army Ammunition Plant
2. Location: Kingsport, Tennessee
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Not Applicable
3. Initial Project:	Mar/ 2016
4. Final Project Award:	Mar/ 2016
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Not Applicable
7. Prove Out Begins:	Not Applicable
8. Prove Out Complete:	Not Applicable

Narrative Explanation:
FY 2016 Base procurement dollars in the amount of $0.323 million support evaluation of treated and recycled waste stream water on explosive products in the manufacturing processes at Holston Army Ammunition Plant. This effort provides a potential capability to recycle the wastewater in supporting the compliance with the National Pollutant Discharge Elimination System permit.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Modernization of Lacquer Preparation Facility

3. End Item Supported Model
Research Development Explosives (RDX), High Melt Explosives (HMX)

4. Project Number: 5163972

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*						
C. Equipment Installation Costs						
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs			952		952	
Total Costs			952		952	

H. Facility

1. Name: Holston Army Ammunition Plant
2. Location: Kingsport, Tennessee
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Oct/ 2016
3. Initial Project:	Apr/ 2016
4. Final Project Award:	Apr/ 2016
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Jul/ 2018
7. Prove Out Begins:	Jul/ 2018
8. Prove Out Complete:	Sep/ 2018

Narrative Explanation:
FY 2016 Base procurement dollars in the amount of $0.952 million support the first phase of the modernization of the lacquer preparation facility at Holston Army Ammunition Plant (AAP). This initial phase will modernize the control panels and control system. The lacquer preparation facility is an aging facility that is essential to the manufacture of mature and innovative Insensitive Munitions (IM). A malfunction of the outdated controls could lead to an extended shutdown of the lacquer preparation facility and affect Holston AAP's ability to manufacture IM product.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Rehabilitate Road F North and Line 3 Roads

3. End Item Supported Model
Modular Artillery Charging Sys(MACS),105mm/120mm Tank,105mm/155mm Artillery

4. Project Number: 5143583

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs	1824					
B. Equipment Costs*						
C. Equipment Installation Costs						
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs	338					
Total Costs	2162					

H. Facility

1. Name: Iowa Army Ammunition Plant
2. Location: Middletown, Iowa
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Jun/ 2013
3. Initial Project:	Apr/ 2014
4. Final Project Award:	Apr/ 2014
5. Construction Complete:	Oct/ 2015
6. Equipment Installation Complete:	Not Applicable
7. Prove Out Begins:	Not Applicable
8. Prove Out Complete:	Not Applicable

Narrative Explanation:
Procurement dollars in the amount of $2.162 million support rehabilitation of Road F and Line 3 perimeter roads at Iowa Army Ammunition Plant. Road F is a major thoroughfare serving production lines 3 and 4A. It also serves Line 3A, the Test Fire Area, and Storage Yards G and K. Without major renovation, the road surface and base will continue to decay, increasing the hazards of transporting explosives and the cost of maintenance.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Rebuild Restrooms and Break Rooms, Line 3A Production Area

3. End Item Supported Model
105mm, 155mm, and 75mm Artillery

4. Project Number: 5143630

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs	503					
B. Equipment Costs*						
C. Equipment Installation Costs						
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs	68					
Total Costs	571					

H. Facility

1. Name: Iowa Army Ammunition Plant
2. Location: Middletown, Iowa
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Jun/ 2013
3. Initial Project:	Feb/ 2014
4. Final Project Award:	Feb/ 2014
5. Construction Complete:	Feb/ 2015
6. Equipment Installation Complete:	Not Applicable
7. Prove Out Begins:	Not Applicable
8. Prove Out Complete:	Not Applicable

Narrative Explanation:
Procurement dollars in the amount of $0.571 million support effort to rebuild four restrooms, enhance functionality of four break rooms, three change houses, and miscellaneous work on Line 3A at Iowa Army Ammunition Plant. Effort will improve the production workers' quality of work environment, morale and sanitation improvements.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Upgrade Restrooms, Line 3 Production Area

3. End Item Supported Model
105mm Artillery, 155mm Artillery, 75mm Artillery

4. Project Number: 5143632

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs	350					
B. Equipment Costs*						
C. Equipment Installation Costs						
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs	64					
Total Costs	414					

H. Facility

1. Name: Iowa Army Ammunition Plant
2. Location: Middletown, Iowa
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Jun/ 2013
3. Initial Project:	Feb/ 2014
4. Final Project Award:	Feb/ 2014
5. Construction Complete:	Feb/ 2015
6. Equipment Installation Complete:	Not Applicable
7. Prove Out Begins:	Not Applicable
8. Prove Out Complete:	Not Applicable

Narrative Explanation:
Procurement dollars in the amount of $0.414 million support effort to upgrade restrooms, break rooms and changing areas in the active production areas of Line 3 at Iowa Army Ammunition Plant (AAP). This effort will improve the production workers' quality of work environment, morale and sanitation requirements.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Line 3A Melt Pour Loader

3. End Item Supported Model
Artillery, Mortars

4. Project Number: 5143687

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*	1504					
C. Equipment Installation Costs	477					
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs	350					
G. Other Costs	785					
Total Costs	3116					

H. Facility

1. Name: Iowa Army Ammunition Plant
2. Location: Middletown, Iowa
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Mar/ 2014
3. Initial Project:	Jun/ 2014
4. Final Project Award:	Oct/ 2015
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Jun/ 2016
7. Prove Out Begins:	Sep/ 2016
8. Prove Out Complete:	Sep/ 2016

Narrative Explanation:
Procurement dollars in the amount of $3.116 million support effort to provide a new melt pouring loader on Line 3A at Iowa Army Ammunition Plant that supports explosive materials to include trinitrotoluene, Composition B and newer insensitive formulations. The loader will consist of stainless steel construction, capable of loading projectiles up to 155mm in size and allow for complete cleaning and visual inspection. It will be equipped with drip pans to minimize employee exposure to hazardous materials and allow for explosive fume removal. This new system will reduce scrap volume and improve cast quality. It will also decrease downtime, cleanup time and costs.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Projectile Preheat Oven, Line 3A

3. End Item Supported Model
High Explosive (HE) Artillery, Mortars

4. Project Number: 5153688

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*		1054				
C. Equipment Installation Costs		176				
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs		505				
Total Costs		1735				

H. Facility

1. Name: Iowa Army Ammunition Plant
2. Location: Middletown, Iowa
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones — **Month & Year**

1. Concept Design Complete: Not Applicable
2. Final Design Complete: Not Applicable
3. Initial Project: Feb/ 2015
4. Final Project Award: Feb/ 2015
5. Construction Complete: Not Applicable
6. Equipment Installation Complete: Feb/ 2016
7. Prove Out Begins: Feb/ 2016
8. Prove Out Complete: Feb/ 2016

Narrative Explanation:
Procurement dollars in the amount of $1.735 million support effort to provide a new projectile preheat oven on Line 3A at Iowa Army Ammunition Plant. Projectiles filled with Insensitive Munitions Explosives-101 (IMX-101) require a higher temperature preheat than with trinitrotoluene-based material. The current oven configuration will not allow complete uniform projectile preheat or the ability to preheat IMX-101-filled projectiles. The new oven will be capable of supporting both current and future production on Line 3A and reduce the preheat time of projectiles.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Central Fire Alarm/Reporting System

3. End Item Supported Model
Artillery, Detonators, Modular Artillery Charge Sys (MACS), Mortars

4. Project Number: 51X3692

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*	1700		1885		1885	
C. Equipment Installation Costs	260		3191		3191	
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs	465		73		73	
Total Costs	2425		5149		5149	

H. Facility

1. Name: Iowa Army Ammunition Plant
2. Location: Middletown, Iowa
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones

	Month & Year
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	May/ 2016
3. Initial Project:	Mar/ 2014
4. Final Project Award:	Apr/ 2016
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Jan/ 2018
7. Prove Out Begins:	Jan/ 2018
8. Prove Out Complete:	Jan/ 2018

Narrative Explanation:
FY 2016 Base procurement dollars in the amount of $5.149 million support additional phase to procure and install necessary equipment for alerting personnel of a fire event or faulty conditions in buildings across Iowa Army Ammunition Plant (AAP). This fire suppression system, including sprinkler systems and ultraviolet deluge systems, will protect both property and personnel and operate in a variety of environments. It will ensure Iowa AAP maintains compliance with applicable fire alarm and reporting system regulations.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Line 3A Explosive Scrap Melter

3. End Item Supported Model
High Explosive Artillery, Mortars

4. Project Number: 5143700

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*	1665					
C. Equipment Installation Costs	433					
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs	152					
G. Other Costs	119					
Total Costs	2369					

H. Facility

1. Name: Iowa Army Ammunition Plant
2. Location: Middletown, Iowa
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	May/ 2013
3. Initial Project:	Jun/ 2014
4. Final Project Award:	Jun/ 2014
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Jun/ 2016
7. Prove Out Begins:	Jun/ 2016
8. Prove Out Complete:	Jun/ 2016

Narrative Explanation:
Procurement dollars in the amount of $2.369 million support efforts to design, procure and install explosive scrap reuse equipment on Line 3A at Iowa Army Ammunition Plant (AAP). This effort will allow Iowa AAP to remelt and reuse excess material from Insensitive Munitions (IM) production. In addition, this process will reduce safety and environmental risks by eliminating the requirement to store, transport and treat excess explosive material. The project will include procurement of two rotary melting vessels, oven heat exchanger, process piping and associated control equipment.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Plant Wide Mass Warning System

3. End Item Supported Model
60mm/81mm Mortar, Artillery

4. Project Number: 5163743

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs			306		306	
B. Equipment Costs*			561		561	
C. Equipment Installation Costs			580		580	
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs			44		44	
Total Costs			1491		1491	

H. Facility

1. Name: Iowa Army Ammunition Plant
2. Location: Middletown, Iowa
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones — **Month & Year**

1. Concept Design Complete: Not Applicable
2. Final Design Complete: May/ 2016
3. Initial Project: Mar/ 2016
4. Final Project Award: Apr/ 2016
5. Construction Complete: Dec/ 2017
6. Equipment Installation Complete: Jan/ 2018
7. Prove Out Begins: Jan/ 2018
8. Prove Out Complete: Apr/ 2018

Narrative Explanation:
FY 2016 Base procurement dollars in the amount of $1.491 million support installation of a plant wide mass warning system at Iowa Army Ammunition Plant. System will be audible to personnel both inside and outside of installation buildings.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
General Road Improvements (Roads D and E)

3. End Item Supported Model
40mm, Artillery, Mortar, Tank

4. Project Number: 5153745

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs		1602				
B. Equipment Costs*						
C. Equipment Installation Costs						
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs		537				
Total Costs		2139				

H. Facility

1. Name: Iowa Army Ammunition Plant
2. Location: Middletown, Iowa
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Not Applicable
3. Initial Project:	Apr/ 2015
4. Final Project Award:	Apr/ 2015
5. Construction Complete:	Aug/ 2016
6. Equipment Installation Complete:	Not Applicable
7. Prove Out Begins:	Not Applicable
8. Prove Out Complete:	Not Applicable

Narrative Explanation:
Procurement dollars in the amount of $2.139 million support improvements to Roads D and E at Iowa Army Ammunition Plant. These roads support active production lines and storage yards. This project will improve safety for plant operational vehicles containing explosive materials.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Replace Chemical and Explosives Laboratory

3. End Item Supported Model
40mm, Artillery, Mortars, Tank

4. Project Number: 5153746

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs		1546				
B. Equipment Costs*		1362				
C. Equipment Installation Costs		270				
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs		45				
G. Other Costs		59				
Total Costs		3282				

H. Facility

1. Name: Iowa Army Ammunition Plant
2. Location: Middletown, Iowa
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Dec/ 2014
3. Initial Project:	May/ 2015
4. Final Project Award:	May/ 2015
5. Construction Complete:	Oct/ 2016
6. Equipment Installation Complete:	Nov/ 2016
7. Prove Out Begins:	Nov/ 2016
8. Prove Out Complete:	Nov/ 2016

Narrative Explanation:
Procurement dollars in the amount of $3.282 million support modernization effort to construct new laboratories adequate to meet all water and chemical measurements and analysis required to support current production at Iowa Army Ammunition Plant. The current facilities are over 70 years old and well past their useful life. The new laboratory and equipment will meet current safety and environmental standards, allowing for enhanced production quality and a safe testing environment for personnel.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Upgrade Insensitive Munitions Explosive (IMX) Wastewater Treatment, Line 3A

3. End Item Supported Model
105mm/155mm Artillery, Mortars

4. Project Number: 5153766

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs		1454				
B. Equipment Costs*		1875				
C. Equipment Installation Costs		552				
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs		125				
G. Other Costs		70				
Total Costs		4076				

H. Facility

1. Name: Iowa Army Ammunition Plant
2. Location: Middletown, Iowa
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	May/ 2014
3. Initial Project:	Dec/ 2014
4. Final Project Award:	Dec/ 2014
5. Construction Complete:	May/ 2017
6. Equipment Installation Complete:	Aug/ 2017
7. Prove Out Begins:	Nov/ 2017
8. Prove Out Complete:	Nov/ 2017

Narrative Explanation:
Procurement dollars in the amount of $4.076 million support modernization improvements to the Line 3A, Load Assemble and Pack operations of Insensitive Munitions Explosive (IMX) projectiles at Iowa Army Ammunition Plant. Efforts include upgrades to the wastewater treatment infrastructure, replacement of deteriorating energetic vapor control and treatment system, installation and integration of advanced wastewater treatment process as well as automation of treatment operation controls for line 3A. These upgrades are required due to the advanced age of the equipment, the current system's incompatibility with IMX waste streams, emerging IMX production requirements, employee safety and environmental laws and regulations. This effort will enhance product quality, equipment reliability, availability, and maintainability.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Main Heating Plant Upgrade and Maximum Achievable Control Technology (MACT)

3. End Item Supported Model
120mm Tank, 155mm Artillery, 40mm, Mortars

4. Project Number: 5143770

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs	5319					
B. Equipment Costs*						
C. Equipment Installation Costs	694					
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs	152					
G. Other Costs	369					
Total Costs	6534					

H. Facility

1. Name: Iowa Army Ammunition Plant
2. Location: Middletown, Iowa
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Not Applicable
3. Initial Project:	Jun/ 2014
4. Final Project Award:	Jun/ 2014
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Jun/ 2017
7. Prove Out Begins:	Jun/ 2017
8. Prove Out Complete:	Jul/ 2017

Narrative Explanation:
Procurement dollars in the amount of $6.534 million support effort to upgrade the Main Heating Plant and meet Maximum Achievable Control Technology (MACT) air emission standards at Iowa Army Ammunition Plant. This project will install a natural gas boiler, a natural gas pipeline and redundant combustion control servers. It will also relocate and cover a conveyor belt and conduct miscellaneous upgrades necessary to meet recent changes to MACT standards. This project will improve the safety and efficiency of the Main Heating Plant and ensure compliance with environmental regulations.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Line 3A Distributed Natural Gas Boiler System

3. End Item Supported Model
105/155mm Artillery, 60mm Mortars

4. Project Number: 5153773

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs		2500				
B. Equipment Costs*		2919				
C. Equipment Installation Costs		800				
D. Contractor Support Costs		350				
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs		65				
G. Other Costs		117				
Total Costs		6751				

H. Facility

1. Name: Iowa Army Ammunition Plant
2. Location: Middletown, Iowa
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones — **Month & Year**

1. Concept Design Complete: Not Applicable
2. Final Design Complete: Not Applicable
3. Initial Project: Jul/ 2015
4. Final Project Award: Jul/ 2015
5. Construction Complete: Jun/ 2017
6. Equipment Installation Complete: Jun/ 2017
7. Prove Out Begins: Jul/ 2017
8. Prove Out Complete: Aug/ 2017

Narrative Explanation:
Procurement dollars in the amount of $6.751 million support effort to install a high-pressure gas boiler at Iowa Army Ammunition Plant (AAP). Project will assure the continued flow of steam for processes and heating, ventilation, and air conditioning (HVAC) purposes. A 2013 baseline energy assessment estimated 33 percent of Iowa AAP's steam energy is lost through distribution, condensate, and insufficient or defective steam traps.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Asbestos Abatement and Removal

3. End Item Supported Model
105mm/120mm Tank, 105mm/155mm Artillery, Modular Artillery Charging System

4. Project Number: 5143910

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*						
C. Equipment Installation Costs						
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs	7737					
Total Costs	7737					

H. Facility

1. Name: Iowa Army Ammunition Plant
2. Location: Middletown, Iowa
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones

	Month & Year
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Not Applicable
3. Initial Project:	Sep/ 2014
4. Final Project Award:	Sep/ 2014
5. Construction Complete:	Aug/ 2016
6. Equipment Installation Complete:	Not Applicable
7. Prove Out Begins:	Not Applicable
8. Prove Out Complete:	Not Applicable

Narrative Explanation:
Procurement dollars in the amount of $7.737 million support effort to remove and abate asbestos in various production and storage facilities at Iowa Army Ammunition Plant. Asbestos proposes significant risk to human health. Friable Asbestos Containing Material will be removed from steam installation lines and lighting fixtures.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Construct 100kW Fuel Cell Pilot Facility

3. End Item Supported Model
Not Applicable

4. Project Number: 5155029

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs		2500				
B. Equipment Costs*		2000				
C. Equipment Installation Costs		810				
D. Contractor Support Costs						
E. Corps of Engineers Support Costs		690				
F. Other In-House Support Costs		360				
G. Other Costs						
Total Costs		6360				

H. Facility

1. Name: Iowa Army Ammunition Plant
2. Location: Middletown, Iowa
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Not Applicable
3. Initial Project:	Not Applicable
4. Final Project Award:	May/ 2015
5. Construction Complete:	May/ 2016
6. Equipment Installation Complete:	Not Applicable
7. Prove Out Begins:	May/ 2016
8. Prove Out Complete:	Aug/ 2016

Narrative Explanation:
Base procurement dollars support in the amount of $6.360 million support fuel cell modernization effort at Iowa Army Ammunition Plant (AAP). This project will develop a pilot-scale process utilizing fuel cell technology for the reduction of Iowa AAP operational costs. The reduced operational costs will be the result of enhanced power production efficiencies, energetics demilitarization and process by-product sales. This project includes construction of a 100kW mobile fuel cell pilot facility, equipment procurement, pilot scale testing and market sales research of the chemical by-product.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Ultraviolet (UV) Deluge System Upgrade, Line 3A

3. End Item Supported Model
105mm Artillery, 155mm Artillery

4. Project Number: 5165333

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*			455		455	
C. Equipment Installation Costs			124		124	
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs			9		9	
Total Costs			588		588	

H. Facility

1. Name: Iowa Army Ammunition Plant
2. Location: Middletown, Iowa
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	May/ 2014
3. Initial Project:	Apr/ 2016
4. Final Project Award:	Apr/ 2016
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Oct/ 2016
7. Prove Out Begins:	Nov/ 2016
8. Prove Out Complete:	Dec/ 2017

Narrative Explanation:
FY 2016 Base procurement dollars in the amount of $0.588 million support replacement of the existing rapid response ultraviolet (UV) Deluge System in Buildings 3A-10-5 and 3A-50-1 at Iowa Army Ammunition Plant. The new systems will enhance fire protection and detection and improve personnel safety. Two additional UV systems in building 3A-05-1 will also be installed to support the explosive scrap melter equipment.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Small Caliber Modernization, Production Line Upgrades

3. End Item Supported Model
.50 Cal (all types except SLAP-T), 5.56mm, 7.62mm (all types)

4. Project Number: 51X3356

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*		2001	9750		9750	
C. Equipment Installation Costs		747	4123		4123	
D. Contractor Support Costs			279		279	
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs		43	550		550	
Total Costs		2791	14702		14702	

H. Facility

1. Name: Lake City Army Ammunition Plant
2. Location: Independence, Missouri
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones

	Month & Year
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Jan/ 2015
3. Initial Project:	Jan/ 2015
4. Final Project Award:	Mar/ 2016
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Sep/ 2017
7. Prove Out Begins:	Dec/ 2017
8. Prove Out Complete:	Jan/ 2018

Narrative Explanation:
FY 2016 Base procurement dollars in the amount of $14.702 million support modernization improvements in small caliber ammunition manufacturing at Lake City Army Ammunition Plant. Efforts include upgrades to the automated high-speed Small Caliber Ammunition Modernization Program (SCAMP) production lines, including waste incinerator and .50 Cal bullet restoration, will improve product quality and equipment reliability, availability and maintainability.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Conductive Flooring Replacement/Asbestos Removal (Buildings 1, 2 and 3)

3. End Item Supported Model
5.56mm, 7.62mm, Cal .50

4. Project Number: 5143615

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs	1614					
B. Equipment Costs*						
C. Equipment Installation Costs	391					
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs	95					
Total Costs	2100					

H. Facility

1. Name: Lake City Army Ammunition Plant
2. Location: Independence, Missouri
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Aug/ 2014
3. Initial Project:	May/ 2014
4. Final Project Award:	May/ 2014
5. Construction Complete:	Oct/ 2016
6. Equipment Installation Complete:	Oct/ 2016
7. Prove Out Begins:	Not Applicable
8. Prove Out Complete:	Not Applicable

Narrative Explanation:
Procurement dollars in the amount of $2.100 million support effort to modernize degraded conductive flooring in the explosives manufacturing areas of Buildings, 1, 2, and 3 at Lake City Army Ammunition Plant. Based on safety regulations, a conductive floor is required to manufacture explosives.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Hard Road Surface Recapitalization

3. End Item Supported Model
20mm, 5.56mm, 7.62mm, Cal .50

4. Project Number: 5143645

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs	4092					
B. Equipment Costs*						
C. Equipment Installation Costs						
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs	973					
Total Costs	5065					

H. Facility

1. Name: Lake City Army Ammunition Plant
2. Location: Independence, Missouri
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Jan/ 2014
3. Initial Project:	Jun/ 2014
4. Final Project Award:	Jun/ 2014
5. Construction Complete:	Apr/ 2015
6. Equipment Installation Complete:	Not Applicable
7. Prove Out Begins:	Not Applicable
8. Prove Out Complete:	Not Applicable

Narrative Explanation:
Procurement dollars in the amount of $5.065 million support effort to resurface existing roads at Lake City Army Ammunition Plant (AAP). This project will provide adequate roadways to production lines, storage yards and support facilities for safe travel by employees utilizing government, private and explosively laden vehicles. This effort will also improve road conditions and reduce maintenance costs to roads and vehicles, and enhance working conditions and safety. This effort will improve the quality of work environment at Lake City AAP.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Structural Upgrades (Buildings 1, 2, 3, and 35)

3. End Item Supported Model
5.56mm, 7.62mm, .Cal .50, Enhanced Performing Rounds (EPRs), Links

4. Project Number: 5163708

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs			3221		3221	
B. Equipment Costs*						
C. Equipment Installation Costs						
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs			386		386	
Total Costs			3607		3607	

H. Facility

1. Name: Lake City Army Ammunition Plant
2. Location: Independence, Missouri
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones

	Month & Year
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Nov/ 2016
3. Initial Project:	Mar/ 2016
4. Final Project Award:	Mar/ 2016
5. Construction Complete:	Sep/ 2017
6. Equipment Installation Complete:	Not Applicable
7. Prove Out Begins:	Nov/ 2017
8. Prove Out Complete:	Nov/ 2017

Narrative Explanation:
FY 2016 Base procurement dollars in the amount of $3.607 million supports this effort to correct structural deficiencies found in Buildings 1, 2, 3, and 35 at Lake City Army Ammunition Plant. Based on a Building Structural Evaluation Study, these buildings are structurally unsafe. This effort will include design and correction of structural deficiencies. This effort will also ensure the safety of personnel, protect production equipment, and assure Lake City AAP complies with Occupational Safety and Health Administration, National Fire Protection Agency, National Electrical Code, and Building Codes.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Building 16 Aerator Upgrade, Water Well Replacement

3. End Item Supported Model
5.56mm, 7.62mm, Cal .50

4. Project Number: 5163715

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs			510		510	
B. Equipment Costs*			5410		5410	
C. Equipment Installation Costs			1539		1539	
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs			123		123	
Total Costs			7582		7582	

H. Facility

1. Name: Lake City Army Ammunition Plant
2. Location: Independence, Missouri
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Nov/ 2016
3. Initial Project:	Mar/ 2016
4. Final Project Award:	Mar/ 2016
5. Construction Complete:	Mar/ 2017
6. Equipment Installation Complete:	Mar/ 2017
7. Prove Out Begins:	Apr/ 2017
8. Prove Out Complete:	Apr/ 2017

Narrative Explanation:
FY 2016 Base procurement dollars in the amount of $7.582 million support modernization upgrades to Building 16 aerator at Lake City Army Ammunition Plant. Efforts include evaluation, design, and replacement of internal components, motors and fans, and potable water wells. Project will also upgrade the main collection lines from the well houses and install take-out cleaning stations, and upgrades to the well water control system. This project will eliminate requirement for five air strippers located around the plant and facilitate the maintenance of adequate water supplies for production.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Structural Upgrades (Buildings 8, 11, and 16)

3. End Item Supported Model
5.56mm, 7.62mm, Cal .50

4. Project Number: 5153758

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs		2300				
B. Equipment Costs*						
C. Equipment Installation Costs						
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs		243				
G. Other Costs		396				
Total Costs		2939				

H. Facility

1. Name: Lake City Army Ammunition Plant
2. Location: Independence, Missouri
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Jan/ 2015
3. Initial Project:	Jan/ 2015
4. Final Project Award:	Jan/ 2015
5. Construction Complete:	Apr/ 2016
6. Equipment Installation Complete:	Not Applicable
7. Prove Out Begins:	Not Applicable
8. Prove Out Complete:	Not Applicable

Narrative Explanation:
Base procurement dollars in the amount of $2.939 million support effort to rehabilitate structural deficiencies identified in Buildings 8, 11 and 16 at Lake City Army Ammunition Plant. This effort will ensure the safety of personnel, protect production equipment and assure compliance with Occupational Safety and Health Administration, National Fire Protection Agency, National Electrical Code, and Building Codes.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015	
2. Project Title/Type Exterior Steam Main Supports	3. End Item Supported Model 5.56mm, 7.62mm, Cal .50
4. Project Number: 5163778	5. Annual Capacity Before (1-8-5): 0
6. Annual Capacity After (1-8-5): 0	

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs			1144		1144	
B. Equipment Costs*						
C. Equipment Installation Costs						
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs			87		87	
Total Costs			1231		1231	

H. Facility

1. Name: Lake City Army Ammunition Plant
2. Location: Independence, Missouri
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Nov/ 2016
3. Initial Project:	Mar/ 2016
4. Final Project Award:	Mar/ 2016
5. Construction Complete:	Mar/ 2017
6. Equipment Installation Complete:	Not Applicable
7. Prove Out Begins:	Apr/ 2017
8. Prove Out Complete:	Apr/ 2017

Narrative Explanation:
FY 2016 Base procurement dollars in the amount of $1.231 million support modernization of exterior steam supports at Lake City Army Ammunition Plant. Effort will evaluate existing steam main supports and design and install new steam supports. Effort will improve safety, reduce steam loss to manufacturing buildings and reduce risk of production interruptions.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Building 15 Reverse Osmosis System

3. End Item Supported Model
5.56mm, 7.62mm, Cal .50

4. Project Number: 5163779

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*			139		139	
C. Equipment Installation Costs			207		207	
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs			91		91	
Total Costs			437		437	

H. Facility

1. Name: Lake City Army Ammunition Plant
2. Location: Independence, Missouri
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Nov/ 2016
3. Initial Project:	Mar/ 2016
4. Final Project Award:	Mar/ 2016
5. Construction Complete:	Mar/ 2018
6. Equipment Installation Complete:	Mar/ 2018
7. Prove Out Begins:	Apr/ 2018
8. Prove Out Complete:	Apr/ 2018

Narrative Explanation:
FY 2016 Base procurement dollars in the amount of $0.437 million support equipment upgrade in Building 15 at Lake City Army Ammunition Plant. The effort will design and install a reverse osmosis system in building 15. Project will improve water quality which reduces solids build up in boiler tubes. Reduction in solids build up will maximize the heat transfer in producing steam which will result in reduced water, natural gas, and chemical consumption.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date:	February 2015
2. Project Title/Type	Building 15 Programmable Logic Control (PLC) and Economizer Upgrade
3. End Item Supported Model	5.56mm, 7.62mm, Cal .50
4. Project Number:	5163780
5. Annual Capacity Before (1-8-5):	0
6. Annual Capacity After (1-8-5):	0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*			522		522	
C. Equipment Installation Costs			875		875	
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs			61		61	
Total Costs			1458		1458	

H. Facility

1. Name:	Lake City Army Ammunition Plant
2. Location:	Independence, Missouri
3. Type (GOGO, GOCO, COCO):	GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Nov/ 2016
3. Initial Project:	Mar/ 2016
4. Final Project Award:	Mar/ 2016
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Mar/ 2018
7. Prove Out Begins:	Apr/ 2018
8. Prove Out Complete:	Apr/ 2018

Narrative Explanation:
FY 2016 Base procurement dollars in the amount of $1.458 million support modernization upgrades to Building 15 Programmable Logic Control (PLC) and economizer at Lake City Army Ammunition Plant. Existing equipment does not meet National Fire Protection Agency code, is obsolete and replacement parts are difficult to procure. This effort will design and install new economizers and PLC on boilers 1-4. This system serves as a safety device to prevent boiler explosions.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Building 3 East Charging Wing Heating, Ventilation and Air Conditioning (HV

3. End Item Supported Model
5.56mm, 7.62mm, Cal .50

4. Project Number: 5163781

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*			409		409	
C. Equipment Installation Costs			648		648	
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs			45		45	
Total Costs			1102		1102	

H. Facility

1. Name: Lake City Army Ammunition Plant
2. Location: Independence, Missouri
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones

	Month & Year
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Nov/ 2016
3. Initial Project:	Mar/ 2016
4. Final Project Award:	Mar/ 2016
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Mar/ 2018
7. Prove Out Begins:	Apr/ 2018
8. Prove Out Complete:	Apr/ 2018

Narrative Explanation:
FY 2016 Base procurement dollars in the amount of $1.102 million support modernization to Building 3 East Charging Wing heating, ventilation and air conditioning (HVAC) at Lake City Army Ammunition Plant. Existing equipment is obsolete. Effort will evaluate, design and install a new HVAC system in Building 3 East Charging Wing. Installation will consist of new modular air handler with filtration, preheat, chilled water cooling, reheat, and humidification.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Building Management System / Metering Upgrade

3. End Item Supported Model
5.56mm, 7.62mm, Cal .50

4. Project Number: 5163782

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*			1439		1439	
C. Equipment Installation Costs			2159		2159	
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs			476		476	
Total Costs			4074		4074	

H. Facility

1. Name: Lake City Army Ammunition Plant
2. Location: Independence, Missouri
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones

	Month & Year
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Nov/ 2016
3. Initial Project:	Mar/ 2016
4. Final Project Award:	Mar/ 2016
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Mar/ 2019
7. Prove Out Begins:	Apr/ 2019
8. Prove Out Complete:	Apr/ 2019

Narrative Explanation:
FY 2016 Base procurement dollars in the amount of $4.074 million support installation of metering to support utility monitoring and control at Lake City Army Ammunition Plant. Effort will evaluate, design and install meters that monitor water, air, gas and electrical utilities. Meters will be installed plant wide and will be incorporated into the overall Building Management System.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Install Occupational Safety and Health Administration (OSHA) Guarding

3. End Item Supported Model
5.56mm, 7.62mm, Cal .50

4. Project Number: 5153933

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*		2261				
C. Equipment Installation Costs		6410				
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs		173				
G. Other Costs		321				
Total Costs		9165				

H. Facility

1. Name: Lake City Army Ammunition Plant
2. Location: Independence, Missouri
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones

	Month & Year
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Nov/ 2016
3. Initial Project:	May/ 2015
4. Final Project Award:	May/ 2015
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Apr/ 2018
7. Prove Out Begins:	May/ 2018
8. Prove Out Complete:	May/ 2018

Narrative Explanation:
Procurement dollars in the amount of $9.165 million support continued installation of Occupational Safety and Health Administration (OSHA) guards on machinery and equipment to comply with current regulations at Lake City Army Ammunition Plant. Production equipment to be guarded will include lead rope forming presses, wash barrels, oilers, washers, case lines, bullet lines, priming machines, loading machines, Cartridge Case Measurement Ejection System, packing lines, palletizers, can printers and tip identification machines. Material handling conveyors will also be guarded. The new machine guarding will be fully compliant with current OSHA Guarding Regulation 1910.212, Subpart O - 2004. This project will reduce operator risk of injury or death.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Construct New Nitrocellulose (NC) Facility

3. End Item Supported Model
Propellants for Large, Medium, and Small Cal Munitions

4. Project Number: 51X2736

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs	7844	6250	9550		9550	
B. Equipment Costs*						
C. Equipment Installation Costs						
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs	550					
G. Other Costs	3287	750	3081		3081	
Total Costs	11681	7000	12631		12631	

H. Facility

1. Name: Radford Army Ammunition Plant
2. Location: Radford, Virginia
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Aug/ 2015
3. Initial Project:	Dec/ 2013
4. Final Project Award:	Mar/ 2016
5. Construction Complete:	Dec/ 2015
6. Equipment Installation Complete:	Not Applicable
7. Prove Out Begins:	Dec/ 2016
8. Prove Out Complete:	Dec/ 2016

Narrative Explanation:
FY 2016 Base procurement dollars in the amount of $12.631 million support effort to continue the modernization and construction of a new, right-sized facility to produce high quality Nitrocellulose (NC) at Radford Army Ammunition Plant. The current NC facility has exceeded its useful life and experienced as many as 70 failures in 12 months. This phase supports the design and construction of the deep foundations required for the new NC facility.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Plant Operations, Request for Equitable Adjustment (REA)/Major Maintenance

3. End Item Supported Model
Propellants for Large, Medium, and Small Cal Munitions

4. Project Number: 5143407

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*						
C. Equipment Installation Costs						
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs	15165					
Total Costs	15165					

H. Facility

1. Name: Radford Army Ammunition Plant
2. Location: Radford, Virginia
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Oct/ 2014
3. Initial Project:	Apr/ 2014
4. Final Project Award:	Oct/ 2014
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Not Applicable
7. Prove Out Begins:	Not Applicable
8. Prove Out Complete:	Not Applicable

Narrative Explanation:
Procurement dollars in the amount of $15.165 million support major maintenance activities, plant operations and Request for Equitable Adjustment (REA) claims at Radford Army Ammunition Plant. Major maintenance activities include, but are not limited to, repair of the pyro acid tanks, ceiling repairs, rebuild of Chain # 2 coal elevator, repairs to dikes 709 and 4414, and rebuild of the dehydration presses. The contractor submitted REAs on several aspects of the contract surrounding deficient equipment/processes, including deficient lead floors, steam leaks and trap replacement, water line breaks, and unrecovered environmental insurance premium.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Telephone Line Upgrades

3. End Item Supported Model
Propellants for Large, Medium, and Small Cal Munitions

4. Project Number: 5153478

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*		670				
C. Equipment Installation Costs		558				
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs		67				
Total Costs		1295				

H. Facility

1. Name: Radford Army Ammunition Plant
2. Location: Radford, Virginia
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Jul/ 2015
3. Initial Project:	Apr/ 2015
4. Final Project Award:	Apr/ 2015
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Nov/ 2015
7. Prove Out Begins:	Nov/ 2015
8. Prove Out Complete:	Dec/ 2015

Narrative Explanation:
Procurement dollars in the amount of $1.295 million support effort to upgrade the Private Branch Exchange (PBX) telephone system and avoid failed communications at Radford Army Ammunition Plant. Where recommended, effort will replace copper wire with fiber optic. In other areas, deteriorated copper wire will be replaced.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Electrical Distribution System Upgrades

3. End Item Supported Model
Propellants for Large, Medium, and Small Cal Munitions

4. Project Number: 5153557

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*		827				
C. Equipment Installation Costs		775				
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs		420				
Total Costs		2022				

H. Facility

1. Name: Radford Army Ammunition Plant
2. Location: Radford, Virginia
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Nov/ 2015
3. Initial Project:	Feb/ 2015
4. Final Project Award:	Feb/ 2015
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Apr/ 2016
7. Prove Out Begins:	Apr/ 2016
8. Prove Out Complete:	Nov/ 2016

Narrative Explanation:
Procurement dollars in the amount of $2.022 million support assessment of the existing electrical distribution system to optimize the electrical load on circuit breakers for current and future production requirements at Radford Army Ammunition Plant. This project will also upgrade, replace and repair the obsolete electrical conductor circuits that service the new nitrocellulose facility. The existing components have exceeded their useful life, experience failures and impact production continuity.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Upgrade Pumps, Water Plant (Building 409)

3. End Item Supported Model
Propellants for Large, Medium, and Small Cal Munitions

4. Project Number: 5143566

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*	1807					
C. Equipment Installation Costs	544					
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs	250					
Total Costs	2601					

H. Facility

1. Name: Radford Army Ammunition Plant
2. Location: Radford, Virginia
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Jan/ 2015
3. Initial Project:	Jul/ 2014
4. Final Project Award:	Jan/ 2015
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Jul/ 2016
7. Prove Out Begins:	Aug/ 2016
8. Prove Out Complete:	Aug/ 2016

Narrative Explanation:
Procurement dollars in the amount of $2.601 million support this effort to modernize and replace both finished and raw water pumps and valves at Radford Army Ammunition Plant (AAP). This project ensures the water treatment operations continue to provide required filtered water for production processes, fire water and two drinking water plants.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Upgrade Settling Basins (Building 409)

3. End Item Supported Model
Propellants for Large, Medium, and Small Cal Munitions

4. Project Number: 5163572

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs			3986		3986	
B. Equipment Costs*						
C. Equipment Installation Costs						
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs			1296		1296	
Total Costs			5282		5282	

H. Facility

1. Name: Radford Army Ammunition Plant
2. Location: Radford, Virginia
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones

	Month & Year
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Jul/ 2016
3. Initial Project:	Apr/ 2016
4. Final Project Award:	Apr/ 2016
5. Construction Complete:	Feb/ 2017
6. Equipment Installation Complete:	Not Applicable
7. Prove Out Begins:	Feb/ 2017
8. Prove Out Complete:	Mar/ 2017

Narrative Explanation:
FY 2016 Base procurement dollars in the amount of $5.282 million support repair of settling basins at Building 409 at Radford Army Ammunition Plant (AAP). The filtered water plant's capability to satisfy the on-plant needs for process water, fire protection water and drinking water is essential to the continued operation of Radford AAP.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Energetic Waste Incinerator (EWI) Facility Upgrades

3. End Item Supported Model
Propellants for Large, Medium, and Small Cal Munitions

4. Project Number: 5153723

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*		3301				
C. Equipment Installation Costs		2450				
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs		1134				
Total Costs		6885				

H. Facility

1. Name: Radford Army Ammunition Plant
2. Location: Radford, Virginia
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Dec/ 2015
3. Initial Project:	Jul/ 2015
4. Final Project Award:	Jul/ 2015
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Dec/ 2016
7. Prove Out Begins:	Dec/ 2016
8. Prove Out Complete:	Dec/ 2016

Narrative Explanation:
Procurement dollars in the amount of $6.885 million support modernization of the Energetic Waste Incinerator (EWI) at Radford Army Ammunition Plant (AAP). Modernization effort will improve incinerator reliability, maintain environmental compliance and improve personnel safety during Radford AAP's waste handling processes.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Construct New Powerhouse Facility

3. End Item Supported Model
Propellants for Large, Medium, and Small Cal Munitions

4. Project Number: 5143724

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs	25500					
B. Equipment Costs*	15320					
C. Equipment Installation Costs	25000					
D. Contractor Support Costs	2064					
E. Corps of Engineers Support Costs	1000					
F. Other In-House Support Costs						
G. Other Costs	15316					
Total Costs	84200					

H. Facility

1. Name: Radford Army Ammunition Plant
2. Location: Radford, Virginia
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Nov/ 2016
3. Initial Project:	May/ 2014
4. Final Project Award:	Oct/ 2015
5. Construction Complete:	May/ 2018
6. Equipment Installation Complete:	May/ 2018
7. Prove Out Begins:	Jun/ 2018
8. Prove Out Complete:	Jul/ 2018

Narrative Explanation:
Procurement dollars in the amount of $84.200 million support construction of a new natural gas powerhouse facility at Radford Army Ammunition Plant (AAP). The new powerhouse facility will satisfy current utility (electric and steam) demand and comply with new Maximum Achievable Control Technology (MACT) environmental regulations. The existing Radford AAP coal fired powerhouse will not meet the new Hazardous Air Pollutant emissions standards and it has exceeded its operational useful life.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Strong Nitric Acid (SNA) Tank Replacement

3. End Item Supported Model
Propellants for Large, Medium, and Small Cal Munitions

4. Project Number: 51X3727

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*		8000				
C. Equipment Installation Costs		5190				
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs	194	275				
G. Other Costs	1931	3708				
Total Costs	2125	17173				

H. Facility

1. Name: Radford Army Ammunition Plant
2. Location: Radford, Virginia
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones

	Month & Year
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Nov/ 2015
3. Initial Project:	Jul/ 2015
4. Final Project Award:	Jul/ 2015
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Jul/ 2016
7. Prove Out Begins:	Jul/ 2016
8. Prove Out Complete:	Sep/ 2016

Narrative Explanation:
Procurement dollars in the amount of $17.173 million support the second phase to upgrade and replace strong nitric acid tanks at Radford Army Ammunition Plant. Efforts include construction of six strong nitric acid storage tanks, dikes, instrumentation, auxiliary equipment, fume abatement, plumbing to the battery location, and commissioning.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Acid Area Improvements

3. End Item Supported Model
Propellants for Large, Medium, and Small Cal Munitions

4. Project Number: 51X3735

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs		1600	2808		2808	
B. Equipment Costs*		4000	2615		2615	
C. Equipment Installation Costs		704	1253		1253	
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs		276	488		488	
Total Costs		6580	7164		7164	

H. Facility

1. Name: Radford Army Ammunition Plant
2. Location: Radford, Virginia
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Sep/ 2016
3. Initial Project:	Apr/ 2015
4. Final Project Award:	Mar/ 2016
5. Construction Complete:	Jul/ 2017
6. Equipment Installation Complete:	Jul/ 2017
7. Prove Out Begins:	Jul/ 2017
8. Prove Out Complete:	Sep/ 2017

Narrative Explanation:
FY 2016 Base procurement dollars in the amount of $7.164 million support repair of critical bulk storage tanks and containment dikes in the acid area at Radford Army Ammunition Plant. Bulk storage tanks vary in age and several existing tanks were installed in the 1940s. Bulk storage capacity is required to handle sulfuric acid, oleum, strong nitric acid, weak nitric acid, and processed (pyro) acid. The safe and reliable storage of acids is critical for nitrocellulose operations. Containment dikes surrounding these bulk storage tanks have deteriorated and repairs are required to contain an acid release in the event of a catastrophic failure.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Acid Sewer Treatment Upgrade

3. End Item Supported Model
Propellants for Large, Medium, and Small Cal Munitions

4. Project Number: 5153738

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*			4000		4000	
C. Equipment Installation Costs			1053		1053	
D. Contractor Support Costs			229		229	
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs						
Total Costs			5282		5282	

H. Facility

1. Name: Radford Army Ammunition Plant
2. Location: Radford, Virginia
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones

	Month & Year
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Aug/ 2016
3. Initial Project:	Apr/ 2016
4. Final Project Award:	Apr/ 2016
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	May/ 2017
7. Prove Out Begins:	May/ 2017
8. Prove Out Complete:	Jul/ 2017

Narrative Explanation:
FY 2016 Base procurement dollars in the amount of $5.282 million supports this effort to upgrade the acid sewer treatment at Radford Army Ammunition Plant (AAP). Slurry pumps and slakers are deteriorating which could potentially disrupt throughput and the ability to treat acidic wastewater. This effort will increase reliability of the acid wastewater treatment facility and allow for continuous operations in the production of propellants and energetics at Radford AAP.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Workplace Safety

3. End Item Supported Model
Nitrocellulose, Solvent Propellant, Solventless Propellant

4. Project Number: 5153753

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs		3759				
B. Equipment Costs*						
C. Equipment Installation Costs						
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs		1005				
Total Costs		4764				

H. Facility

1. Name: Radford Army Ammunition Plant
2. Location: Radford, Virginia
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Jul/ 2015
3. Initial Project:	May/ 2015
4. Final Project Award:	May/ 2015
5. Construction Complete:	Mar/ 2016
6. Equipment Installation Complete:	Not Applicable
7. Prove Out Begins:	Mar/ 2016
8. Prove Out Complete:	May/ 2016

Narrative Explanation:
Procurement dollars in the amount of $4.764 million support various safety upgrades throughout Radford Army Ammunition Plant. There are significant risks associated with handling/processing chemicals used in production of propellants and energetics. This project will reduce the risk of serious injury by upgrading safety showers to current Occupational Safety and Health Administration standards. Additionally, it will replace a failed retaining wall avoiding a potential landslide, which could affect Press 3 operations and risk the safety of personnel in the immediate area.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Plant Wide Dike Upgrades

3. End Item Supported Model
Propellants for Large, Medium, and Small Cal Munitions

4. Project Number: 5163755

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs		4217				
B. Equipment Costs*						
C. Equipment Installation Costs						
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs		962				
Total Costs		5179				

H. Facility

1. Name: Radford Army Ammunition Plant
2. Location: Radford, Virginia
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Jun/ 2015
3. Initial Project:	Jun/ 2015
4. Final Project Award:	Jun/ 2015
5. Construction Complete:	May/ 2016
6. Equipment Installation Complete:	Not Applicable
7. Prove Out Begins:	May/ 2016
8. Prove Out Complete:	Jun/ 2016

Narrative Explanation:
Procurement dollars in the amount of $5.179 million support modernization upgrades to various containment dikes throughout Radford Army Ammunition Plant. Several containment dikes are in poor condition and in recent tank leaks, containment dikes have failed to adequately contain the liquid. This project will eliminate ground contamination from deteriorated dikes, ensure personnel safety in the area and eliminate the potential for environmental fines.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
New Solvent Area Chiller

3. End Item Supported Model
Propellants for Large, Medium, and Small Cal Munitions

4. Project Number: 5153764

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*		567				
C. Equipment Installation Costs		287				
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs		183				
Total Costs		1037				

H. Facility

1. Name: Radford Army Ammunition Plant
2. Location: Radford, Virginia
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Apr/ 2015
3. Initial Project:	Jan/ 2015
4. Final Project Award:	Jan/ 2015
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Aug/ 2015
7. Prove Out Begins:	Aug/ 2015
8. Prove Out Complete:	Sep/ 2015

Narrative Explanation:
Procurement dollars in the amount of $1.037 million support modernization effort to install a standalone chiller system for the new Solvent Recovery and Rectification Facility at Radford Army Ammunition Plant. Without this chiller, solvent streams from propellant production will not be able to be recovered and processed on site.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Solvent Propellant Manufacturing Facility (Preliminary Design)

3. End Item Supported Model
Propellants for Large, Medium, and Small Cal Munitions

4. Project Number: 5153816

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*						
C. Equipment Installation Costs						
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs		921				
Total Costs		921				

H. Facility

1. Name: Radford Army Ammunition Plant
2. Location: Radford, Virginia
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Apr/ 2016
3. Initial Project:	Aug/ 2015
4. Final Project Award:	Aug/ 2015
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Not Applicable
7. Prove Out Begins:	Not Applicable
8. Prove Out Complete:	Not Applicable

Narrative Explanation:
Procurement dollars in the amount of $0.921 million support engineering and preliminary design efforts to improve the solvent propellant manufacturing process at Radford Army Ammunition Plant. These efforts will identify modernization upgrades that can be incorporated into the production process in future years. These improvements will reduce operating costs and enhance production efficiencies.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015		
2. Project Title/Type Electrical Upgrades	3. End Item Supported Model 120mm Mortars, M1, M107, M110, M795, MK64	
4. Project Number: 5162985	5. Annual Capacity Before (1-8-5): 0	6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*			3060		3060	
C. Equipment Installation Costs			1081		1081	
D. Contractor Support Costs			146		146	
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs			382		382	
Total Costs			4669		4669	

H. Facility

1. Name: Scranton Army Ammunition Plant
2. Location: Scranton, Pennsylvania
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Mar/ 2016
3. Initial Project:	Mar/ 2016
4. Final Project Award:	Mar/ 2016
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Nov/ 2016
7. Prove Out Begins:	Dec/ 2016
8. Prove Out Complete:	Dec/ 2016

Narrative Explanation:
FY 2016 Base procurement dollars in the amount of $4.669 million support the continuation in modernization of Scranton Army Ammunition Plant's electrical system. This project will clean and retrofit substation circuit breakers to prevent electrical hazards, as well as correct deficiencies identified from past fire.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Modernization of Flexible Machining Cell

3. End Item Supported Model
120mm Mortar, M1, M107, M110, M795

4. Project Number: 5143013

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*	4000					
C. Equipment Installation Costs	1260					
D. Contractor Support Costs	221					
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs	950					
Total Costs	6431					

H. Facility

1. Name: Scranton Army Ammunition Plant
2. Location: Scranton, Pennsylvania
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Oct/ 2014
3. Initial Project:	Sep/ 2014
4. Final Project Award:	Sep/ 2014
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Apr/ 2016
7. Prove Out Begins:	Apr/ 2016
8. Prove Out Complete:	May/ 2016

Narrative Explanation:
Procurement dollars in the amount of $6.431 million support this effort to modernize various equipment utilized throughout the flexible machining cell at Scranton Army Ammunition Plant. The effort will design and build a new centering machine, along with upgrading three existing centering machines. The relay logic control system will be replaced with a Programmable Logic Controller (PLC). Numerous pieces of equipment supporting the projectile metal parts production lines will be upgraded, allowing multiple operations to be performed simultaneously. This modernization effort will result in energy savings, reduce maintenance costs due to leaks and contamination, and make troubleshooting safer due to the separation of high and low voltage components.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Rehabilitate Subway Floor and Arches

3. End Item Supported Model
120mm Mortars, M1, M107, M110, M795, MK64

4. Project Number: 5143550

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs	850					
B. Equipment Costs*						
C. Equipment Installation Costs						
D. Contractor Support Costs	101					
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs	156					
Total Costs	1107					

H. Facility

1. Name: Scranton Army Ammunition Plant
2. Location: Scranton, Pennsylvania
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Oct/ 2014
3. Initial Project:	Sep/ 2014
4. Final Project Award:	Sep/ 2014
5. Construction Complete:	Jun/ 2015
6. Equipment Installation Complete:	Not Applicable
7. Prove Out Begins:	Not Applicable
8. Prove Out Complete:	Not Applicable

Narrative Explanation:
Procurement dollars in the amount of $1.107 million support this effort to rehabilitate subway floors and arches at Scranton Army Ammunition Plant. The building infrastructures experience water leaks, which causes rebar to rust and sections of concrete to break and fall into active work areas. This project will perform structural repairs and install driveway waterproofing to avoid production interruption and water damage.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Replace Waste Treatment Facility, Production Shop

3. End Item Supported Model
120mm Mortars, M1, M795

4. Project Number: 5143702

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs	100					
B. Equipment Costs*	570					
C. Equipment Installation Costs	89					
D. Contractor Support Costs	19					
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs						
Total Costs	778					

H. Facility

1. Name: Scranton Army Ammunition Plant
2. Location: Scranton, Pennsylvania
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Jun/ 2014
3. Initial Project:	Mar/ 2014
4. Final Project Award:	Mar/ 2014
5. Construction Complete:	Dec/ 2014
6. Equipment Installation Complete:	Dec/ 2014
7. Prove Out Begins:	Dec/ 2014
8. Prove Out Complete:	Dec/ 2014

Narrative Explanation:
Procurement dollars in the amount of $0.778 million support the replacement of the waste treatment facility at Scranton Army Ammunition Plant (AAP). The current waste treatment facility is approximately 20 years old and replacement parts are difficult to produce or not available. The sand filter is ineffective which reduces the system efficiency. A new sewer permit has reduced the effluent limit for Zinc, and the existing system has problems maintaining proper levels when less than three bonderizer systems are running. This new treatment system will allow Scranton AAP to remain in compliance with the new sewer permit and avoid fines or penalties.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
External Wall Repairs (Mattes Ave/River Street) and Structural Repairs

3. End Item Supported Model
120mm Mortars, M1, M795

4. Project Number: 5163704

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs			2701		2701	
B. Equipment Costs*						
C. Equipment Installation Costs						
D. Contractor Support Costs			310		310	
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs			494		494	
Total Costs			3505		3505	

H. Facility

1. Name: Scranton Army Ammunition Plant
2. Location: Scranton, Pennsylvania
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones

	Month & Year
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Apr/ 2016
3. Initial Project:	Mar/ 2016
4. Final Project Award:	Mar/ 2016
5. Construction Complete:	Oct/ 2016
6. Equipment Installation Complete:	Not Applicable
7. Prove Out Begins:	Not Applicable
8. Prove Out Complete:	Not Applicable

Narrative Explanation:
FY 2016 Base procurement dollars in the amount of $3.505 million support exterior wall and structural repairs at Scranton Army Ammunition Plant. Effort will repair the exterior wall of the facility along Mattes Ave and River St and structural repairs to the subway and catacombs.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Quick Die Change for Press Lines

3. End Item Supported Model
120mm Mortars, M1, M795

4. Project Number: 5143707

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*	1600					
C. Equipment Installation Costs	393					
D. Contractor Support Costs	57					
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs	180					
Total Costs	2230					

H. Facility

1. Name: Scranton Army Ammunition Plant
2. Location: Scranton, Pennsylvania
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Oct/ 2014
3. Initial Project:	Sep/ 2014
4. Final Project Award:	Sep/ 2014
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Jul/ 2015
7. Prove Out Begins:	Jul/ 2015
8. Prove Out Complete:	Jul/ 2015

Narrative Explanation:
Procurement dollars in the amount of $2.230 million support the procurement and installation of quick die change tooling handling systems on three forge press lines at Scranton Army Ammunition Plant. This quick die change system will improve the plant's ability to produce smaller quantity lots in a cost effective manner and improve operational safety.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Saw Area Transformation

3. End Item Supported Model
120mm Mortars, 5”/54, M1, M107, M110, M795

4. Project Number: 5143719

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*	530					
C. Equipment Installation Costs	150					
D. Contractor Support Costs	20					
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs	50					
Total Costs	750					

H. Facility

1. Name: Scranton Army Ammunition Plant
2. Location: Scranton, Pennsylvania
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones

	Month & Year
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Oct/ 2014
3. Initial Project:	Aug/ 2014
4. Final Project Award:	Aug/ 2014
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Apr/ 2015
7. Prove Out Begins:	Apr/ 2015
8. Prove Out Complete:	May/ 2015

Narrative Explanation:
Procurement dollars in the amount of $0.750 million support the replacement of metal saws at Scranton Army Ammunition Plant. Replacement of the metal saws will decrease maintenance and tooling costs, decrease electrical and raw material costs and increase productivity.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Upgrade Nitrogen Gas Supply System

3. End Item Supported Model
120mm Mortars, 5”/54, M1, M107, M110, M795

4. Project Number: 5143720

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*	400					
C. Equipment Installation Costs	233					
D. Contractor Support Costs	27					
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs	40					
Total Costs	700					

H. Facility

1. Name: Scranton Army Ammunition Plant
2. Location: Scranton, Pennsylvania
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones

	Month & Year
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Aug/ 2014
3. Initial Project:	May/ 2014
4. Final Project Award:	May/ 2014
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Jan/ 2015
7. Prove Out Begins:	Jan/ 2015
8. Prove Out Complete:	Jan/ 2015

Narrative Explanation:
Procurement dollars in the amount of $0.700 million support the procurement and installation of three nitrogen generators and one air compressor for the heat treat and forging operations at Scranton Army Ammunition Plant. This effort will reduce costs associated with purchasing liquid nitrogen, decrease scrap, and increase productivity in the heat treat and forging operations.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Boiler for Bonderizers

3. End Item Supported Model
120mm Mortars, 5”/54, M1, M107, M110, M795

4. Project Number: 5143722

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*	275					
C. Equipment Installation Costs	260					
D. Contractor Support Costs	32					
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs	55					
Total Costs	622					

H. Facility

1. Name: Scranton Army Ammunition Plant
2. Location: Scranton, Pennsylvania
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones

	Month & Year
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Oct/ 2014
3. Initial Project:	Aug/ 2014
4. Final Project Award:	Aug/ 2014
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Feb/ 2015
7. Prove Out Begins:	Feb/ 2015
8. Prove Out Complete:	Feb/ 2015

Narrative Explanation:
Procurement dollars in the amount of $0.622 million support project to relocate the boiler closer to the bonderizers at Scranton Army Ammunition Plant. The steam boilers that feed the bonderizers are located 1,200 feet from where steam is required. Project will eliminate several hundred feet of piping, thus reducing the amount of steam lost in transportation and maintenance costs.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Replace Forge Shop Exterior Wall Siding

3. End Item Supported Model
120mm Mortars, 5”/54, M1, M107, M110, M795

4. Project Number: 5143731

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs	450					
B. Equipment Costs*						
C. Equipment Installation Costs	142					
D. Contractor Support Costs	66					
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs	66					
Total Costs	724					

H. Facility

1. Name: Scranton Army Ammunition Plant
2. Location: Scranton, Pennsylvania
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones

	Month & Year
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Jan/ 2015
3. Initial Project:	Sep/ 2014
4. Final Project Award:	Sep/ 2014
5. Construction Complete:	Jun/ 2015
6. Equipment Installation Complete:	Jun/ 2015
7. Prove Out Begins:	Not Applicable
8. Prove Out Complete:	Not Applicable

Narrative Explanation:
Procurement dollars in the amount of $0.724 million support removal and replacement of transite panels from the Forge Shop at Scranton Army Ammunition Plant. The installation of new panels will eliminate personnel exposure to asbestos.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Rehabilitate Storm Water Collection and Treatment System

3. End Item Supported Model
120mm Mortars, 5”/54, M1, M107, M110, M795

4. Project Number: 5143732

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*	250					
C. Equipment Installation Costs	300					
D. Contractor Support Costs	38					
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs	85					
Total Costs	673					

H. Facility

1. Name: Scranton Army Ammunition Plant
2. Location: Scranton, Pennsylvania
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones

	Month & Year
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Sep/ 2014
3. Initial Project:	Aug/ 2014
4. Final Project Award:	Aug/ 2014
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Jan/ 2015
7. Prove Out Begins:	Jan/ 2015
8. Prove Out Complete:	Jan/ 2015

Narrative Explanation:
Procurement dollars in the amount of $0.673 million support a new storm water collection and treatment system at Scranton Army Ammunition Plant (AAP). The new treatment system will allow Scranton AAP to avoid fines by complying with storm water and non-contact cooling water National Pollutant Discharge Elimination System permit and avoid paying any penalties.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Replace and Upgrade Shell Rotating Band Welders

3. End Item Supported Model
M795, XM1128

4. Project Number: 5143767

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*	5200					
C. Equipment Installation Costs	1001					
D. Contractor Support Costs	175					
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs	750					
Total Costs	7126					

H. Facility

1. Name: Scranton Army Ammunition Plant
2. Location: Scranton, Pennsylvania
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Oct/ 2014
3. Initial Project:	Sep/ 2014
4. Final Project Award:	Sep/ 2014
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Jun/ 2016
7. Prove Out Begins:	Jun/ 2016
8. Prove Out Complete:	Jun/ 2016

Narrative Explanation:
Procurement dollars in the amount of $7.126 million support project to provide Scranton Army Ammunition Plant with the highest quality welded rotating bands, on the latest state-of-the-art equipment available, in the most cost effective and efficient manner. It will increase the capacity and capability to weld rotating bands on multiple projectile bodies simultaneously.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
New Small Batch Heat Treat

3. End Item Supported Model
120mm Mortars, 5”/54, M1, M795

4. Project Number: 5143771

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*	3750					
C. Equipment Installation Costs	988					
D. Contractor Support Costs	145					
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs	460					
Total Costs	5343					

H. Facility

1. Name: Scranton Army Ammunition Plant
2. Location: Scranton, Pennsylvania
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Oct/ 2014
3. Initial Project:	Sep/ 2014
4. Final Project Award:	Sep/ 2014
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Sep/ 2015
7. Prove Out Begins:	Sep/ 2015
8. Prove Out Complete:	Sep/ 2015

Narrative Explanation:
Procurement dollars in the amount of $5.343 million support project to install a Small Batch Heat Treatment Furnace in the Forge Shop using an area created by the Verson Press System removal project at Scranton Army Ammunition Plant. The new Heat Treatment System will be a package system and include all necessary material handling and support equipment for operation. The new heat treat system's ability to heat treat smaller quantities will decrease overheads associated with the Heat Treat Building.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015	
2. Project Title/Type New Rough Turn Lathes	3. End Item Supported Model 120mm Mortars, 5”/54, M1, M795

4. Project Number:	5. Annual Capacity Before (1-8-5):	6. Annual Capacity After (1-8-5):
5143772	0	0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*	1180					
C. Equipment Installation Costs	300					
D. Contractor Support Costs	68					
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs	376					
Total Costs	1924					

H. Facility

1. Name: Scranton Army Ammunition Plant
2. Location: Scranton, Pennsylvania
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Oct/ 2014
3. Initial Project:	Sep/ 2014
4. Final Project Award:	Sep/ 2014
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Dec/ 2015
7. Prove Out Begins:	Dec/ 2015
8. Prove Out Complete:	Dec/ 2015

Narrative Explanation:
Procurement dollars in the amount of $1.924 million support project to install a new rough turn lathes in the Forge Shop using an area created by the Verson Press System removal project at Scranton Army Ammunition Plant. The new lathes will be a package system and include all necessary material handling and support equipment for operation. Project will eliminate the need to ship or transport forgings to Production Shop for rough machining and shot blasting prior to heat treat.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Modernize Forge Shop Exhaust

3. End Item Supported Model
120mm Mortars, M1, M107, M110, M795, MK64

4. Project Number: 5143917

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs	300					
B. Equipment Costs*	1500					
C. Equipment Installation Costs	435					
D. Contractor Support Costs	74					
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs	179					
G. Other Costs						
Total Costs	2488					

H. Facility

1. Name: Scranton Army Ammunition Plant
2. Location: Scranton, Pennsylvania
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones

	Month & Year
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Dec/ 2014
3. Initial Project:	Aug/ 2014
4. Final Project Award:	Aug/ 2014
5. Construction Complete:	Jan/ 2015
6. Equipment Installation Complete:	Jun/ 2015
7. Prove Out Begins:	Jun/ 2015
8. Prove Out Complete:	Jun/ 2015

Narrative Explanation:
Procurement dollars in the amount of $2.488 million support effort to modernize the forge shop exhaust at Scranton Army Ammunition Plant. This effort will reduce the chance of production interruption due to a failed exhaust system, and improve air quality and personnel health.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Relocate 800 lb/hr Induction Heater

3. End Item Supported Model
120mm Mortars, M1, M107, M110, M795, MK64

4. Project Number: 5165048

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*			45		45	
C. Equipment Installation Costs			170		170	
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs			45		45	
G. Other Costs						
Total Costs			260		260	

H. Facility

1. Name: Scranton Army Ammunition Plant
2. Location: Scranton, Pennsylvania
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Not Applicable
3. Initial Project:	Mar/ 2016
4. Final Project Award:	Mar/ 2016
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Jun/ 2016
7. Prove Out Begins:	Jul/ 2016
8. Prove Out Complete:	Jul/ 2016

Narrative Explanation:
FY 2016 Base procurement dollars in the amount of $0.260 million support modernization upgrades to Scranton Army Ammunition Plant's Forge Press and Billet Heating Systems. This project will relocate the 800 pound/hr Induction Heater to support the Bliss III press system.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Relocate Rough Turn Lathes & Welders to the Subway

3. End Item Supported Model
120mm Mortars, M1, M107, M110, M795, MK64

4. Project Number: 5165049

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs			55		55	
B. Equipment Costs*			45		45	
C. Equipment Installation Costs			115		115	
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs			45		45	
Total Costs			260		260	

H. Facility

1. Name: Scranton Army Ammunition Plant
2. Location: Scranton, Pennsylvania
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Mar/ 2016
3. Initial Project:	Mar/ 2016
4. Final Project Award:	Mar/ 2016
5. Construction Complete:	Apr/ 2016
6. Equipment Installation Complete:	Jul/ 2016
7. Prove Out Begins:	Aug/ 2016
8. Prove Out Complete:	Aug/ 2016

Narrative Explanation:
FY 2016 Base procurement dollars in the amount of $0.260 million support modernization upgrades to Scranton Army Ammunition Plant's Rough Turn Machining Cell and Welder systems. This project will move existing Rough Turn Lathes and Rotating Band Welders in the facility into the Subway under the Forge Shop. This project will also modify the structure of the Subway under the Forge Shop to allow for this effort.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Retrofit Erie IV Press for Nosing Capability

3. End Item Supported Model
120mm Mortars, M1, M107, M110, M795, MK64

4. Project Number: 5165050

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*			110		110	
C. Equipment Installation Costs			340		340	
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs			589		589	
Total Costs			1039		1039	

H. Facility

1. Name: Scranton Army Ammunition Plant
2. Location: Scranton, Pennsylvania
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Mar/ 2016
3. Initial Project:	Mar/ 2016
4. Final Project Award:	Mar/ 2016
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	May/ 2016
7. Prove Out Begins:	Dec/ 2016
8. Prove Out Complete:	Dec/ 2016

Narrative Explanation:
FY 2016 Base procurement dollars in the amount of $1.039 million support modernization upgrades to Scranton Army Ammunition Plant's Erie IV Press system. This project will use existing equipment at the facility to retrofit the Erie IV Press for Nosing operations and develop appropriate standards and documents for use of this system.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Forge Shop Addition and Flex Cell Relocation

3. End Item Supported Model
120mm Mortars, M1, M107, M110, M795, MK64

4. Project Number: 5165051

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs			730		730	
B. Equipment Costs*			320		320	
C. Equipment Installation Costs			110		110	
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs			139		139	
Total Costs			1299		1299	

H. Facility

1. Name: Scranton Army Ammunition Plant
2. Location: Scranton, Pennsylvania
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Mar/ 2016
3. Initial Project:	Mar/ 2016
4. Final Project Award:	Mar/ 2016
5. Construction Complete:	Jun/ 2016
6. Equipment Installation Complete:	Aug/ 2016
7. Prove Out Begins:	Sep/ 2016
8. Prove Out Complete:	Sep/ 2016

Narrative Explanation:
FY 2016 Base procurement dollars in the amount of $1.299 million support modernization upgrades to Scranton Army Ammunition Plant's Forge Shop and Flex Cell. This project will build an addition onto the Forge Shop along the steel yard to house the equipment from the Flex Cell and relocate that equipment to the new addition.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Engineering in Support of Provision of Industrial Facilities

3. End Item Supported Model
Multiple

4. Project Number: 5XX3046

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*						
C. Equipment Installation Costs						
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs	3263	4453	4558		4558	
Total Costs	3263	4453	4558		4558	

H. Facility

1. Name: Various Army Ammunition Plants
2. Location: Multiple
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Not Applicable
3. Initial Project:	Not Applicable
4. Final Project Award:	Not Applicable
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Not Applicable
7. Prove Out Begins:	Not Applicable
8. Prove Out Complete:	Not Applicable

Narrative Explanation:
FY 2016 Base procurement dollars in the amount of $4.558 million support the procurement of processing and engineering support efforts, including technical and pre-design analyses of future modernization investments for Production Base Support program execution.

Exhibit P-25, Production Support and Industrial Facilities Cost Analysis *(Dollars in Thousands)*

1. Date: February 2015

2. Project Title/Type
Replace Test Instrumentation in Production Acceptance Testing (Ammunition)

3. End Item Supported Model
Initial Production Acceptance & Product Improvements for Ammunition

4. Project Number: 5XX5060

5. Annual Capacity Before (1-8-5): 0

6. Annual Capacity After (1-8-5): 0

Element of Cost	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
A. Construction Costs						
B. Equipment Costs*						
C. Equipment Installation Costs						
D. Contractor Support Costs						
E. Corps of Engineers Support Costs						
F. Other In-House Support Costs						
G. Other Costs	2449	1525	1482		1482	
Total Costs	2449	1525	1482		1482	

H. Facility

1. Name: Yuma Proving Ground / Aberdeen Test Center
2. Location: Yuma, Arizona / Aberdeen, Maryland
3. Type (GOGO, GOCO, COCO): GOCO

I. Related Projects

Project Number	Title	FY & Appn	Value ($ Mil)	Facing	Start Date	Compl Date
	Not Applicable					

J. Principal Milestones	**Month & Year**
1. Concept Design Complete:	Not Applicable
2. Final Design Complete:	Not Applicable
3. Initial Project:	Not Applicable
4. Final Project Award:	Not Applicable
5. Construction Complete:	Not Applicable
6. Equipment Installation Complete:	Not Applicable
7. Prove Out Begins:	Not Applicable
8. Prove Out Complete:	Not Applicable

Narrative Explanation:
FY 2016 Base procurement dollars in the amount of $1.482 million replace analog video scoring and data collection equipment with a digital capability at the multipurpose impact firing range, which is used for testing munitions; acquires precision, high-dynamic, rugged sensors to include displacement, pyro-shock/acceleration, infrared flash detector, and pressure transducers; replaces outdated Lot Acceptance Test/Munition instrumentation, calibration equipment, and test sets with modern components (includes firing boxes, ballistic fuse test sets, Rocket Pad Test Sets, boresight Targets, etc.) and procures high speed digital imaging cameras for ammunition testing that will follow a direct fire projectile's flight path in lieu of using many cameras lined along the flight path. The majority of the instrumentation being upgraded or replaced is obsolete and has met or exceeded its economic life. This instrumentation is required to ensure complete and accurate test data is collected and safety and environmental hazards are minimized. Benefits of this project include increased test efficiencies and decreased costs and risks to Army Program Managers.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 2 / Ammunition production base support

P-1 Item Nomenclature
Maintenance Of Inactive Facilities (EP1500)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	512.2	5.8	3.9	6.0		6.0	6.2	6.3	6.4	6.5		553.4
Less PY Adv Proc												
Net Proc P1	512.2	5.8	3.9	6.0		6.0	6.2	6.3	6.4	6.5		553.4
Plus CY Adv Proc												
Total Proc Cost	512.2	5.8	3.9	6.0		6.0	6.2	6.3	6.4	6.5		553.4
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
Procurement funds will also support the Maintenance of Inactive Facilities (MIF) to include utilities, buildings, plant equipment, special tooling, and special test equipment being retained to support future production requirements. Additional efforts include support of associated MIF costs such as grounds maintenance, fire protection, equipment security, and administrative support.

Justification:
FY 2016 Base procurement dollars in the amount of $6.037 million support the care and maintenance of laid-away equipment and facilities at active and inactive ammunition installations.

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 2 / Ammunition production base support	P-1 Line Item Nomenclature: Maintenance Of Inactive Facilities (EP1500)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
Support																
INACTIVE LINES AT ACTIVE PLANTS																
Crane Army Ammunition Activity		307			309			310						310		
Hawthorne Army Depot		54			97			99						99		
Holston Army Ammunition Plant (AAP)		19			52			53						53		
Iowa AAP		302			458			735						735		
McAlester AAP		155			158			161						161		
Milan AAP		197			165			168						168		
Pine Bluff Arsenal		333			313			313						313		
Quad City Cartridge Case Facility		6			283			425						425		
Radford AAP		219			429			437						437		
Scranton AAP					52			53						53		
Various		4207			1602			3283						3283		
SUBTOTAL		**5799**			**3918**			**6037**						**6037**		
Total		**5799**			**3918**			**6037**						**6037**		
Total:		**5799**			**3918**			**6037**						**6037**		

Exhibit P-26, Maintenance of Inactive Industrial Facilities	Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army/2/Ammunition production base support	Date: February 2015

Inactive Lines at Active Plants			Facility: Crane Army Ammunition Activity			Contractor: Not Applicable			
Funding	**FY 2014**	**FY 2015**	**FY 2016 Base**	**FY 2016 OCO**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**
MAINTENANCE	307	309	310		310				
RECURRING									
ENVIRONMENTAL									
OTHER									
TOTAL FUNDING	307	309	310		310				

Description: FY 2016 Base procurement dollars in the amount of $0.310 million support the care and maintenance of laid-away ammunition industrial facilities and equipment at Crane Army Ammunition Activity. This effort includes non-severable equipment, plant equipment, special tooling, and special test equipment being retained as part of approved plant equipment packages, which are required to support future replenishment requirements.

Inactive Lines at Active Plants			Facility: Hawthorne Army Depot			Contractor: Day & Zimmerman			
Funding	**FY 2014**	**FY 2015**	**FY 2016 Base**	**FY 2016 OCO**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**
MAINTENANCE	54	97	99		99				
RECURRING									
ENVIRONMENTAL									
OTHER									
TOTAL FUNDING	54	97	99		99				

Description: FY 2016 Base procurement dollars in the amount of $0.099 million support the maintenance and long-term storage of reserved unique production equipment with long replacement lead times at Hawthorne Army Depot.

Inactive Lines at Active Plants			Facility: Holston Army Ammunition Plant			Contractor: BAE Systems Ordnance			
Funding	**FY 2014**	**FY 2015**	**FY 2016 Base**	**FY 2016 OCO**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**
MAINTENANCE	19	52	53		53				
RECURRING									
ENVIRONMENTAL									
OTHER									
TOTAL FUNDING	19	52	53		53				

Description: FY 2016 Base procurement dollars in the amount of $0.053 million support the care and maintenance of laid-away critical production facilities at Holston Army Ammunition Plant. This effort includes periodic inspections of equipment and buildings, corrective maintenance, preservation efforts, asbestos management, and minimum maintenance of specialized production equipment.

Inactive Lines at Active Plants	Facility: Iowa Army Ammunition Plant	Contractor: American Ordnance

Exhibit P-26, Maintenance of Inactive Industrial Facilities	Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army/2/Ammunition production base support	Date: February 2015

Funding	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
MAINTENANCE	99	147	250		250				
RECURRING	132	206	300		300				
ENVIRONMENTAL	71	105	185		185				
OTHER									
TOTAL FUNDING	302	458	735		735				

Description: FY 2016 Base procurement dollars in the amount of $0.735 million support the care and maintenance of laid-away critical production facilities at Iowa Army Ammunition Plant. They include periodic inspections of equipment and buildings, corrective maintenance to maintain weather-tightness of buildings, preservation touchup, asbestos management, and minimum maintenance of specialized production equipment. These efforts are responsible for associated MIF costs and provide for monitoring of excess facilities until they can be disposed.

Inactive Lines at Active Plants	Facility: McAlester Army Ammunition Plant	Contractor: Not Applicable

Funding	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
MAINTENANCE	80	83	85		85				
RECURRING	75	75	76		76				
ENVIRONMENTAL									
OTHER									
TOTAL FUNDING	155	158	161		161				

Description: FY 2016 Base procurement dollars in the amount of $0.161 million support the care and maintenance of laid-away ammunition industrial facilities to include utilities, buildings, non-severable equipment, plant equipment, special tooling, and special test equipment being retained to support potential future requirements at McAlester Army Ammunition Plant. This effort also includes associated maintenance of inactive facilities costs such as grounds maintenance, fire protection, equipment security, and administrative support.

Inactive Lines at Active Plants	Facility: Milan Army Ammunition Plant	Contractor: American Ordnance

Funding	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
MAINTENANCE	116	83	83		83				
RECURRING	32	33	36		36				
ENVIRONMENTAL	49	49	49		49				
OTHER									
TOTAL FUNDING	197	165	168		168				

Description: FY 2016 Base procurement dollars in the amount of $0.168 million support the care and maintenance of laid-away critical production facilities at Milan Army Ammunition Plant. These activities include periodic inspections of equipment and buildings, corrective maintenance, preservation efforts, plant equipment, special tooling, and special test equipment being retained to support potential future requirements. This effort includes asbestos management, minimum maintenance of specialized production equipment and associated MIF costs such as grounds maintenance, fire protection, equipment security, and administrative support.

Exhibit P-26, Maintenance of Inactive Industrial Facilities	Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army/2/Ammunition production base support	Date: February 2015

Inactive Lines at Active Plants			Facility: Pine Bluff Arsenal			Contractor: Not Applicable			
Funding	**FY 2014**	**FY 2015**	**FY 2016 Base**	**FY 2016 OCO**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**
MAINTENANCE	173	163	160		160				
RECURRING	160	150	153		153				
ENVIRONMENTAL									
OTHER									
TOTAL FUNDING	333	313	313		313				

Description: FY 2016 Base procurement dollars in the amount of $0.313 million support the care and maintenance of laid-away ammunition industrial facilities to include utilities, buildings, non-severable equipment, plant equipment, special tooling and special test equipment being retained to support potential future requirements at Pine Bluff Arsenal. These funds also support associated MIF costs such as grounds maintenance, fire protection, equipment security, and administrative support.

Inactive Lines at Active Plants			Facility: Quad City Cartridge Case Facility			Contractor: Not Applicable			
Funding	**FY 2014**	**FY 2015**	**FY 2016 Base**	**FY 2016 OCO**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**
MAINTENANCE		259	400		400				
RECURRING	6	24	25		25				
ENVIRONMENTAL									
OTHER									
TOTAL FUNDING	6	283	425		425				

Description: FY 2016 Base procurement dollars in the amount of $0.425 million support the care and maintenance of laid-away deep draw cartridge case production line located at the Quad City Cartridge Case Facility in Rock Island, IL. This effort includes periodic inspections of equipment and buildings, corrective maintenance, utilities, preservation efforts, and minimum maintenance of specialized production equipment.

Inactive Lines at Active Plants			Facility: Radford Army Ammunition Plant			Contractor: BAE Systems Ordnance			
Funding	**FY 2014**	**FY 2015**	**FY 2016 Base**	**FY 2016 OCO**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**
MAINTENANCE	75	129	134		134				
RECURRING	111	257	258		258				
ENVIRONMENTAL	33	43	45		45				
OTHER									
TOTAL FUNDING	219	429	437		437				

Description: FY 2016 Base procurement dollars in the amount of $0.437 million support the care and maintenance of laid-away critical production facilities at Radford Army Ammunition Plant. They include periodic inspections of equipment and buildings, corrective maintenance to maintain weather-tightness of buildings, preservation efforts, asbestos management, and minimum maintenance of specialized production equipment. These efforts support associated MIF costs and provide monitoring of excess facilities.

Exhibit P-26, Maintenance of Inactive Industrial Facilities	Appropriation / Budget Activity / Serial No: Procurement of Ammunition, Army/2/Ammunition production base support	Date: February 2015

Inactive Lines at Active Plants			Facility: Scranton Army Ammunition Plant			Contractor: General Dynamics Ordnance and Tactical System (GD-OTS)			
Funding	**FY 2014**	**FY 2015**	**FY 2016 Base**	**FY 2016 OCO**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**
MAINTENANCE		52	53		53				
RECURRING									
ENVIRONMENTAL									
OTHER									
TOTAL FUNDING		52	53		53				

Description: FY 2016 Base procurement dollars in the amount of $0.053 million support the care and maintenance of large caliber metal parts equipment at Scranton Army Ammunition Plant. This effort includes periodic inspections of equipment and buildings, corrective maintenance, preservation efforts and minimum maintenance of specialized production equipment and associated storage costs.

Inactive Lines at Active Plants			Facility: Various			Contractor: Various			
Funding	**FY 2014**	**FY 2015**	**FY 2016 Base**	**FY 2016 OCO**	**FY 2016**	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**
MAINTENANCE		850	1733		1733				
RECURRING									
ENVIRONMENTAL		752	1550		1550				
OTHER	4207								
TOTAL FUNDING	4207	1602	3283		3283				

Description: FY 2016 Base procurement dollars in the amount of $3.283 million support the maintenance and long-term storage of reserved unique production equipment at various facilities.

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 2 / Ammunition production base support

P-1 Item Nomenclature
Layaway Of Industrial Facilities (EP2000)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	665.7	17.3	7.0	10.5		10.5	11.0	11.2	11.5	11.6	Continuing	Continuing
Less PY Adv Proc												
Net Proc P1	665.7	17.3	7.0	10.5		10.5	11.0	11.2	11.5	11.6	Continuing	Continuing
Plus CY Adv Proc												
Total Proc Cost	665.7	17.3	7.0	10.5		10.5	11.0	11.2	11.5	11.6	Continuing	Continuing
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C											Continuing	Continuing

Description:
This budget line provides funding for preservation, storage and movement of real property facilities and equipment required for anticipated future requirements at active and inactive Army ammunition installations, also known as Layaway of Industrial Facilities (LIF) activities. Funding will also support consolidation of laid-away production equipment and redistribution of production equipment that cannot be stored on-site. Layaway efforts will also include retaining critical operational and technical knowledge of production equipment, such as engineering designs, process data and control manufacturing practices. Efforts will also include safety-related decontamination, disposal and demolition of production equipment and facilities, and environmental site assessments.

Justification:
FY 2016 Base procurement dollars in the amount of $10.464 million support the protection and preservation of industrial facilities at active and inactive Army ammunition installations and equipment that is no longer required for current production but must be retained for future peacetime or emergency production needs to include the first phase of the stabilization and layaway of Area A at Holston AAP. LIF efforts also include reducing the industrial base footprint by demolishing facilities and disposing equipment no longer required at the Army ammunition installations.

Exhibit P-40C, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army/2/Ammunition production base support

P-1 Item Nomenclature
Layaway Of Industrial Facilities (EP2000)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

Location	Project	Project Title	Type	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
Active and Inactive Government-Owned Facilities / Various	5XX8000	Layaway of Industrial Facilities, Minor Efforts Less Than $0.100 Million	GOCO	0.018	0.028	0.297		0.297	
Holston Army Ammunition Plant / Kingsport, Tennessee	5168060	Stabilization of HSAAP Area A, Phase 1	GOCO			3.000		3.000	
Holston Army Ammunition Plant / Kingsport, Tennessee	5168067	Layaway of Magnesium Nitrate Facility	GOCO			1.889		1.889	
Iowa Army Ammunition Plant / Middletown, Iowa	5XX8049	Decontamination and Disposal of Excess Production Equipment	GOCO			1.100		1.100	
Iowa Army Ammunition Plant / Middletown, Iowa	5XX8051	Facility Disposal/Demolition	GOCO		2.077				
Lake City Army Ammunition Plant / Independence, Missouri	5158056	Demolition of Excess Buildings	GOCO		3.659				
Milan Army Ammunition Plant / Milan, Tennessee	5148052	Facility Disposal/Demolition	GOCO	0.138					
Milan Army Ammunition Plant / Milan, Tennessee	5158058	Transition Line H to Modified Caretaker	GOCO		0.312				
Milan Army Ammunition Plant / Milan, Tennessee	5158059	Transition Line O to Modified Caretaker	GOCO		0.312				
Milan Army Ammunition Plant / Milan, Tennessee	5168061	Layaway Area ZZ (Test Area)	GOCO			0.173		0.173	
Milan Army Ammunition Plant / Milan, Tennessee	5168063	Layaway Line A	GOCO			0.445		0.445	
Pine Bluff Arsenal / Pine Bluff, Arkansas	5168035	Demolition of Inactive White Phosphorous Production Tanks, Ph 2	GOGO			1.788		1.788	
Pine Bluff Arsenal / Pine Bluff, Arkansas	5168045	Removal/Disposal of Inactive White Phosphorous Equipment	GOGO			0.419		0.419	
Pine Bluff Arsenal / Pine Bluff, Arkansas	5148055	Remove/Dispose of Hexachlorethane (HC)/Zinc Chloride Mix Equipment, Building 34-640	GOGO	1.395					
Quad City Cartridge Case Facility / Rock Island, Illinois	51X8053	Layaway of Steel Cartridge Case Equipment	GOCO	6.681					
Radford Army Ammunition Plant / Radford, Virginia	5XX8440	Decontamination and Disposal of Facilities/Excess Production Equipment	GOCO	6.589		0.730		0.730	
Radford Army Ammunition Plant / Radford, Virginia	5XX8047	Remove Nitrocellulose (NC) Hill Tanks	GOCO	1.193					
Scranton Army Ammunition Plant / Scranton, Pennsylvania	5143721	Removal of Verson Press System	GOCO	1.292					

Exhibit P-40C, Budget Item Justification Sheet

Date:
February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army/2/Ammunition production base support

P-1 Item Nomenclature
Layaway Of Industrial Facilities (EP2000)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

Location	Project	Project Title	Type	FY 14	FY 15	FY 16 Base	FY 16 OCO	FY 16	FY 17
Scranton Army Ammunition Plant / Scranton, Pennsylvania	5158068	Layaway of 120mm Mortar Line	GOCO		0.600				
Scranton Army Ammunition Plant / Scranton, Pennsylvania	5168072	Removal of the John Deer Furnace	GOCO			0.623		0.623	
		Total		17.306	6.988	10.464		10.464	

Exhibit P-17, Layaway and/or Distribution

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army/2/Ammunition production base support

P-1 Item Nomenclature
Layaway Of Industrial Facilities (EP2000)

Project: 5XX8000	FY 2014	FY 2015	FY Base 2016	FY OCO 2016	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
—	0.018	0.028	0.297		0.297				

Title: Layaway of Industrial Facilities, Minor Efforts Less Than $0.100 Million

Description: FY 2016 Base procurement dollars in the amount of $0.297 million support various minor efforts at active and inactive facilities that preserve and store industrial facilities for reserve capacity.

Manufacturer (Name and Location)	Production Lines being laid away (Include Location)	Production Ends
Active and Inactive Government-Owned Facilities / Various	Various	
Layaway Cost: 0.297	**Other Costs:**	**Annual Maintenance Cost:**

Project: 5168060	FY 2014	FY 2015	FY Base 2016	FY OCO 2016	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
—			3.000		3.000				

Title: Stabilization of HSAAP Area A, Phase 1

Description: FY 2016 Base Procurement dollars in the amount of $3.000 million support the stabilization and layaway of Area A at Holston Army Ammunition Plant. Product operations in Area A are forecasted for termination in 2015. This effort will perform the necessary requirements to place Area A buildings and tank farms into a stabilized and layaway condition.

Manufacturer (Name and Location)	Production Lines being laid away (Include Location)	Production Ends
Holston Army Ammunition Plant / Kingsport, Tennessee	Buildings: 2-A, 6-A, 7-A, TF-27 & various utilities to include 33-A, 36-A, 39-A,29-A,11-A & 12-A	
Layaway Cost: 3.000	**Other Costs:**	**Annual Maintenance Cost:**

Project: 5168067	FY 2014	FY 2015	FY Base 2016	FY OCO 2016	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
—			1.889		1.889				

Title: Layaway of Magnesium Nitrate Facility

Description: FY 2016 Base Procurement dollars in the amount of $1.889 million support layaway of the Magnesium Nitrate Facility at Holston Army Ammunition Plant (AAP). The facility was removed from layaway status in 2012 to support production of strong nitric acid (SNA) at Holston AAP. In May 2012, the primary supplier of SNA experienced an accidental explosion resulting in a two year delay in production. This layaway effort will assure preservation for future reactivation.

Manufacturer (Name and Location)	Production Lines being laid away (Include Location)	Production Ends
Holston Army Ammunition Plant / Kingsport, Tennessee	Magnesium Nitrate Unit #5	September 2015
Layaway Cost: 1.889	**Other Costs:**	**Annual Maintenance Cost:**

Project: 5XX8049	FY 2014	FY 2015	FY Base 2016	FY OCO 2016	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
—			1.100		1.100				

Title: Decontamination and Disposal of Excess Production Equipment

Description: FY 2016 Base procurement dollars in the amount of $1.100 million support decontamination and disposal of excess equipment no longer required for production at Iowa Army Ammunition Plant (AAP). Decontamination and disposal of inactive equipment enables Iowa AAP to re-use existing storage facilities for future production.

Manufacturer (Name and Location)	Production Lines being laid away (Include Location)	Production Ends
Iowa Army Ammunition Plant / Middletown, Iowa	Various	
Layaway Cost: 1.100	**Other Costs:**	**Annual Maintenance Cost:**

Project: 5XX8051	FY 2014	FY 2015	FY Base 2016	FY OCO 2016	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
—		2.077							

Exhibit P-17, Layaway and/or Distribution

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army/2/Ammunition production base support

P-1 Item Nomenclature
Layaway Of Industrial Facilities (EP2000)

Title: Facility Disposal/Demolition

Description: Procurement dollars in the amount of $2.077 million support efforts to decontaminate, remove asbestos and demolish facilities plant wide due to unsafe conditions and environmental risks at Iowa Army Ammunition Plant.

Manufacturer (Name and Location)	**Production Lines being laid away (Include Location)**	**Production Ends**
Iowa Army Ammunition Plant / Middletown, Iowa	Various	
Layaway Cost: 2.077	**Other Costs:**	**Annual Maintenance Cost:**

Project: 5158056	FY 2014	FY 2015	FY Base 2016	FY OCO 2016	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
---		3.659							

Title: Demolition of Excess Buildings

Description: Procurement dollars in the amount of $3.659 million support effort to demolish facilities plant wide due to unsafe conditions and environmental risks at Lake City Army Ammunition Plant.

Manufacturer (Name and Location)	**Production Lines being laid away (Include Location)**	**Production Ends**
Lake City Army Ammunition Plant / Independence, Missouri	Various	
Layaway Cost: 3.659	**Other Costs:**	**Annual Maintenance Cost:**

Project: 5148052	FY 2014	FY 2015	FY Base 2016	FY OCO 2016	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
---	0.138								

Title: Facility Disposal/Demolition

Description: Procurement dollars in the amount of $0.138 million support efforts to decontaminate, remove asbestos, and demolish building J-139, due to unsafe conditions and environmental risks, at Milan Army Ammunition Plant.

Manufacturer (Name and Location)	**Production Lines being laid away (Include Location)**	**Production Ends**
Milan Army Ammunition Plant / Milan, Tennessee		
Layaway Cost: 0.138	**Other Costs:**	**Annual Maintenance Cost:**

Project: 5158058	FY 2014	FY 2015	FY Base 2016	FY OCO 2016	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
---		0.312							

Title: Transition Line H to Modified Caretaker

Description: Procurement dollars in the amount of $0.312 million support efforts to transition Line H at Milan Army Ammunition Plant (AAP) to modified caretaker. Efforts will decontaminate to level 5X condition and dispose of all excess production equipment. Efforts will also retain selected equipment and transfer the items to a layaway storage facility at Milan AAP to preserve for future production capacity. In December 2011, production of ignition cartridges and propelling charges for 60mm and 81mm mortars was shut down at Line H. Production of these items has been transferred to Iowa Army Ammunition Plant.

Manufacturer (Name and Location)	**Production Lines being laid away (Include Location)**	**Production Ends**
Milan Army Ammunition Plant / Milan, Tennessee	60mm and 81mm Mortars Line H	
Layaway Cost: 0.312	**Other Costs:**	**Annual Maintenance Cost:**

Project: 5158059	FY 2014	FY 2015	FY Base 2016	FY OCO 2016	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
---		0.312							

Title: Transition Line O to Modified Caretaker

Description: Procurement dollars in the amount of $0.312 million support transition of Line O at Milan Army Ammunition Plant to modified caretaker. Effort will decontaminate and dispose of all excess production equipment. Efforts will also retain selected production equipment and transfer the items to a layaway storage facility at Milan AAP to preserve for future production capacity. In December 2011, production and

Exhibit P-17, Layaway and/or Distribution

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army/2/Ammunition production base support

P-1 Item Nomenclature
Layaway Of Industrial Facilities (EP2000)

demilitarization of various ammunition components was shut down at Line O. Production of these items has been transferred to Iowa Army Ammunition Plant.

Manufacturer (Name and Location)	**Production Lines being laid away (Include Location)**	**Production Ends**
Milan Army Ammunition Plant / Milan, Tennessee	Various Ammunition Components Line O	
Layaway Cost: 0.312	**Other Costs:**	**Annual Maintenance Cost:**

Project: 5168061	FY 2014	FY 2015	FY Base 2016	FY OCO 2016	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Layaway			0.173		0.173				

Title: Layaway Area ZZ (Test Area)

Description: FY 2016 Base procurement dollars in the amount of $0.173 million support layaway of Area ZZ buildings and equipment at Milan Army Ammunition Plant. Effort is required to maintain production readiness for 40MM grenade test fire.

Manufacturer (Name and Location)	**Production Lines being laid away (Include Location)**	**Production Ends**
Milan Army Ammunition Plant / Milan, Tennessee		
Layaway Cost: 0.173	**Other Costs:**	**Annual Maintenance Cost:**

Project: 5168063	FY 2014	FY 2015	FY Base 2016	FY OCO 2016	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Layaway			0.445		0.445				

Title: Layaway Line A

Description: FY 2016 Base procurement dollars in the amount of $0.445 million support layaway of Line A buildings and equipment at Milan Army Ammunition Plant. Effort will maintain production readiness for 40mm grenade pressing and 155mm Improved Conventional Munitions (ICM) artillery shell and Multiple Launch Rocket System (MLRS) download operations.

Manufacturer (Name and Location)	**Production Lines being laid away (Include Location)**	**Production Ends**
Milan Army Ammunition Plant / Milan, Tennessee		
Layaway Cost: 0.445	**Other Costs:**	**Annual Maintenance Cost:**

Project: 5168035	FY 2014	FY 2015	FY Base 2016	FY OCO 2016	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Layaway			1.788		1.788				

Title: Demolition of Inactive White Phosphorous Production Tanks, Ph 2

Description: FY 2016 Base procurement dollars in the amount of $1.788 million support decontamination and demolition of obsolete White Phosphorous production tanks and support equipment at Pine Bluff Arsenal. These efforts will eliminate safety and environmental risks.

Manufacturer (Name and Location)	**Production Lines being laid away (Include Location)**	**Production Ends**
Pine Bluff Arsenal / Pine Bluff, Arkansas	Various	
Layaway Cost: 1.788	**Other Costs:**	**Annual Maintenance Cost:**

Project: 5168045	FY 2014	FY 2015	FY Base 2016	FY OCO 2016	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Layaway			0.419		0.419				

Title: Removal/Disposal of Inactive White Phosphorous Equipment

Description: FY 2016 Base Procurement dollars in the amount of $0.419 million support removal and disposal of inactive White Phosphorous equipment at Pine Bluff Arsenal. The obsolete White Phosphorous support equipment will be decontaminated, dismantled and disposed. This project will eliminate safety, environmental and a human health hazards.

Manufacturer (Name and Location)	**Production Lines being laid away (Include Location)**	**Production Ends**

Exhibit P-17, Layaway and/or Distribution

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army/2/Ammunition production base support

P-1 Item Nomenclature
Layaway Of Industrial Facilities (EP2000)

Pine Bluff Arsenal / Pine Bluff, Arkansas	Tank #3 (34-170), Tank A (34-130), Test Ovens (34-110) & Containment area (34-196)	
Layaway Cost: 0.419	**Other Costs:**	**Annual Maintenance Cost:**

Project: 5148055	FY 2014	FY 2015	FY Base 2016	FY OCO 2016	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
	1.395								

Title: Remove/Dispose of Hexachlorethane (HC)/Zinc Chloride Mix Equipment, Building 34-640

Description: Procurement dollars in the amount of $1.395 million support efforts to remove, decontaminate and dispose of HC / Zinc Chloride mix equipment in building 34-640 at Pine Bluff Arsenal. HC has been determined to be a toxic carcinogen and will no longer support program objective memorandum (POM) buys. All equipment must be flashed to level 5X prior to disposal.

Manufacturer (Name and Location) Pine Bluff Arsenal / Pine Bluff, Arkansas	**Production Lines being laid away (Include Location)** Large Mix Load, Assemble and Pack (LAP), HC smoke munitions. Building 34-640	**Production Ends**
Layaway Cost: 1.395	**Other Costs:**	**Annual Maintenance Cost:**

Project: 51X8053	FY 2014	FY 2015	FY Base 2016	FY OCO 2016	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
	6.681								

Title: Layaway of Steel Cartridge Case Equipment

Description: Procurement dollars in the amount of $6.681 million support this effort to layaway the deep drawn cartridge case equipment at the Quad City Cartridge Case Facility. Effort includes purchase of intellectual property, tooling, gages, and common processes, and in-house project support costs.

Manufacturer (Name and Location) Quad City Cartridge Case Facility / Rock Island, Illinois	**Production Lines being laid away (Include Location)** 105mm M148A1B1, 155mm Advanced Gun System (AGS), 5	**Production Ends**
Layaway Cost: 6.681	**Other Costs:**	**Annual Maintenance Cost:**

Project: 5XX8440	FY 2014	FY 2015	FY Base 2016	FY OCO 2016	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
	6.589		0.730		0.730				

Title: Decontamination and Disposal of Facilities/Excess Production Equipment

Description: FY 2016 Base procurement dollars in the amount of $0.730 million support this continued effort to decontaminate and dispose of excess production equipment and facilities at Radford Army Ammunition Plant.

Manufacturer (Name and Location) Radford Army Ammunition Plant / Radford, Virginia	**Production Lines being laid away (Include Location)** Various	**Production Ends**
Layaway Cost: 7.319	**Other Costs:**	**Annual Maintenance Cost:**

Project: 5XX8047	FY 2014	FY 2015	FY Base 2016	FY OCO 2016	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
	1.193								

Title: Remove Nitrocellulose (NC) Hill Tanks

Description: Procurement dollars in the amount of $1.193 million support efforts to remove and dispose waste NC from recovered water tanks at Radford Army Ammunition Plant. These efforts will significantly reduce environmental and safety issues associated with large quantities of legacy NC.

Manufacturer (Name and Location) Radford Army Ammunition Plant / Radford, Virginia	**Production Lines being laid away (Include Location)**	**Production Ends**

Exhibit P-17, Layaway and/or Distribution

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army/2/Ammunition production base support

P-1 Item Nomenclature
Layaway Of Industrial Facilities (EP2000)

Layaway Cost:	1.193	Other Costs:	Annual Maintenance Cost:

Project: 5143721	FY 2014	FY 2015	FY Base 2016	FY OCO 2016	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Total	1.292								

Title: Removal of Verson Press System

Description: Procurement dollars in the amount of $1.292 million support the removal of the Verson Press System at Scranton Army Ammunition Plant. The press system is comprised of a 1500 ton hydraulic preform press, a 1500 ton hydraulic extrusion press, and a 1250 ton hydraulic draw press. The system has been in layaway status for twenty five years. The press system has deteriorated and is no longer economically feasible to repair and retain.

Manufacturer (Name and Location)	Production Lines being laid away (Include Location)	Production Ends
Scranton Army Ammunition Plant / Scranton, Pennsylvania		

Layaway Cost:	1.292	Other Costs:	Annual Maintenance Cost:

Project: 5158068	FY 2014	FY 2015	FY Base 2016	FY OCO 2016	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Total		0.600							

Title: Layaway of 120mm Mortar Line

Description: Procurement dollars in the amount of $0.600 million support layaway of the 120mm Mortar production line at Scranton Army Ammunition Plant. This project will ensure the 120mm Mortar production line is maintained in a

Manufacturer (Name and Location)	Production Lines being laid away (Include Location)	Production Ends
Scranton Army Ammunition Plant / Scranton, Pennsylvania	Layaway of 120mm Mortar Line	

Layaway Cost:	0.600	Other Costs:	Annual Maintenance Cost:

Project: 5168072	FY 2014	FY 2015	FY Base 2016	FY OCO 2016	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Total			0.623		0.623				

Title: Removal of the John Deer Furnace

Description: FY 2016 Base procurement dollars in the amount $0.623 million support removal of the John Deere Furnace at Scranton Army Ammunition Plant. The furnace has been inactive for over twenty years and is no longer required for plant operations. This project will remove and scrap the John Deer Furnace to create additional capacity for future production modernization enhancements.

Manufacturer (Name and Location)	Production Lines being laid away (Include Location)	Production Ends
Scranton Army Ammunition Plant / Scranton, Pennsylvania		

Layaway Cost:	0.623	Other Costs:	Annual Maintenance Cost:

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 2 / Ammunition production base support

P-1 Item Nomenclature
Conventional Munitions Demilitarization (EP1700)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	2327.5	199.6	113.9	113.3		113.3	204.8	222.6	157.4	128.1		3467.1
Less PY Adv Proc												
Net Proc P1	2327.5	199.6	113.9	113.3		113.3	204.8	222.6	157.4	128.1		3467.1
Plus CY Adv Proc												
Total Proc Cost	2327.5	199.6	113.9	113.3		113.3	204.8	222.6	157.4	128.1		3467.1
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
The Conventional Munitions Demilitarization Program provides for the demilitarization (demil) and disposal of Single Manager for Conventional Ammunition (SMCA) conventional ammunition for all Military Services per DoD Directive 5160.65 and DoD Instruction 5160.68 that is unserviceable, obsolete, unsafe, or excess to requirements. The program accomplishes demil using open burning/open detonation (OB/OD) processes or closed disposal technologies (CDT) with primary emphasis on resource recovery and recycling (R3). This program also provides for operations and technical support and services; packaging, crating, handling, and transportation (PCHT) of ammunition for demil projects at United States Army depots, plants and activities; commercial contracts that provide CDT demil support and services, and international operations, which include the European and Pacific Theatres.

Justification:
FY 2016 Base procurement dollars in the amount of $113.250 million will support the demilitarization of conventional ammunition as well as missile and missile components (msl/comp) for all Military Services.

FY 2016 funds will support the US demil operations of conventional ammunition in both Continental United States (CONUS) and Outside the Continental United States (OCONUS). CONUS demil operations are performed by a combination of Government Owned, Government Operated (GOGO) depots, Government Owned, Contractor Operated (GOCO) depots as well as commercial contractors. OCONUS demil operations are performed at Demilitarization Facilities (DEFACs) in the Republic of Korea and Japan as well as commercial contractors in the European Union.

As of the end of September 2014, the conventional ammunition demil account contained 537,679 tons of ammunition in CONUS wholesale storage locations: 492,433 tons of conventional ammunition and 45,246 tons (369,361 eaches) of msl/comp. As of the end of September 2014, 73,612 tons of conventional ammunition were demilitarized. As of the end of September 2014, 11,602 tons (94,714 eaches) of msl/comp were demilitarized.

Stockpile growth and generations: An estimated 70,204 tons of conventional ammunition will be generated into the SMCA Resource, Recovery and Disposition Account (B5A) in FY 2015. For FY 2016 through FY 2020, 533,917 tons of conventional ammunition are forecasted to be added into the B5A. For missile demil, an estimated 6,143 tons (40,199 eaches) of msl/comp are planned for generations into the B5A in FY 2015. For FY 2016 through FY 2020, 48,872 tons (319,819 eaches) msl/comp are forecasted to be added into the B5A.

Stockpile growth factors: The demil stockpile is expected to grow as a result of Military Services generations as well as other factors such as cluster munitions, land mine policies and the disestablishment of War Reserve Stocks Allies (WRSA) accounts at OCONUS locations. Currently, there are approximately 221,502 tons of cluster munitions in the demil stockpile. An additional 250,224 tons are expected to be added into the B5A no later than FY 2018 to ensure compliance with the Cluster Munitions Policy.

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 2 / Ammunition production base support	P-1 Line Item Nomenclature: Conventional Munitions Demilitarization (EP1700)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
Support																
CONVENTIONAL MUNITIONS DEMIL, ALL TYPES																
EP1800-Conventional Ammo Demil (SMCA)		153250	1	153250	63578	1	63578	60641	1	60641				60641	1	60641
EP1801-Oth Non-Army Svcs Demil(Non-SMCA)		1730	1	1730	7386	1	7386	9898	1	9898				9898	1	9898
EP1802-Army Missile Demil		43904	1	43904	40068	1	40068	40183	1	40183				40183	1	40183
EP1803-Non-Army Missile Demil		720	1	720	2849	1	2849	2528	1	2528				2528	1	2528
Total:		**199604**			**113881**			**113250**						**113250**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 2 / Ammunition production base support

P-1 Item Nomenclature
CONVENTIONAL AMMUNITION DEMILITARIZATION (SMCA) (EP1800)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	1968.7	153.3	63.6	60.6		60.6	136.5	158.4	86.5	65.1		2692.7
Less PY Adv Proc												
Net Proc P1	1968.7	153.3	63.6	60.6		60.6	136.5	158.4	86.5	65.1		2692.7
Plus CY Adv Proc												
Total Proc Cost	1968.7	153.3	63.6	60.6		60.6	136.5	158.4	86.5	65.1		2692.7
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
The Conventional Ammunition Demilitarization (CAD) program provides for the demilitarization (demil) and disposal of Single Manger for Conventional Ammunition (SMCA) conventional ammunition per DoD Directive 5160.65 and DoD Instruction 5160.68 that is unserviceable, obsolete, unsafe, or excess to requirements. The program accomplishes demil using open burning/open detonation (OB/OD) processes or closed disposal technologies (CDT) with primary emphasis on resource recovery and recycling (R3). The program also provides for demil operations and technical support and services; packaging, crating, handling, and transportation (PCHT) of ammunition for demil projects at US Army depots, plants and activities; commercial contracts that provide CDT demil support and services, and international operations, which include the European and Pacific Theatres.

Justification:
FY 2016 Base procurement dollars in the amount of $60.641 million will support demil and disposal of ammunition that is unserviceable, obsolete, unsafe, or excess to requirements.

At the end of September 2014, the conventional ammunition demilitarization account contained 492,433 tons of conventional ammunition in Continental United States (CONUS) wholesale storage locations; 73,612 tons of conventional ammunition demilitarization was accomplished in FY 2014. A total of 70,260 tons of conventional ammunition are planned to be demilitarized by the end of FY 2015.

An estimated 70,204 tons of conventional ammunition will be generated into the SMCA Resource, Recovery and Disposition Account (B5A) in FY 2015. A total of 533,917 tons of conventional ammunition are forecasted to be added to the B5A from FY 2016 through FY 2020.

The demil stockpile is expected to grow as a result of Military Service generations as well as other factors such as cluster munitions, land mine policies and the disestablishment of War Reserve Stocks Allies (WRSA) accounts at Outside Continental United States (OCONUS) locations. Currently, there are approximately 221,502 tons of cluster munitions in the demil stockpile. An additional 250,224 tons will be generated into the B5A no later than 2018 to ensure compliance with the Cluster Munitions Policy.

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 2 / Ammunition production base support	P-1 Line Item Nomenclature: CONVENTIONAL AMMUNITION DEMILITARIZATION (SMCA) (EP1800)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
Support																
CONVENTIONAL AMMO DEMIL (SMCA)																
WHITE PHOSPHORUS	WP	11195	1	11195												
DEMOLITION MATERIAL	DM	412	1	412												
HE DETONATORS/BOOSTERS	HA	797	1	797	795	1	795	829	1	829				829	1	829
HE BOMBS	HB	410	1	410												
HE CARTRIDGES	HC	11580	1	11580	6193	1	6193	5000	1	5000				5000	1	5000
GRENADES	HG	191	1	191	56	1	56	58	1	58				58	1	58
HE DEPTH CHARGES	HH	492	1	492												
CLUSTER BOMBS/ICM; ANTI-TANK & PERSONNEL	CU	35167	1	35167	9354	1	9354	9762	1	9762				9762	1	9762
HE LAND MINES	LM	134	1	134	448	1	448	467	1	467				467	1	467
INERT	IN	5635	1	5635												
MULTIPLE FAMILY	MU	1841	1	1841	3174	1	3174	2309	1	2309				2309	1	2309
BULK HIGH EXPLOSIVES	BX	375	1	375												
PROPELLANT CHARGES/INCREMENT CHARGES	PC	9105	1	9105	5452	1	5452	4685	1	4685				4685	1	4685
TARGET PRACTICES/ 40MM ANTI-AIRCRAFT	TP	16747	1	16747	52	1	52	54	1	54				54	1	54
SMALL ARMS AMMO THRU 20MM	SA	446	1	446	291	1	291	303	1	303				303	1	303
INCINERABLE MUNITIONS/ MISCELLANEOUS	IC	2984	1	2984	314	1	314	327	1	327				327	1	327
FUZES	FZ	1430	1	1430	1191	1	1191	1252	1	1252				1252	1	1252
SMOKE MUNITIONS	SM	370	1	370												
PROGRAM SUPPORT	PS	1105	1	1105	1000	1	1000	750	1	750				750	1	750
TRANSPORTATION	TS	8010	1	8010	6100	1	6100	5345	1	5345				5345	1	5345
MUNITIONS CHARACTERIZATION	MC	4905	1	4905												
OCONUS DEMIL - EUCOM	EU	443	1	443	5000	1	5000	2000	1	2000				2000	1	2000
OCONUS DEMIL - PACOM	PA	37	1	37	1500	1	1500	5000	1	5000				5000	1	5000
CONTRACT - CONUS DEMIL	CC	39439	1	39439	22658	1	22658	22500	1	22500				22500	1	22500
Total:		**153250**			**63578**			**60641**						**60641**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 2 / Ammunition production base support

P-1 Item Nomenclature
Other Non-Army Service Demil Items (non-SMCA) (EP1801)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	22.2	1.7	7.4	9.9		9.9	11.6	13.7	15.7	6.3		88.5
Less PY Adv Proc												
Net Proc P1	22.2	1.7	7.4	9.9		9.9	11.6	13.7	15.7	6.3		88.5
Plus CY Adv Proc												
Total Proc Cost	22.2	1.7	7.4	9.9		9.9	11.6	13.7	15.7	6.3		88.5
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
The Conventional Ammunition Demilitarization (CAD) program provides for the demilitarization (demil) and disposal of Single Manager for Conventional Ammunition (SMCA) conventional ammunition for non-Army Service demil items per DoD Directive 5160.65 and DoD Instruction 5160.68 that are unserviceable, obsolete, unsafe, or excess to requirements. The program accomplishes demil using open burning/open detonation (OB/OD) processes or closed disposal technologies (CDT) with primary emphasis on resource recovery and recycling (R3). The program also provides for demil operations and technical support and services; packaging, crating, handling, and transportation (PCHT) of ammunition for demil projects at US Army depots, plants and activities; and commercial contracts that provide CDT demil support and services.

Justification:
FY 2016 Base procurement dollars in the amount of $9.898 million will support demil of Other Non-Army Service demil items, with recovery and recycling of components.

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 2 / Ammunition production base support	P-1 Line Item Nomenclature: Other Non-Army Service Demil Items (non-SMCA) (EP1801)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
Support																
OTHER NON-ARMY SERVICE DEMIL (NON-SMCA)																
TORPEDOES	HT	1730	1	1730.000	7386	1	7386.000	9898	1	9898.000				9898	1	9898.000
Total:		**1730**			**7386**			**9898**						**9898**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 2 / Ammunition production base support

P-1 Item Nomenclature
Army Missile Demilitarization (EP1802)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	314.3	43.9	40.1	40.2		40.2	53.7	47.6	52.4	53.5		645.7
Less PY Adv Proc												
Net Proc P1	314.3	43.9	40.1	40.2		40.2	53.7	47.6	52.4	53.5		645.7
Plus CY Adv Proc												
Total Proc Cost	314.3	43.9	40.1	40.2		40.2	53.7	47.6	52.4	53.5		645.7
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
The Army Missile Demilitarization (demil) Program provides for demil and disposal of US Army missiles and missile components per DoD Directive 5160.65 and DoD Instruction 5160.68 that are unserviceable, obsolete, unsafe, or excess to requirements. The program accomplishes demil using open burning/open detonation (OB/OD) processes or closed disposal technologies (CDT) with primary emphasis on resource recovery and recycling (R3). The program also provides for operations and technical support and services; packaging, crating, handling, and transportation (PCHT) of ammunition for demil projects at US Army depots and commercial contracts that provide CDT demil support and services.

Justification:
FY 2016 Base procurement dollars in the amount of $40.183 million will support demil of Army tactical missiles, such as Multiple Launch Rocket System (MLRS) and various missile components using OB/OD, CDT and R3 techniques. The funding also supports demil process improvement efforts at Anniston Munitions Center and Letterkenny Munitions Center associated with modular demil capability.

At the end of September 2014, the missile demilitarization account contained 45,246 tons (369,361 eaches) of conventional missiles and components (msl/ comp) in Continental United States (CONUS) wholesale storage locations; 11,602 tons (94,714 eaches) of msl/comp demilitarization was accomplished in FY 2014. A total of 13,970 tons (114,035 eaches) of msl/comp are planned to be demilitarized by the end of FY 2015.

An estimated 6,143 tons (40,199 eaches) of msl/comp will be generated into the B5A in FY 2015. A total of 48,872 tons (319,819 eaches) of msl/comp are forecasted to be added to the B5A from FY 2016 through FY 2020.

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 2 / Ammunition production base support	P-1 Line Item Nomenclature: Army Missile Demilitarization (EP1802)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
Support																
Army Missile Demil																
MULTIPLE LAUNCH ROCKET SYSTEM	EF	30256	1	30256	34416	1	34416	31403	1	31403				31403	1	31403
TOW CD/R3	E1	1162	1	1162	1705	1	1705	596	1	596				596	1	596
HELLFIRE		17	1	17	26	1	26	23	1	23				23	1	23
STINGER	DR	55	1	55				98	1	98				98	1	98
PATRIOT		96	1	96				492	1	492				492	1	492
HONEST JOHN					331	1	331	150	1	150				150	1	150
MISSILE COMPONENTS		2247	1	2247	301	1	301	2471	1	2471				2471	1	2471
HAWK MOTORS								581	1	581				581	1	581
DEMIL PROCESS IMPROVEMENTS		6600	1	6600	532	1	532	758	1	758				758	1	758
PROGRAM SUPPORT		3471	1	3471	2757	1	2757	3611	1	3611				3611	1	3611
Total:		**43904**			**40068**			**40183**						**40183**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 2 / Ammunition production base support

P-1 Item Nomenclature
Non-Army Missile Demilitarization (EP1803)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	22.3	0.7	2.8	2.5		2.5	2.9	2.9	2.9	3.2		40.3
Less PY Adv Proc												
Net Proc P1	22.3	0.7	2.8	2.5		2.5	2.9	2.9	2.9	3.2		40.3
Plus CY Adv Proc												
Total Proc Cost	22.3	0.7	2.8	2.5		2.5	2.9	2.9	2.9	3.2		40.3
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
The non-Army Missile Demilitarization (demil) Program provides for the demil and disposal of non-Army, non-Single Manager for Conventional Ammunition missile and missile components per DoD Directive 5160.65 and DoD Instruction 5160.68 that are unserviceable, obsolete, unsafe, or excess to requirements. The program accomplishes demil using open burning/open detonation (OB/OD) processes or closed disposal technologies (CDT) with primary emphasis on resource recovery and recycling (R3). The program also provides for operations and technical support and services; packaging, crating, handling, and transportation (PCHT) of ammunition for demil projects at United States Army depots and commercial contracts that provide CDT demil support and services.

Justification:
FY 2016 Base procurement dollars in the amount of $2.528 million will support demilitarization of non-Army, non-Single Manger for Conventional Ammunition missile components using OB/OD, CDT and R3 techniques.

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 2 / Ammunition production base support	P-1 Line Item Nomenclature: Non-Army Missile Demilitarization (EP1803)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
Support																
NON-ARMY MISSILE DEMIL																
HE MISSILES	HM	720	720	1.000	2849	1	2849.000	2528	1	2528.000				2528	1	2528.000
Total:		**720**			**2849**			**2528**						**2528**		

Exhibit P-40, Budget Item Justification Sheet

Date: February 2015

Appropriation / Budget Activity / Serial No:
Procurement of Ammunition, Army / 2 / Ammunition production base support

P-1 Item Nomenclature
ARMS Initiative (EP2500)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total Prog
Proc Qty												
Gross Cost	347.4	3.4	2.5	3.6		3.6	3.6	3.7	3.8	3.8		371.9
Less PY Adv Proc												
Net Proc P1	347.4	3.4	2.5	3.6		3.6	3.6	3.7	3.8	3.8		371.9
Plus CY Adv Proc												
Total Proc Cost	347.4	3.4	2.5	3.6		3.6	3.6	3.7	3.8	3.8		371.9
Initial Spares												
Flyaway U/C												
Weapon System Proc U/C												

Description:
The Armament Retooling and Manufacturing Support (ARMS) program reuses idle capacity at active and inactive Government-Owned, Contractor-Operated (GOCO) Army Ammunition Plants and GOCO Army Depots through commercialization. Congress enacted this program in the FY 1993 Defense Authorization Act (Public Law (PL) 102-484) and codified in FY 2000 (10 U.S.C. 4551-4555). ARMS resources are used for facility strategic reuse plans, marketing plans, building renovation and recapitalization, equipment purchase, relocation, or consolidation, and environmental baseline studies to encourage commercial use of underutilized Army assets. The ARMS objectives include sustaining critical manufacturing capabilities and critical skills; reducing facility operating and maintenance costs; decreasing product cost; providing opportunities for small business; and accelerating private sector economic development, employment and investment. The ARMS program allows the Army to manage portions of the ammunition infrastructure as a commercial business. This management concept has allowed the Army to apply overhead costs across multiple commercial contracts to reduce operating costs.

Justification:
FY 2016 Base procurement dollars in the amount of $3.575 million support financial and marketing investments to attract revenue-producing tenants to locate on GOCO Army Ammunition Plants and GOCO Army Depots. The ARMS Program reduces Army cost of ownership and maintains critical munitions industrial base skills. Revenues collected will be utilized to reduce overhead and total annual operating costs, improve and maintain existing buildings for current tenants, and perform improvements to other vacant buildings to entice potential tenants.

Exhibit P-5, Weapon AMMO Cost Analysis	Appropriation/Budget Activity/Serial No: Procurement of Ammunition, Army / 2 / Ammunition production base support	P-1 Line Item Nomenclature: ARMS Initiative (EP2500)	Weapon System Type:	MDAP:	DODIC:	Date: February 2015

AMMO Cost Elements	ID CD	FY 14			FY 15			FY 16 Base			FY 16 OCO			FY 16 Total		
		Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost	Total Cost	Qty	Unit Cost
		$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000	$000	Each	$000
Support																
Holston Army Ammunition Plant (AAP)		50			50			500						500		
Hawthorne Army Depot					150			100						100		
Iowa AAP		723			200			300						300		
Lake City AAP		991			950			1300						1300		
Milan AAP		125			300			200						200		
Radford AAP					250			100						100		
Administrative and Management Support		500			604			850						850		
Various AAP		1047						225						225		
Total:		**3436**			**2504**			**3575**						**3575**		