

UNCLASSIFIED

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

Appropriation / Budget Activity / Budget Sub Activity: 3011F: Procurement of Ammunition, Air Force / BA 01: Ammunition / BSA 13: Bombs	P-1 Line Item Number / Title: 353020 / General Purpose Bombs
---	--

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

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	To Complete	Total
Procurement Quantity (<i>Units in Each</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (<i>\$ in Millions</i>)	-	569.482	329.501	259.308	551.862	811.170	342.632	454.175	506.673	515.796	-	3,529.429
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	-	569.482	329.501	259.308	551.862	811.170	342.632	454.175	506.673	515.796	-	3,529.429
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	-	569.482	329.501	259.308	551.862	811.170	342.632	454.175	506.673	515.796	-	3,529.429

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

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

Description:

The following Weapon System Cost Elements are represented in this P-1 line:

-MXU-651 B/B (EC31/EC28) is an airfoil group consisting of an aft wing assembly, forward canards and attaching hardware needed to assemble a GBU-10 Laser Guided Bomb, (BLU-109 2000lb Hard Target Penetrator Bomb or MK84 2000lb class bomb). The system has folding wings which open upon release for increased maneuverability. This item is procured by Munitions Sustainment Division at Hill AFB.

-MXU-650 Fin Assembly kit (EC32) consists of a tail fin, forward canards and attachment hardware needed to assemble the GBU-12 (MK-82 Warhead, 500lb class) Laser Guided Bomb (LGB). This Fin assembly kit, coupled with a Computer Control Group (ED58) complete the GBU-12 weapons build. These weapons are primarily used for precision bombing against non-hardened targets. This item is procured by Munitions Sustainment Division at Hill AFB.

-MAU-209/MAU-169 (ED58) GBU-10/12 Computer Control Group is a laser homing guidance unit used on the GBU-10 and GBU-12 Laser Guided Bombs, (GBU-10, MK-84 Warhead, 2000lb class or GBU-12, MK-82 Warhead, 500lb class). The system has folding wings which open upon release for maneuverability and increased aircraft payload. This item is procured by Hill AFB. Laser Guided Bombs are essential to meeting training, operational and inventory objective requirements worldwide for precision bombing against hardened and non-hardened targets. Yearly procurements ensure the necessary stock on hand to meet these requirements. Paveway II telemetry (TM) kits are radio monitored modules installed in the GBU-10, 12 and 16 weapon systems that monitor and track data during flight. They provide essential data for issues such as flight failures and weapon accuracy as well as data for the long term sustainment of the weapon system.

-GBU-49; The Enhanced Paveway II kit for the GBU-49 consists of a MAU-210 G/B Enhanced Computer Control Group (ECCG) and an MXU-650 M/B Air Foil Group (AFG). The ECCG and AFG provide GPS-aided INS and laser terminal guidance capabilities to enable the GBU-49 to engage fixed, re-locatable, and moving targets.

-BLU-117 (ED09) is a 2,000-pound class general purpose bomb. The bomb produces blast and fragmentation effects and can be used as either an unguided high or low drag weapon. When used with a guidance kit, it can be employed as a precision guided bomb. The warhead is used on the GBU-10/12 (PAVEWAY) and Joint Direct Attack Munition (GBU-31) weapon systems. The BLU-117 can also be fuzed with proximity, instantaneous, or delayed fuzes to provide a variety of military effects. This item is procured through the Army Single Manager for Conventional Ammunition (SMCA).

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2019 Air Force		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 3011F: Procurement of Ammunition, Air Force / BA 01: Ammunition / BSA 13: Bombs		P-1 Line Item Number / Title: 353020 / General Purpose Bombs
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A		
<p>-BLU-111 (ED15) is a General Purpose Bomb, identical to the MK-82 (500 lb bomb), except for type of explosive filler (PBXN-109 vs Tritonal) and vented aft closure. It has a relatively thin case with a slender body designed for improved ballistics. Employed as general purpose bombs delivered in high and low drag modes with ground burst, delayed, or air burst fuzes and as precision guided munitions (GBU-12,-22,-38,or -54) and aerial mines depending on the fin/airfoil group and fuzing. This item is procured through the Army Single Manager for Conventional Ammunition (SMCA).</p> <p>-BLU-109 (ED49) warhead is a 2000-pound hard target penetrator bomb designed with Insensitive Munitions (IM) technology. It is a penetrator weapon used against bunkers, aircraft shelters, and reinforced concrete structures. The warhead is used on the GBU-10, 24, and 27 as well as Joint Direct Attack Munition (JDAM) GBU-31V3 weapon systems. This item is procured through the Army Single Manager for Conventional Ammunition (SMCA).</p> <p>-BLU-137/B (EE59) Advanced 2,000-pound Penetrator (A2K) is a weapon used against bunkers, aircraft shelters, and reinforced concrete structures and is compatible with the JDAM guidance tail kit. The BLU-137/B will eventually begin to replace the BLU-109 C/B. The BLU-137/B will be initially procured through AFLCMC/EBD at Eglin AFB in FY18 and will transition to Hill (AFLCMC/EBH) for future procurement.</p> <p>-BLU-129/B (ED78) Composite Case Warhead - Carbon fiber composite case for high near-field lethality to deliver 3x reduction in collateral damage. The program is dependent on field stated quantity requirements based on current tactical operational needs until a normalized inventory objective is established.</p> <p>-Next Generation Area Attack Weapons (NGAAWs) are a family of unitary area attack weapon capabilities to meet the DoD policy on cluster munitions. They consist of BLU-134/B and BLU-136/B warheads with a height of burst sensor. BLU-134/B, Improved Lethality Warhead (ILW), Next Generation Area Attack Weapon Increment I, is an area attack employed, near-term solution, 500 lb warhead for improved anti-personnel anti-material (APAM) target lethality which meets DoD policy on cluster munitions. This item will be procured through AFLCMC/EBDW at Eglin AFB for LRIP and FRP 1. BLU-136/B, Next Generation Area Attack Weapon Increment II, is a 2,000 lb high fragmentation area attack warhead to augment the BLU-134/B for significant improvement against the APAM target lethality which meets DoD policy on cluster munitions.</p> <p>-Items Less Than Five Million Dollars: All items have an annual procurement of less than \$5,000,000 and are Code A.</p> <p>Portion of FY19-FY23 funding will be used for facilitization efforts. This will enhance production line capacity required to replenish inventory.</p> <p>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.</p> <p>Funding for this exhibit contained in PEs: 0208030F, 0207599F</p>		

UNCLASSIFIED

Exhibit P-40, Budget Line Item Justification: PB 2019 Air Force		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 3011F: Procurement of Ammunition, Air Force / BA 01: Ammunition / BSA 13: Bombs		P-1 Line Item Number / Title: 353020 / General Purpose Bombs
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A		

Exhibits Schedule					Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-40a	(EC32) MXU-650 GCG, FIN ASSEMBLY				- / -	- / 20.640	- / 18.000	- / 18.000	- / 3.300	- / 21.300
P-5	(ED09) BLU-117, 2000LB GP BOMB	P-5a	A		- / -	- / 367.461	- / 32.603	- / -	- / -	- / -
P-5	(ED15) BLU-111A/B 500LB GP BOMB		A		- / -	- / 5.000	- / 5.000	- / 5.000	- / -	- / 5.000
P-5	(ED49) BLU-109 2000 LB HARD TARGET BOMB	P-5a	A		- / -	- / 97.000	- / 70.000	- / 45.483	- / 541.862	- / 587.345
P-40a	(ED58) MAU-209C/B CCG				- / -	- / 45.281	- / 25.000	- / 35.000	- / 6.700	- / 41.700
P-40a	(ED78) BLU-129/B 500LB BOMB				- / -	- / -	- / 8.125	- / 8.125	- / -	- / 8.125
P-40a	BLU-134/B CDI 500LB				- / -	- / -	- / 81.573	- / 84.996	- / -	- / 84.996
P-5	(EE59) BLU-137		A		- / -	- / -	- / -	1,000 / 45.500	- / -	1,000 / 45.500
P-40a	GBU-49				- / -	- / 0.000	- / 72.000	- / -	- / -	- / -
P-40a	GENERAL PURPOSE BOMBS (ITEMS LESS THAN \$5 MILLION)				- / -	- / 17.100	- / 17.200	- / 17.200	- / -	- / 17.200
P-40	Total Gross/Weapon System Cost				- / -	- / 569.482	- / 329.501	- / 259.308	- / 551.862	- / 811.170

*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. Title represents the P-40a Title when only the P-40a Summary/Total is shown.
 Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

Justification:
 FY2019 purchases 500, 1,000 and 2,000 pound conventional general purpose bombs, and guidance and control kits to provide precision bombing capabilities; additionally, equipment or support required to enhance production line capacity as required by inventory replenishment. These weapons are used to defeat non-hard, hardened and deeply buried targets, bunkers, aircraft shelters, reinforced concrete structures and various armored targets. Built up with assorted componentry, the bombs can also be employed as Joint Direct Attack Munitions or Laser Guided Bombs.

The Air Force procures munitions to maintain appropriate quantities in the War Reserve Materiel (WRM) Munitions and test and training stockpiles. Active, Guard and Reserve components draw from the WRM stockpiles as required and receive test and training allocations annually based on current-year requirements.

Procurement/Replenishment is required to maintain readiness objectives and worldwide war reserve materiel (WRM) stockpiles to support requirements for penetrator bombs, low collateral damage bombs, and multiple precision guided bomb configurations as determined by the non-nuclear consumables annual analysis (NCAA), to execute DoD approved combat plans and training requirements.

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2019 Air Force **Date:** February 2018

Appropriation / Budget Activity / Budget Sub Activity: 3011F / 01 / 13 **P-1 Line Item Number / Title:** 353020 / General Purpose Bombs **Aggregated Items Title:** (EC32) MXU-650 GCG, FIN ASSEMBLY

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
MXU-650 FIN ASSEMBLY - EC32	A		-	-	-	0.004	4,832	20.640	0.004	4,500	18.000	0.004	4,726	18.000	0.004	866	3.300	0.004	5,592	21.300
Subtotal: Uncategorized			-	-	-	-	-	20.640	-	-	18.000	-	-	18.000	-	-	3.300	-	-	21.300
Total			-	-	-	-	-	20.640	-	-	18.000	-	-	18.000	-	-	3.300	-	-	21.300

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

Remarks:

Prices shown reflect the average unit cost of split-award contracts plus inflation. Due to the competitive nature of the currently qualified vendors, estimated unit cost information from the vendors is not available for planning purposes.

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2019 Air Force		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 3011F / 01 / 13	P-1 Line Item Number / Title: 353020 / General Purpose Bombs	Item Number / Title [DODIC]: (ED09) BLU-117, 2000LB GP BOMB

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

Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	367.461	32.603	-	-	-
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	367.461	32.603	-	-	-
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	367.461	32.603	-	-	-

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

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

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

Cost Elements	Prior Years			FY 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - Hardware End Item Cost																		
Recurring Cost																		
LOAD, ASSEMBLE, PACK (LAP) ^(†)	-	-	-	0.005	14,138	77.213	0.005	1,302	6.638	-	-	-	-	-	-	-	-	-
BOMB BODY 2000LB MK84 MOD 10 IM	-	-	-	0.006	14,138	89.510	0.005	1,302	7.031	-	-	-	-	-	-	-	-	-
LUG SUSP ACFT ORD MK3-0	-	-	-	0.000	28,276	1.620	0.000	2,604	0.166	-	-	-	-	-	-	-	-	-
CXM-AF7	-	-	-	0.000	10,223,680	193.125	0.000	895,776	18.014	-	-	-	-	-	-	-	-	-
PALLET MK79-1	-	-	-	0.001	7,069	5.571	0.001	651	0.630	-	-	-	-	-	-	-	-	-
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	367.039	-	-	32.479	-	-	-	-	-	-	-	-	-
<i>Subtotal: Hardware - Hardware End Item Cost</i>	-	-	-	-	-	367.039	-	-	32.479	-	-	-	-	-	-	-	-	-
Support - Support End Item Cost																		
PRODUCTION ENGINEERING	-	-	-	-	-	0.379	-	-	0.106	-	-	-	-	-	-	-	-	-
QUALITY ASSURANCE	-	-	-	-	-	0.004	-	-	0.003	-	-	-	-	-	-	-	-	-
FIRST ARTICLE TEST	-	-	-	-	-	0.039	-	-	0.015	-	-	-	-	-	-	-	-	-
<i>Subtotal: Support - Support End Item Cost</i>	-	-	-	-	-	0.422	-	-	0.124	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost	-	-	-	-	-	367.461	-	-	32.603	-	-	-	-	-	-	-	-	-

Remarks:

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2019 Air Force		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 3011F / 01 / 13	P-1 Line Item Number / Title: 353020 / General Purpose Bombs	Item Number / Title [DODIC]: (ED09) BLU-117, 2000LB GP BOMB
ID Code (A=Service Ready, B=Not Service Ready) : A		MDAP/MAIS Code:
<p>This cost analysis represents the Single Manager for Conventional Ammunition (SMCA) efforts to obtain hardware, containers, pallets, straps, explosive material, lugs, etc. for the DoD Military Services purchasing the same or similar items, and to load, assemble and pack (LAP) the Air Force order.</p> <p>The load, assemble, pack (LAP) quantity is the number of completed rounds to be delivered into the AF inventory. The ammunition production plant provides the LAP price to SMCA, which includes cost to receive bomb bodies and for miscellaneous explosives, fillers and packing materials used to produce an inventory-worthy round.</p> <p>Bomb Body price, provided by the manufacturer to SMCA, is the unit price of an empty bomb body/casing. Developing the cost for a completed round, SMCA applies a Production Loss Factor (PLF) to estimate an additional quantity of bomb bodies/casings to mitigate risks during production of complete rounds. Risks may include defective bomb body or need to replace the body after filled with a nonconforming batch of explosives.</p> <p>Primary cost drivers include the total military customer orders (increases/decreases), complex or scarce materials, economic price adjustments, currency rate fluctuations.</p> <p>(†) indicates the presence of a P-5a</p>		

UNCLASSIFIED

Exhibit P-5a, Procurement History and Planning: PB 2019 Air Force **Date:** February 2018

Appropriation / Budget Activity / Budget Sub Activity: 3011F / 01 / 13	P-1 Line Item Number / Title: 353020 / General Purpose Bombs	Item Number / Title [DODIC]: (ED09) BLU-117, 2000LB GP BOMB
--	--	---

Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ M)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
LOAD, ASSEMBLE, PACK (LAP)		2017	MCALESTER ARMY AMMUNITION PLANT / MCALESTER, OK	MIPR	ACC-ROCK ISLAND	Jun 2017	Jul 2018	14,138	0.005	Y		
LOAD, ASSEMBLE, PACK (LAP)		2018	MCALESTER ARMY AMMUNITION PLANT / MCALESTER, OK	MIPR	ACC-ROCK ISLAND	Jun 2018	Jul 2018	1,302	0.005	Y		

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2019 Air Force		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 3011F / 01 / 13		P-1 Line Item Number / Title: 353020 / General Purpose Bombs
		Item Number / Title [DODIC]: (ED15) BLU-111A/B 500LB GP BOMB

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

Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	5.000	5.000	5.000	-	5.000
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	5.000	5.000	5.000	-	5.000
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	5.000	5.000	5.000	-	5.000

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

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

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

Cost Elements	Prior Years			FY 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - Cost Cost																		
Recurring Cost																		
LOAD, ASSEMBLE, PACK (LAP)	-	-	-	0.002	815	1.283	0.002	787	1.234	0.002	904	1.831	-	-	-	0.002	904	1.831
BOMB BODY 500 LB MK82 MOD 6 IM	-	-	-	0.002	815	1.865	0.002	787	1.954	0.001	904	1.342	-	-	-	0.001	904	1.342
LUG SUSP ACFT ORD MS3314	-	-	-	0.000	1,631	0.050	0.000	1,574	0.054	0.000	1,808	0.052	-	-	-	0.000	1,808	0.052
CXM-7	-	-	-	0.000	106,022	1.740	0.000	102,310	1.566	0.000	117,520	1.614	-	-	-	0.000	117,520	1.614
PALLET INSPECTION, MHU-122E	-	-	-	0.000	136	0.026	0.000	131	0.025	0.000	151	0.028	-	-	-	0.000	151	0.028
PALLET MHU-122/E	-	-	-	-	-	-	0.000	131	0.031	0.000	151	0.036	-	-	-	0.000	151	0.036
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	4.964	-	-	4.864	-	-	4.903	-	-	-	-	-	4.903
<i>Subtotal: Hardware - Cost Cost</i>	-	-	-	-	-	4.964	-	-	4.864	-	-	4.903	-	-	-	-	-	4.903
Support - Support End Item Cost																		
PRODUCTION ENGINEERING	-	-	-	-	-	0.022	-	-	0.069	-	-	0.080	-	-	-	-	-	0.080
QUALITY ASSURANCE	-	-	-	-	-	0.001	-	-	0.004	-	-	0.010	-	-	-	-	-	0.010
FIRST ARTICLE TEST	-	-	-	-	-	0.013	-	-	0.047	-	-	0.007	-	-	-	-	-	0.007
ACCEPTANCE TESTING	-	-	-	-	-	-	-	-	0.016	-	-	0.000	-	-	-	-	-	0.000
<i>Subtotal: Support - Support End Item Cost</i>	-	-	-	-	-	0.036	-	-	0.136	-	-	0.097	-	-	-	-	-	0.097

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2019 Air Force												Date: February 2018					
Appropriation / Budget Activity / Budget Sub Activity: 3011F / 01 / 13						P-1 Line Item Number / Title: 353020 / General Purpose Bombs						Item Number / Title [DODIC]: (ED15) BLU-111A/B 500LB GP BOMB					
ID Code (A=Service Ready, B=Not Service Ready) : A												MDAP/MAIS Code:					

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

Cost Elements	Prior Years			FY 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Gross/Weapon System Cost	-	-	-	-	-	5.000	-	-	5.000	-	-	5.000	-	-	-	-	-	5.000

Remarks:

This cost analysis represents the Single Manager for Conventional Ammunition (SMCA) efforts to obtain hardware, containers, pallets, straps, explosive material, lugs, etc. for the DoD Military Services purchasing the same or similar items, and to load, assemble and pack (LAP) the Air Force order.

The load, assemble, pack (LAP) quantity is the number of completed rounds to be delivered into the AF inventory. The ammunition production plant provides the LAP price to SMCA, which includes cost to receive bomb bodies and for miscellaneous explosives, fillers and packing materials used to produce an inventory-worthy round.

Bomb Body price, provided by the manufacturer to SMCA, is the unit price of an empty bomb body/casing. Developing the cost for a completed round, SMCA applies a Production Loss Factor (PLF) to estimate an additional quantity of bomb bodies/casings to mitigate risks during production of complete rounds. Risks may include defective bomb body or need to replace the body after filled with a nonconforming batch of explosives.

Primary cost drivers include the total military customer orders (increases/decreases), complex or scarce materials, economic price adjustments, currency rate fluctuations.

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2019 Air Force		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 3011F / 01 / 13	P-1 Line Item Number / Title: 353020 / General Purpose Bombs	Item Number / Title [DODIC]: (ED49) BLU-109 2000 LB HARD TARGET BOMB

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

Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	97.000	70.000	45.483	541.862	587.345
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	97.000	70.000	45.483	541.862	587.345
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	97.000	70.000	45.483	541.862	587.345

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

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

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

Cost Elements	Prior Years			FY 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - Hardware End Item Cost																		
Recurring Cost																		
LOAD, ASSEMBLE, PACK ^(†)	-	-	-	0.011	2,870	30.417	0.008	2,045	16.478	0.008	1,389	10.973	-	-	-	0.008	1,389	10.973
BOMB BODY, 2000LB BLU-109/B	-	-	-	0.018	2,870	51.657	0.021	2,045	42.415	0.020	1,389	28.257	-	-	-	0.020	1,389	28.257
CONTAINER, CNU-417/E	-	-	-	0.002	1,435	3.495	0.002	1,023	2.231	0.002	695	1.472	-	-	-	0.002	695	1.472
CXM-AF-5	-	-	-	0.000	487,900	11.163	0.000	347,650	8.476	0.000	236,130	4.496	-	-	-	0.000	236,130	4.496
BLU-109/B Tritonal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	541.862	-	-	541.862
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	96.732	-	-	69.600	-	-	45.197	-	-	541.862	-	-	587.059
<i>Subtotal: Hardware - Hardware End Item Cost</i>	-	-	-	-	-	96.732	-	-	69.600	-	-	45.197	-	-	541.862	-	-	587.059
Support - Support End Item Cost																		
PRODUCTION ENGINEERING	-	-	-	-	-	0.127	-	-	0.264	-	-	0.178	-	-	-	-	-	0.178
QUALITY ASSURANCE	-	-	-	-	-	0.029	-	-	0.026	-	-	0.020	-	-	-	-	-	0.020
FIRST ARTICLE TEST	-	-	-	-	-	0.112	-	-	0.110	-	-	0.088	-	-	-	-	-	0.088
<i>Subtotal: Support - Support End Item Cost</i>	-	-	-	-	-	0.268	-	-	0.400	-	-	0.286	-	-	-	-	-	0.286
Gross/Weapon System Cost	-	-	-	-	-	97.000	-	-	70.000	-	-	45.483	-	-	541.862	-	-	587.345

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2019 Air Force		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 3011F / 01 / 13	P-1 Line Item Number / Title: 353020 / General Purpose Bombs	Item Number / Title [DODIC]: (ED49) BLU-109 2000 LB HARD TARGET BOMB
ID Code (A=Service Ready, B=Not Service Ready) : A		MDAP/MAIS Code:
<p>Remarks: This cost analysis represents the Single Manager for Conventional Ammunition (SMCA) efforts to obtain hardware, containers, pallets, straps, explosive material, lugs, etc. for the DoD Military Services purchasing the same or similar items, and to load, assemble and pack (LAP) the Air Force order.</p> <p>The load, assemble, pack (LAP) quantity is the number of completed rounds to be delivered into the AF inventory. The ammunition production plant provides the LAP price to SMCA, which includes cost to receive bomb bodies and for miscellaneous explosives, fillers and packing materials used to produce an inventory-worthy round.</p> <p>Bomb Body price, provided by the manufacturer to SMCA, is the unit price of an empty bomb body/casing. Developing the cost for a completed round, SMCA applies a Production Loss Factor (PLF) to estimate an additional quantity of bomb bodies/casings to mitigate risks during production of complete rounds. Risks may include defective bomb body or need to replace the body after filled with a nonconforming batch of explosives.</p> <p>Primary cost drivers include the total military customer orders (increases/decreases), complex or scarce materials, economic price adjustments, currency rate fluctuations.</p> <p>The BLU-137/B Advanced 2,000-pound Penetrator (A2K) will eventually begin to replace the BLU-109 C/B. The BLU-137/B will be initially procured through AFLCMC/EBD at Eglin AFB in FY18 and will transition to Hill (AFLCMC/EBH) for future procurement.</p> <p>(t) indicates the presence of a P-5a</p>		

UNCLASSIFIED

Exhibit P-5a, Procurement History and Planning: PB 2019 Air Force							Date: February 2018				
Appropriation / Budget Activity / Budget Sub Activity: 3011F / 01 / 13			P-1 Line Item Number / Title: 353020 / General Purpose Bombs				Item Number / Title [DODIC]: (ED49) BLU-109 2000 LB HARD TARGET BOMB				

Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$ M)	Specs Avail Now?	Date Revision Available	RFP Issue Date
LOAD, ASSEMBLE, PACK		2017	MCALESTER ARMY AMMUNITION PLANT / MCALESTER, OK	MIPR	ACC-ROCK ISLAND	Jun 2017	Jul 2018	2,870	0.011	Y		
LOAD, ASSEMBLE, PACK		2018	MCALESTER ARMY AMMUNITION PLANT / MCALESTER, OK	MIPR	ACC-ROCK ISLAND	Jun 2018	Jul 2019	2,045	0.008	Y		
LOAD, ASSEMBLE, PACK		2019	MCALESTER ARMY AMMUNITION PLANT / MCALESTER, OK	MIPR	ACC-ROCK ISLAND	Jun 2019	Jun 2020	1,389	0.008	Y		

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2019 Air Force **Date:** February 2018

Appropriation / Budget Activity / Budget Sub Activity: 3011F / 01 / 13	P-1 Line Item Number / Title: 353020 / General Purpose Bombs	Aggregated Items Title: (ED58) MAU-209C/B CCG
--	--	---

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
MAU-209C/B - ED58	A		-	-	-	0.005	8,446	45.281	0.007	3,571	25.000	0.008	4,520	35.000	0.008	865	6.700	0.008	5,385	41.700
Subtotal: Uncategorized			-	-	-	-	-	45.281	-	-	25.000	-	-	35.000	-	-	6.700	-	-	41.700
Total			-	-	-	-	-	45.281	-	-	25.000	-	-	35.000	-	-	6.700	-	-	41.700

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

Remarks:

Prices shown reflect the average unit cost of split-award contracts plus inflation. Due to the competitive nature of the currently qualified vendors, estimated unit costs are not available for planning purposes.

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2019 Air Force **Date:** February 2018

Appropriation / Budget Activity / Budget Sub Activity: 3011F / 01 / 13	P-1 Line Item Number / Title: 353020 / General Purpose Bombs	Aggregated Items Title: (ED78) BLU-129/B 500LB BOMB
--	--	---

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
BLU-129/B 500LB BOMB	A		-	-	-	-	-	-	0.116	70	8.125	0.116	70	8.125	-	-	-	0.116	70	8.125
Subtotal: Uncategorized			-	-	-	-	-	-	-	-	8.125	-	-	8.125	-	-	-	-	-	8.125
Total			-	-	-	-	-	-	-	-	8.125	-	-	8.125	-	-	-	-	-	8.125

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

Remarks:
BLU-129/B Composite Case Warhead - carbon fiber composite case for high near-field lethality to deliver 3x reduction in collateral damage.

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2019 Air Force **Date:** February 2018

Appropriation / Budget Activity / Budget Sub Activity: 3011F / 01 / 13	P-1 Line Item Number / Title: 353020 / General Purpose Bombs	Aggregated Items Title: BLU-134/B CDI 500LB
--	--	---

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
BLU-134/B, CDI 500 lb	A		-	-	-	-	-	-	0.010	8,225	81.573	0.010	8,492	84.996	-	-	-	0.010	8,492	84.996
Subtotal: Uncategorized			-	-	-	-	-	-	-	-	81.573	-	-	84.996	-	-	-	-	-	84.996
Total			-	-	-	-	-	-	-	-	81.573	-	-	84.996	-	-	-	-	-	84.996

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

Remarks:
Next Generation Area Attack Weapons (NGAAWs) are a family of unitary area attack weapon capabilities to meet the DoD policy on cluster munitions. They consist of BLU-134/B and BLU-136/B warheads with a cockpit height of burst sensor.

BLU-134/B, Improved Lethality Warhead (ILW), NGAAW Increment I is an area attack employed, near-term solution, 500 lb warhead for improved anti-personnel anti-material (APAM) target lethality which meets DoD policy on cluster munitions.

BLU-136/B, NGAAW Increment II, is a 2,000 lb area attack warhead to augment the BLU-134/B for significant improvement against the APAM target lethality which meets DoD policy on cluster munitions

UNCLASSIFIED

Exhibit P-5, Cost Analysis: PB 2019 Air Force		Date: February 2018
Appropriation / Budget Activity / Budget Sub Activity: 3011F / 01 / 13	P-1 Line Item Number / Title: 353020 / General Purpose Bombs	Item Number / Title [DODIC]: (EE59) BLU-137

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

Resource Summary	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Procurement Quantity (Units in Each)	-	-	-	1,000	-	1,000
Gross/Weapon System Cost (\$ in Millions)	-	-	-	45.500	-	45.500
Less PY Advance Procurement (\$ in Millions)	-	-	-	0.000	-	0.000
Net Procurement (P-1) (\$ in Millions)	-	-	-	45.500	-	45.500
Plus CY Advance Procurement (\$ in Millions)	-	-	-	0.000	-	0.000
Total Obligation Authority (\$ in Millions)	-	-	-	45.500	-	45.500

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

Initial Spares (\$ in Millions)	-	-	-	0.000	0.000	0.000
Gross/Weapon System Unit Cost (\$ in Millions)	-	-	-	0.046	-	0.046

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

Cost Elements	Prior Years			FY 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 Total		
	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Hardware - (EE59) BLU-137 Cost																		
Recurring Cost																		
Load Assemble Pack (LAP)	-	-	-	-	-	-	-	-	-	0.019	1,000	18.520	-	-	-	0.019	1,000	18.520
BLU-137/B Warhead Case and Assembly	-	-	-	-	-	-	-	-	-	0.026	1,000	25.588	-	-	-	0.026	1,000	25.588
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	-	-	-	-	-	-	<i>44.108</i>	-	-	-	-	-	<i>44.108</i>
<i>Subtotal: Hardware - (EE59) BLU-137 Cost</i>	-	-	-	-	-	-	-	-	-	-	-	<i>44.108</i>	-	-	-	-	-	<i>44.108</i>
Support - (EE59) BLU-137 Cost																		
Production Engineering	-	-	-	-	-	-	-	-	-	-	-	1.190	-	-	-	-	-	1.190
First Article Acceptance Test	-	-	-	-	-	-	-	-	-	-	-	0.100	-	-	-	-	-	0.100
Quality Assurance	-	-	-	-	-	-	-	-	-	-	-	0.102	-	-	-	-	-	0.102
<i>Subtotal: Support - (EE59) BLU-137 Cost</i>	-	-	-	-	-	-	-	-	-	-	-	<i>1.392</i>	-	-	-	-	-	<i>1.392</i>
Gross/Weapon System Cost	-	-	-	-	-	-	-	-	-	0.046	1,000	45.500	-	-	-	0.046	1,000	45.500

Remarks:

The BLU-137/B Advanced 2,000-pound Penetrator (A2K) is a weapon used against bunkers, aircraft shelters, and reinforced concrete structures and is compatible with the JDAM guidance tail kit. The BLU-137/B will eventually begin to replace the BLU-109 C/B. The BLU-137/B will be initially procured through AFLCMC/EBD at Eglin AFB in FY18 and will transition to Hill (AFLCMC/EBH) for future procurement.

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2019 Air Force **Date:** February 2018

Appropriation / Budget Activity / Budget Sub Activity: 3011F / 01 / 13	P-1 Line Item Number / Title: 353020 / General Purpose Bombs	Aggregated Items Title: GBU-49
--	--	--

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
GBU-49	A		-	-	-	-	-	0.000	-	-	72.000	-	-	-	-	-	-	-	-	-
Subtotal: Uncategorized			-	-	-	-	-	0.000	-	-	72.000	-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	0.000	-	-	72.000	-	-	-	-	-	-	-	-	-

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

Remarks:
Procurement of 1,200 guidance kits (notional inventory requirement), necessary support equipment, and qualification testing.

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2019 Air Force															Date: February 2018				
Appropriation / Budget Activity / Budget Sub Activity: 3011F / 01 / 13							P-1 Line Item Number / Title: 353020 / General Purpose Bombs							Aggregated Items Title: GENERAL PURPOSE BOMBS (ITEMS LESS THAN \$5 MILLION)					

Item Number / Title [DODIC]	ID CD	MDAP/MAIS Code	Prior Years			FY 2017			FY 2018			FY 2019 Base			FY 2019 OCO			FY 2019 Total		
			Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ M)	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
MXU-651 AFG, GBU-10 (EC31)	A		-	-	-	0.009	200	1.700	0.009	211	1.800	-	-	1.800	-	-	-	-	-	1.800
BOMB FUZE PROTECTION ASSEMBLY (ED67)	A		-	-	-	0.000	4,160	0.500	0.000	4,310	0.500	-	-	0.500	-	-	-	-	-	0.500
MK84 FIN ASSEMBLY (F607)	A		-	-	-	0.001	1,182	1.000	0.001	1,308	1.000	-	-	1.000	-	-	-	-	-	1.000
FIN ASSY BSU-33B/B (EE10)	A		-	-	-	0.000	10,655	3.000	0.000	10,879	3.000	-	-	3.000	-	-	-	-	-	3.000
(ED41) BLU-110B/B GENERAL PURPOSE BOMB	A		-	-	-	-	-	-	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
IM	A		-	-	-	-	-	2.000	-	-	2.000	-	-	2.000	-	-	-	-	-	2.000
LWIP	A		-	-	-	-	-	3.000	-	-	3.000	-	-	3.000	-	-	-	-	-	3.000
GP BOMB IM PRODUCTION ENGINEERING	A		-	-	-	-	-	4.900	-	-	4.900	-	-	4.900	-	-	-	-	-	4.900
PMA OTHER GOVERNMENT COSTS	A		-	-	-	-	-	1.000	-	-	1.000	-	-	1.000	-	-	-	-	-	1.000
Subtotal: Uncategorized			-	-	-	-	-	17.100	-	-	17.200	-	-	17.200	-	-	-	-	-	17.200
Total			-	-	-	-	-	17.100	-	-	17.200	-	-	17.200	-	-	-	-	-	17.200

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