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

Appropriation / Budget Activity / Budget Sub Activity: 2034A: Procurement of Ammunition, Army / BA 01: Ammunition / BSA 37: Artillery Ammunition	P-1 Line Item Number / Title: E15101 / Artillery Cartridges, 75MM & 105MM, All Types
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ID Code (A=Service Ready, B=Not Service Ready) :	Program Elements for Code B Items:						Other Related Program Elements:					
Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	2,970.921	51.225	47.455	57.756	5.000	62.756	57.907	65.483	64.577	62.473	-	3,382.797
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P1) (\$ in Millions)	2,970.921	51.225	47.455	57.756	5.000	62.756	57.907	65.483	64.577	62.473	-	3,382.797
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	2,970.921	51.225	47.455	57.756	5.000	62.756	57.907	65.483	64.577	62.473	-	3,382.797

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Dollars)	-	-	-	-	-	-	-	-	-	-	-	-

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

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 2034A: Procurement of Ammunition, Army / BA 01: Ammunition / BSA 37: Artillery Ammunition		P-1 Line Item Number / Title: E15101 / Artillery Cartridges, 75MM & 105MM, All Types
ID Code (A=Service Ready, B=Not Service Ready) :	Program Elements for Code B Items:	Other Related Program Elements:
<p>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 kilometers. This item is Code B, not approved for service use.</p> <p>(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.</p>		

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Appropriation / Budget Activity / Budget Sub Activity: 2034A: Procurement of Ammunition, Army / BA 01: Ammunition / BSA 37: Artillery Ammunition	P-1 Line Item Number / Title: E15101 / Artillery Cartridges, 75MM & 105MM, All Types
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Exhibits Schedule			Program Elements for Code B Items:			Other Related Program Elements:		
Title*	Exhibits	ID CD	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
			Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
E15200 / CTG, ARTY, 75MM BLANK, M337A1	P-40a	A	- / 55.019	- / -	- / 4.435	- / -	- / -	- / -
E21200 / CTG, ARTY, 105MM BLANK M395	P-40a	A	- / 24.475	- / 4.000	- / -	- / -	- / -	- / -
E21610 / CTG, ARTY, 105MM, EXT RANGE HE-BB PFF, M1130A1 W/O	P-40a	B	- / -	- / 3.332	- / -	- / -	- / -	- / -
E21501 / CTG, ARTY, 105MM HE, M1 W/O FUZE [C445]	P-5	A	- / 2,635.174	- / 42.493	- / 36.613	- / 57.756	- / 5.000	- / 62.756
E21702 / CTG, ARTY, 105MM VL ILLUM M314 W/O FUZE	P-5	A	- / 30.091	- / 1.400	- / -	- / -	- / -	- / -
E21705 / CTG, ARTY, 105MM IR ILLUM M1064 W/O FUZE [CA53]	P-5	A	- / 18.957	- / -	- / 6.407	- / -	- / -	- / -
Total Gross/Weapon System Cost			- / 2,970.921	- / 51.225	- / 47.455	- / 57.756	- / 5.000	- / 62.756

*Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.
 Note: Totals in this Exhibit P-40 set may not be exact or add due to rounding.

Justification:
 FY 2016 Base 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 supports 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.

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Exhibit P-40, Budget Line Item Justification: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 2034A: Procurement of Ammunition, Army / BA 01: Ammunition / BSA 37: Artillery Ammunition		P-1 Line Item Number / Title: E15101 / Artillery Cartridges, 75MM & 105MM, All Types
ID Code (A=Service Ready, B=Not Service Ready) :	Program Elements for Code B Items:	Other Related Program Elements:
<p>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</p> <p>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</p>		

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Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2016 Army														Date: February 2015					
Appropriation / Budget Activity / Budget Sub Activity: 2034A / 01 / 37							P-1 Line Item Number / Title: E15101 / Artillery Cartridges, 75MM & 105MM, All Types							Aggregated Items Title: Various					

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

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
			Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
CTG, ARTY, 75MM BLANK, M337A1																				
E15200 / CTG, ARTY, 75MM BLANK, M337A1	A		-	-	55.019	-	-	-	-	-	4.435	-	-	-	-	-	-	-	-	-
E21200 / CTG, ARTY, 105MM BLANK M395	A		-	-	24.475	-	-	4.000	-	-	-	-	-	-	-	-	-	-	-	-
E21610 / CTG, ARTY, 105MM, EXT RANGE HE-BB PFF, M1130A1 W/O	B		-	-	-	-	-	3.332	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: CTG, ARTY, 75MM BLANK, M337A1</i>			-	-	79.494	-	-	7.332	-	-	4.435	-	-	-	-	-	-	-	-	-
Total			-	-	79.494	-	-	7.332	-	-	4.435	-	-	-	-	-	-	-	-	-

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Exhibit P-5, Cost Analysis: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 2034A / 01 / 37	P-1 Line Item Number / Title: E15101 / Artillery Cartridges, 75MM & 105MM, All Types	Item Number / Title [DODIC]: E21501 / CTG, ARTY, 105MM HE, M1 W/O FUZE [C445]

ID Code (A=Service Ready, B=Not Service Ready) : A	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	2,635.174	42.493	36.613	57.756	5.000	62.756
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)	2,635.174	42.493	36.613	57.756	5.000	62.756
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	2,635.174	42.493	36.613	57.756	5.000	62.756

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)	-	-	-	-	-	-

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

Cost Elements	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Support Cost																		
RECAPITALIZATION	-	-	2,635.174	-	-	42.493	-	-	36.613	-	-	57.756	-	-	5.000	-	-	62.756
<i>Subtotal: Support Cost</i>	-	-	2,635.174	-	-	42.493	-	-	36.613	-	-	57.756	-	-	5.000	-	-	62.756
Gross/Weapon System Cost	-	-	2,635.174	-	-	42.493	-	-	36.613	-	-	57.756	-	-	5.000	-	-	62.756

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Exhibit P-5, Cost Analysis: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 2034A / 01 / 37	P-1 Line Item Number / Title: E15101 / Artillery Cartridges, 75MM & 105MM, All Types	Item Number / Title [DODIC]: E21702 / CTG, ARTY, 105MM VL ILLUM M314 W/O FUZE

ID Code (A=Service Ready, B=Not Service Ready) : A				MDAP/MAIS Code:			
Resource Summary		Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Procurement Quantity (<i>Units in Each</i>)		-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)		30.091	1.400	-	-	-	-
Less PY Advance Procurement (<i>\$ in Millions</i>)		-	-	-	-	-	-
Net Procurement (P1) (<i>\$ in Millions</i>)		30.091	1.400	-	-	-	-
Plus CY Advance Procurement (<i>\$ in Millions</i>)		-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)		30.091	1.400	-	-	-	-
<i>(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)</i>							
Initial Spares (<i>\$ in Millions</i>)		-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Dollars</i>)		-	-	-	-	-	-

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

Cost Elements	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Support Cost																		
PRODUCTION ENGINEERING	-	-	-	-	-	1.400	-	-	-	-	-	-	-	-	-	-	-	-
ACCEPTANCE TESTING	-	-	30.091	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Subtotal: Support Cost</i>	-	-	30.091	-	-	1.400	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost	-	-	30.091	-	-	1.400	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-5, Cost Analysis: PB 2016 Army		Date: February 2015
Appropriation / Budget Activity / Budget Sub Activity: 2034A / 01 / 37	P-1 Line Item Number / Title: E15101 / Artillery Cartridges, 75MM & 105MM, All Types	Item Number / Title [DODIC]: E21705 / CTG, ARTY, 105MM IR ILLUM M1064 W/O FUZE [CA53]

ID Code (A=Service Ready, B=Not Service Ready) : A	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Procurement Quantity <i>(Units in Each)</i>	-	-	-	-	-	-
Gross/Weapon System Cost <i>(\$ in Millions)</i>	18.957	-	6.407	-	-	-
Less PY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-
Net Procurement (P1) <i>(\$ in Millions)</i>	18.957	-	6.407	-	-	-
Plus CY Advance Procurement <i>(\$ in Millions)</i>	-	-	-	-	-	-
Total Obligation Authority <i>(\$ in Millions)</i>	18.957	-	6.407	-	-	-

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares <i>(\$ in Millions)</i>	-	-	-	-	-	-
Gross/Weapon System Unit Cost <i>(\$ in Dollars)</i>	-	-	-	-	-	-

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

Cost Elements	Prior Years			FY 2014			FY 2015			FY 2016 Base			FY 2016 OCO			FY 2016 Total		
	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$)	Qty (Each)	Total Cost (\$ M)
Support Cost																		
RECAPITALIZATION	-	-	18.957	-	-	-	-	-	6.407	-	-	-	-	-	-	-	-	-
<i>Subtotal: Support Cost</i>	-	-	18.957	-	-	-	-	-	6.407	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost	-	-	18.957	-	-	-	-	-	6.407	-	-	-	-	-	-	-	-	-