## Department of Defense Fiscal Year (FY) 2023 Budget Estimates

April 2022



## **Air Force**

Justification Book Volume 1 of 1

Procurement of Ammunition, Air Force

UNCLASSIFIED				
THIS PAGE INTENTIONALLY LEFT BLANK				

Air Force • Budget Estimates FY 2023 • Procurement

## **Volume 1 Table of Contents**

Introduction and Explanation of Contents	Volume 1 - iii
Comptroller Exhibit P-1	Volume 1 - v
Master Line Item Table of Contents (by Appropriation then Line Number)	Volume 1 - xv
Master Line Item Table of Contents (Alphabetically by Line Item Title)	Volume 1 - xvi
Exhibit P-1M, Procurement Programs - Modification Summary	Volume 1 - xix
Acronyms	Volume 1 - xxii
Exhibit P-40s	Volume 1 - 1



# Appropriation Language Fiscal Year (FY) 2023 Budget Estimates Procurement of Ammunition, Air Force

For construction, procurement, production, and modification of ammunition and accessories therefor; specialized equipment and training devices; expansion of public and private plants, including ammunition facilities authorized by section 2854 of title 10, United States Code, and the land necessary therefor, for the foregoing purposes, and such lands and interests therein, for the foregoing purposes, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to approval of title; and procurement and installation of equipment, appliances, and machine tools in public and private plants; reserve plant and Government and contractor-owned equipment layaway; other expenses necessary for the foregoing purposes, and overseas contingency operations, \$903,630,000 to remain available for obligation until September 30, 2025.

#### Footnotes:

Fiscal Year (FY) 2023 Overseas Operations Costs funding accounted for in the Base budget include:

- Operation INHERENT RESOLVE (OIR) \$0 thousands.
- European Deterrence Initiative (EDI) \$0 thousands.
- Other theater requirements and related missions \$10,825 thousands.



#### Department of the Air Force FY 2023 President's Budget Exhibit P-1 FY 2023 President's Budget Total Obligational Authority (Dollars in Thousands)

25 Mar 2022

FY 2022

Appropriation: Procurement of Ammunition, Air Force

		11 0000				
		FY 2022	Division B	FY 2022		
		Less	Division C	Division B		
	FY 2021	Supplementals	P.L.117-43	P.L.117-70		
Budget Activity	(Base + OCO)	Enactment	Enactment*	Enactment**		
01. Ammunition	1,189,147	655,884				
02. Weapons	20,142	10,093				
Total Procurement of Ammunition, Air Force	1,209,289	665,977				

P-123PBP: FY 2023 President's Budget (Total Base Published Version), as of March 25, 2022 at 15:48:45
\*Includes enacted funding pursuant to the Extending Government Funding and Delivering Emergency Assistance Act (Public Law 117-43).

<sup>\*\*</sup>Includes enacted funding pursuant to the Further Extending Government Funding Act (Public Law 117-70).

#### Department of the Air Force FY 2023 President's Budget Exhibit P-1 FY 2023 President's Budget Total Obligational Authority (Dollars in Thousands)

25 Mar 2022

Appropriation: Procurement of Ammunition, Air Force

Budget Activity	FY 2022 Division A P.L. 117-86 Enactment***	FY 2022 Division N P.L. 117-103 Enactment****	FY 2022 Total Supplemental Enactment	FY 2022 Total Enactment
01. Ammunition				655,884
02. Weapons				10,093
Total Procurement of Ammunition, Air Force				665,977

P-123PBP: FY 2023 President's Budget (Total Base Published Version), as of March 25, 2022 at 15:48:45
\*\*\*Includes enacted funding pursuant to the Further Additional Extending Government Funding Act (Public Law 117-86).
\*\*\*\*Includes enacted funding pursuant to the Ukraine Supplemental Appropriations Act (Public Law 117-103).

#### Department of the Air Force FY 2023 President's Budget Exhibit P-1 FY 2023 President's Budget Total Obligational Authority (Dollars in Thousands)

25 Mar 2022

FY 2023

Appropriation: Procurement of Ammunition, Air Force

Budget Activity	Request
01. Ammunition	887,235
02. Weapons	16,395
Total Procurement of Ammunition, Air Force	903,630

P-123PBP: FY 2023 President's Budget (Total Base Published Version), as of March 25, 2022 at 15:48:45

FY 2022

Total Obligational Authority 25 Mar 2022
(Dollars in Thousands)

Appropriation: 3011F Procurement of Ammunition, Air Force

Line	Ident	FY 2021 (Base + OCO)	FY 2022 Less Supplementals Enactment	FY 2022 Division B Division C P.L.117-43 Enactment*	FY 2022 Division B P.L.117-70 S Enactment** e
No Item Nomenclature	Code 	Quantity Cost	Quantity Cost	Quantity Cost	Quantity Cost c
Budget Activity 01: Ammunition					
Rockets					
1 Rockets	А	34,451	36,572		U
Cartridges					
2 Cartridges	А	157,799	161,917		U
Bombs					
3 Practice Bombs	А	34,313	48,745		U
4 General Purpose Bombs	А	369,566	160,976		U
5 Massive Ordnance Penetrator (MOP)			15,500		U
6 Joint Direct Attack Munition	А	17300 346,985	1180 48,584		U
7 в-61	А	21,189	2,709		U
Other Items					
8 Cad/Pad	А	47,830	59,010		U
9 Explosive Ordnance Disposal (EOD)	А	6,232	5,151		U
10 Spares And Repair Parts	А	542	535		U
11 Modifications	А	1,310	292		U
12 First Destination Transportation	A				U
13 Items Less Than \$5,000,000	A	4,753	9,164		U

P-123PBP: FY 2023 President's Budget (Total Base Published Version), as of March 25, 2022 at 15:48:45

Page F-1 Volume 1 - viii

<sup>\*</sup>Includes enacted funding pursuant to the Extending Government Funding and Delivering Emergency Assistance Act (Public Law 117-43).

<sup>\*\*</sup>Includes enacted funding pursuant to the Further Extending Government Funding Act (Public Law 117-70).

Total Obligational Authority 25 Mar 2022
(Dollars in Thousands)

Appropriation: 3011F Procurement of Ammunition, Air Force

Line	Ident	FY 20 Divisi P.L. 11 Enactme	ion A 17-86	FY 20 Divisi P.L. 11 Enactmer	ion N 17-103	FY 2( Tota Suppler Enactr	al mental		2022 cal cment	S e
No Item Nomenclature	Code	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	C _
Budget Activity 01: Ammunition										
Rockets										
1 Rockets	А								36 <b>,</b> 572	U
Cartridges										
2 Cartridges	А								161,917	U
Bombs										
3 Practice Bombs	А								48,745	U
4 General Purpose Bombs	А								160,976	U
5 Massive Ordnance Penetrator (MOP)									15,500	U
6 Joint Direct Attack Munition	А							1180	48,584	U
7 B-61	А								2,709	U
Other Items										
8 Cad/Pad	А								59,010	U
9 Explosive Ordnance Disposal (EOD)	А								5,151	U
10 Spares And Repair Parts	А								535	U
11 Modifications	А								292	U
12 First Destination Transportation	А									U
13 Items Less Than \$5,000,000	A								9,164	U

P-123PBP: FY 2023 President's Budget (Total Base Published Version), as of March 25, 2022 at 15:48:45

Page F-16 Volume 1 - ix

<sup>\*\*\*</sup>Includes enacted funding pursuant to the Further Additional Extending Government Funding Act (Public Law 117-86).

<sup>\*\*\*\*</sup>Includes enacted funding pursuant to the Ukraine Supplemental Appropriations Act (Public Law 117-103).

tal Obligational Authority 25 Mar 2022 (Dollars in Thousands)

Appropriation: 3011F Procurement of Ammunition, Air Force

Line No Item Nomenclature	Ident Code 	FY 2023 S Request e Quantity Cost c
Budget Activity 01: Ammunition		
Rockets		
1 Rockets	А	22,190 U
Cartridges		
2 Cartridges	А	124,164 U
Bombs		
3 Practice Bombs	А	U
4 General Purpose Bombs	А	162,800 U
5 Massive Ordnance Penetrator (MOP)		19,743 U
6 Joint Direct Attack Munition	А	4200 251,956 U
7 B-61	А	U
Other Items		
8 Cad/Pad	А	50,473 U
9 Explosive Ordnance Disposal (EOD)	A	6,343 U
10 Spares And Repair Parts	А	573 U
11 Modifications	А	U
12 First Destination Transportation	А	1,903 U
13 Items Less Than \$5,000,000	А	5,014 U

P-123PBP: FY 2023 President's Budget (Total Base Published Version), as of March 25, 2022 at 15:48:45

Page F-16BVolume 1 - x

#### Department of the Air Force FY 2023 President's Budget Exhibit P-1 FY 2023 President's Budget Total Obligational Authority

Total Obligational Authority 25 Mar 2022 (Dollars in Thousands)

Appropriation: 3011F Procurement of Ammunition, Air Force

Line No Item Nomenclature	Ident Code	FY 2021 (Base + OCO) Quantity Cost	FY 2022 Less Supplementals Enactment Quantity Cost	FY 2022 Division B Division C P.L.117-43 Enactment* Quantity Cost	FY 2022 Division B P.L.117-70 S Enactment** e Quantity Cost c
Flares					
14 Expendable Countermeasures	А	61,259	85,934		U
Fuzes					
15 Fuzes	A	102,918	20,795		Ŭ
Total Ammunition		1,189,147	655,884		
Budget Activity 02: Weapons					
Small Arms					
16 Small Arms	А	20,142	10,093		U
Total Weapons		20,142	10,093		
Total Procurement of Ammunition, Air Force		1,209,289	665,977		

Page F-17 Volume 1 - xi

P-123PBP: FY 2023 President's Budget (Total Base Published Version), as of March 25, 2022 at 15:48:45

<sup>\*</sup>Includes enacted funding pursuant to the Extending Government Funding and Delivering Emergency Assistance Act (Public Law 117-43).

<sup>\*\*</sup>Includes enacted funding pursuant to the Further Extending Government Funding Act (Public Law 117-70).

Total Obligational Authority 25 Mar 2022 (Dollars in Thousands)

Appropriation: 3011F Procurement of Ammunition, Air Force

Line	Ident	FY 202 Divisio P.L. 117 Enactmer	on A 7-86	FY 20 Divisi P.L. 11 Enactmer	ion N 17-103	FY 20 Tota Suppler Enactr	al mental	FY 2 Tot Enact:	al	S e
No Item Nomenclature	Code	Quantity 	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	C -
Flares										
14 Expendable Countermeasures	А								85,934	U
Fuzes										
15 Fuzes	А								20,795	
Total Ammunition									655 <b>,</b> 884	-
Budget Activity 02: Weapons										
Small Arms										
16 Small Arms	А								10,093	U
Total Weapons									10 <b>,</b> 093	
Total Procurement of Ammunition, Air Force									665 <b>,</b> 977	

P-123PBP: FY 2023 President's Budget (Total Base Published Version), as of March 25, 2022 at 15:48:45
\*\*\*Includes enacted funding pursuant to the Further Additional Extending Government Funding Act (Public Law 117-86).
\*\*\*\*Includes enacted funding pursuant to the Ukraine Supplemental Appropriations Act (Public Law 117-103).

#### Department of the Air Force FY 2023 President's Budget Exhibit P-1 FY 2023 President's Budget Total Obligational Authority

Total Obligational Authority 25 Mar 2022
(Dollars in Thousands)

Appropriation: 3011F Procurement of Ammunition, Air Force

Line No Item Nomenclature	Ident Code	FY 2023 S Request e Quantity Cost c
Flares		
14 Expendable Countermeasures	A	120,548 U
Fuzes		
15 Fuzes	A	121,528 U
Total Ammunition		887 <b>,</b> 235
Budget Activity 02: Weapons		
Small Arms		
16 Small Arms	A	16,395 U
Total Weapons		16,395
Total Procurement of Ammunition, Air Force		903,630

P-123PBP: FY 2023 President's Budget (Total Base Published Version), as of March 25, 2022 at 15:48:45



## Air Force • Budget Estimates FY 2023 • Procurement

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

## Appropriation 3011F: Procurement of Ammunition, Air Force

Line #	ВА	BSA	Line Item Number	Line Item Title	Page
1	01	11	351010	RocketsVolum	
2	01	12	352010	CartridgesVolum	ne 1 - 9
3	01	13	353010	Practice BombsVolume	e 1 - 23
4	01	13	353020	General Purpose BombsVolume	e 1 - 25
5	01	13	353190	Massive Ordnance Penetrator (MOP)Volume	e 1 - 37
6	01	13	353620	Joint Direct Attack MunitionVolume	e 1 - 41
7	01	13	354040	B-61Volume	e 1 - 51
8	01	15	355100	Cad/PadVolume	e 1 - 55
9	01	15	355450	Explosive Ordnance Disposal (EOD)Volume	e 1 - 59
10	01	15	355900	Spares And Repair PartsVolume	e 1 - 65
11	01	15	355970	Modifications	e 1 - 67
12	01	15	355980	First Destination TransportationVolume	e 1 - 69
13	01	15	355990	Items Less Than \$5,000,000Volume	e 1 - 71
14	01	16	356010	Expendable CountermeasuresVolume	e 1 - 75
15	01	18	356120	FUZESVolume	e 1 - 93

Air Force • Budget Estimates FY 2023 • Procurement

## Appropriation 3011F: Procurement of Ammunition, Air Force

Page	•	e Item Number Line Item Title	Line Item N	BSA	ВА	Line #
Volume 1 - 99	V	O10 Small Arms	357010	01	02	16

## Air Force • Budget Estimates FY 2023 • Procurement

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

Line Item Title	Line Item Number	Line #	ВА	BSA Page
B-61	354040	7	01	13Volume 1 - 51
Cad/Pad	355100	8	01	15 Volume 1 - 55
Cartridges	352010	2	01	12Volume 1 - 9
Expendable Countermeasures	356010	14	01	16Volume 1 - 75
Explosive Ordnance Disposal (EOD)	355450	9	01	15Volume 1 - 59
FUZES	356120	15	01	18Volume 1 - 93
First Destination Transportation	355980	12	01	15Volume 1 - 69
General Purpose Bombs	353020	4	01	13 Volume 1 - 25
Items Less Than \$5,000,000	355990	13	01	15 Volume 1 - 71
Joint Direct Attack Munition	353620	6	01	13 Volume 1 - 41
Massive Ordnance Penetrator (MOP)	353190	5	01	13 Volume 1 - 37
Modifications	355970	11	01	15 Volume 1 - 67
Practice Bombs	353010	3	01	13Volume 1 - 23
Rockets	351010	1	01	11Volume 1 - 1
Small Arms	357010	16	02	01Volume 1 - 99
Spares And Repair Parts	355900	10	01	15Volume 1 - 65

UNCLASSIFIED
THIS PAGE INTENTIONALLY LEFT BLANK

Air Force • Budget Estimates FY 2023 • Procurement Exhibit P-1M, Procurement Programs - Modification Summary (Listing by Model)

**Lookup Matrix by Model** 



Air Force • Budget Estimates FY 2023 • Procurement Exhibit P-1M, Procurement Programs - Modification Summary (Funding for Modifications)

## Funding (\$ M)

Modification P-40a Item Title P-3a Modification Title	PYS	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027					
Totals (Total Obligation Authority)	Totals (Total Obligation Authority)														
Total Obligation Authority	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000					

UNCLASSIFIED
THIS PAGE INTENTIONALLY LEFT BLANK

## **ACRONYMS**

#### GENERAL ACRONYMS

A&AS - Advisory & Assistance Services

ABIDES - Automated Budget Interactive Data Environment System

ACAT - Acquisition Category

ACTD - Advanced Concept Technology Demonstration

AGM - Air-to-Ground Missile
AIM - Air Intercept Missile
AIS - Avionics Intermediate Shop

ACMI - Aircraft Combat Maneuvering Instrumentation AMRAAM - Advanced Medium-Range Air-to-Air Missile

APPN - Appropriation

ATD - Advanced Technology Development

BA - Budget Activity

BES - Budget Estimate Submission

BY - Budget Year

C3 - Command, Control, and Communication System

CFE - Contractor Furnished Equipment

CONOPS - Concept of Operation CONUS - Continental United States

CPMS - Comprehensive Power Management System

CPT - Cockpit Procedures Trainer
CRA - Continuing Resolution Authority
CTS - Countermosques Test Set

CTS - Countermeasures Test Set

CY - Current Year

ECCM - Electronic Counter Counter-Measures

ECM - Electronic Counter Measures
 ECO - Engineering Change Orders
 EOQ - Economic Order Quantity
 ECP - Engineering Change Proposal
 EPA - Economic Price Adjustment

EW - Electronic Warfare

EWAISP - Electronic Warfare Avionics Integration Support Facility

FLIR - Forward Looking Infra Red

FOT&E - Follow-on Test and Evaluation FOC - Fully Operational Capability

FLTS - Flight Line Test Set
FPIF - Fixed Price Incentive Firm

FPIS - Fixed Price Incentive Fee, Successive Targets

FY - Fiscal Year

**GANS** - Global Access Navigation & Safety **GATM** - Global Air Traffic Management - Government Furnished Equipment **GFE GFP** - Government Furnished Property - Global Positioning System **GPS** - Ground Support Equipment **GSE** - Interim Contractor Support ICS - Initial Operating Capability IOC - Information Technology IT - Joint Urgent Operational Need **JUON** 

MAIS - Major Automated Information System Program

MDAP - Major Defense Acquisition Program
METS - Mobile Electronic Test Stations

MYP - Multiyear Procurement
NAVWAR - Navigation Warfare
NMC Rate - Not Mission Capable Rate

OCO - Overseas Contingency Operations
OT&E - Operational Test and Evaluation
OWRM - Other War Reserve Material

PAGEL - Priced Aerospace Ground Equipment List

PB - President's Budget PBR - Program Budget Review

PMA - Program Management Administration

PMC - Procurement Method Code

PNO - Acquisition Program Number (MDAP Codes)

PR - Purchase Request

PRCP - Program Resource Collection Process

PTT - Part Task Trainer

PY - Prior Year

R&M - Reliability and Maintainability

RAA - Rapid Acquisition Authority

RDT&E - Research, Development, Test and Evaluation

RWR - Radar Warning Receiver ROM - Rough Order of Magnitude

SS - Sole Source

SOF - Special Operation Force TAF - Tactical Air Force

TCAS - Traffic Collision Alert and Avoidance System

TEWS - Tactical Electronic Warfare System
TISS - TEWS Intermediate Support System

TOA - Total Obligation Authority
WCF - Working Capital Fund
WRM - War Reserve Material
WST - Weapon System Trainer
UAV - Unmanned Aerial Vehicle
XML - Extensible Markup Language

#### BASE / ORGANIZATIONAL ACRONYMNS

ACC - Air Combat Command

- Air Education & Training Command **AETC** - Air Force Computer Acquisition Office **AFCAO** - Air Force Civil Engineering Support Agency **AFCESA** - AF Communications & Information Center **AFCIC AFCSC** - Air Force Cryptologic Service Center - Air Force Engineering Services Center **AFESC AFGWC** - Air Force Global Weather Central - Air Force Institute of Technology **AFIT** - Air Force Life Cycle Management Center **AFLCMC** 

AFMC - Air Force Materiel Command

AFMETCAL - Air Force Metrology and Calibration Office

AFMLO - Air Force Medical Logistics Office AFOSI - Air Force Office of Special Investigation

AFOTEC - Air Force Operational Test & Evaluation Center

AFPC - Air Force Personnel Center AFPSL - AF Primary Standards Lab

AFR - Air Force Reserve

AFSOC - AF Special Operations Command
AFSPC - Air Force Space Command
AIA - Air Intelligence Agency
ALC - Air Logistics Center
AMC - Air Mobility Command
ANG - Air National Guard

ASC - Aeronautical Systems Center AETC - Air Education Training Command

AU - Air University
AWS - Air Weather Service
CIA - Central Intelligence Agency
DGSC - Defense General Support Center
DLA - Defense Logistics Center
DOE - Department of Energy

DPSC - Defense Personnel Support Center
DSCC - Defense Supply Center, Columbus
DTIC - Defense Technical Information Center

ER - Eastern Range

ESC - Electronic Systems Center
FAA - Federal Aviation Agency
FBI - Federal Bureau of Investigation
GSA - General Services Administration

JCS - Joint Chiefs of Staff

NATO - North Atlantic Treaty Organization
OSD - Office of the Secretary of Defense

PACAF - Pacific Air Forces
USAF - United States Air Force

USAFA - United States Air Force Academy
USAFE - United States Air Force Europe
USCENTCOM - United States Central Command
USEUCOM - United States European Command
USMC - United States Marine Corps

USSTRATCOM - United States Strategic Command

WP AFB - Wright-Patterson AFB, OH

#### CONTRACT METHOD / TYPE ACRONYMNS

C - Competitive BA - Basic Agreement

BOA - Basic Ordering Agreement
BPA - Blanket Purchasing Agreement

CS - Cost Sharing

IDDQ
 Indefinite Delivery, Definite Quantity
 IDIQ
 Indefinite Delivery, Indefinite Quantity
 IDRT
 Indefinite Delivery, Requirements

Letter - Letter LH - Labor-hour

MIPR - Military Interdepartmental Purchase Request

MIPR-C - Military Interdepartmental Purchase Request - Competitive
MIPR-OPT - Military Interdepartmental Purchase Request - Option
MIPR-OTH - Military Interdepartmental Purchase Request - Other
MIPR-SS - Military Interdepartmental Purchase Request - Sole Source

OPT - Option OTH - Other

PO - Project Order REQN - Requisition SS - Sole Source

T&M - Time and Materials

UCA - Undefinitized Contract Action

WP - Work Project

#### CONTRACTED BY ACRONYMNS

11 WING - 11th Support Wing, Washington, DC ACC - Air Combat Command, Langley AFB, VA

AEDC - Arnold Engineering Development Center, Arnold AFB, TN

AAC - Air Armament Center, Eglin AFB, FL

AEDC - Arnold Engineering Development Center, Arnold AFB, TN
AETC - Air Education and Training Command, Randolph AFB, TX

AFCIC - Air Force Communications and Information Center, Washington, DC
AFCESA - Air Force Civil Engineering Support Agency, Tyndall AFB, FL

AFFTC - Air Force Flight Test Center, Edwards AFB, CA

AFLCMC - Air Force Life Cycle Management Center, Wright-Patterson AFB, OH

AFMC - Air Force Materiel Command, Wright-Patterson AFB, OH
AFMETCAL - Air Force Metrology and Calibration Office, Heath, Ohio
- Air Force Medical Logistics Office, Ft Detrick, MD

AIA - Air Intelligence Agency, Kelly AFB, TX
AMC - Air Mobility Command, Scott AFB, IL

ASC - Aeronautical Systems Center, Wright-Patterson AFB, OH & Eglin AFB, FL

AFWA - Air Force Weather Agency, Offutt AFB, NE
DGSC - Defense General Support Center, Richmond, VA
DPSC - Defense Personnel Support Center, Philadelphia, PA

ER - Eastern Range, Patrick SFB, FL

ESC - Electronic Systems Center, Hanscom AFB, MA

HSC - Human Services Center, Brook AFB, TX

OC-ALC - Oklahoma City Air Logistics Center, Tinker AFB, OK

OO-ALC - Ogden Air Logistics Center, Hill AFB, UT

SMC - Space & Missile Systems Center, Los Angeles AFB, CA

US STRATCOM - US Strategic Command, Offutt AFB, NE

WACC - Washington Area Contracting Center, Washington DC

WR - Western Range, Vandenberg SFB, CA

WR-ALC

- Warner-Robins Air Logistics Center, Robins AFB, GA

AFSPC

- Air Force Space Command, Peterson AFB, CO

HQ ANG

- Headquarters, Air National Guard, Washington, DC

USAFE

- United States Air Force Europe, Ramstein AB, GE

USAFA

- United States Air Force Academy, Colorado Springs, CO

#### **IDENTIFICATION CODES**

Code "A" - Line items of material which have been approved for Air Force service use.

Code "B" - Line items of material that have not been approved for Service use

OBAN - Operating Budget Account Number, 2-digit code for unit allocated funds

Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force Date: April 2022

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F: Procurement of Ammunition, Air Force / BA 01: Ammunition / BSA 11:

351010 / Rockets

Rockets

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 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	34.451	36.572	22.190	-	22.190	18.359	23.900	24.414	24.914	-	184.800
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	34.451	36.572	22.190	-	22.190	18.359	23.900	24.414	24.914	-	184.800
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	34.451	36.572	22.190	-	22.190	18.359	23.900	24.414	24.914	-	184.800
(The following	g Resource Sum	mary rows are fo	r informational p	urposes only. Th	ne corresponding	budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	_	-	-	-

#### **Description:**

- FY2021 funding totals include 19.489M appropriated for Overseas Contingency Operations.
- FY2022 funding totals include 15.079M requested for Over-The-Horizon.
- The WGU-59B Advanced Precision Kill Weapon System II (APKWS II) is employed on the A-10 and F-16 aircraft. APKWS II AUR is composed of a fuse, M151/M282 warhead, WGU-59B guidance and control section, and a MK66 rocket motor launched from a LAU-131A/A or LAU-68F/A rocket launcher. The weapon is effective in any terrain, including, but not limited to, urban, desert and mountainous. It provides an ability to engage and destroy moving and transient targets. APKWS II offers greater precision, reduced collateral damage, and increased standoff range to enhance crew survivability.
- The APKWS II guidance section is a mid-body, semi-active laser guidance and control kit that converts an unguided 2.75 inch rocket into a precision laser-guided rocket. APKWS II guidance sections are compatible with new and existing inventories of rocket motors, warheads, and launchers. The guidance sections are procured through Department of the Navy PMA-242 at Patuxent River Naval Air Station.
- The Air Force uses the 2.75 inch diameter rocket system to support various missions including low collateral damage engagements, target marking, and battle field illumination. The system can be employed from both high and low speed aircraft. The 2.75 inch diameter rocket motor (HA07) is a single stage, solid grain rocket motor used to propel unguided and guided payloads to their targets. The HA07 is able to carry the WGU-59B (HB24) Advanced Precision Kill Weapon System II (APKWS II) guidance section, and the following payloads: illuminating flare warhead (H812), infrared (IR) illuminating flare warhead (HA06/HB37), Signal Practice warhead (H872), White Phosphorus (WP) warhead (H855), M151 High Explosive warheads (H842 and H843), and M282A2 (HB45) Penetrator warhead. The 2.75 inch rockets are launched from reusable pods, the LAU-131A (H149) and LAU-131A/A (HA91) extended length launcher, carried on A-10 and F-16 aircraft. These items are procured by AFLCMC/EBH through the U.S. Army Missile Command, Tactical Aviation and Ground Munitions (TAGM), PEO Missile and Space at Redstone Arsenal, Alabama, and Department of the Navy PMA-242 at Patuxent River Naval Air Station and Naval Surface Warfare Center Indian Head Explosive Ordnance Disposal Technology Division (IHEODTD) at Indian Head, MD.
- The M151 (H843) and M282 Multi-Purpose Penetrator (MPP) warheads are low-cost, low-collateral damage capabilities. The M282 MPP warhead provides aircrew and ground commanders greatly enhanced weaponeering options to engage targets protected by urban and cave environments. Equipment such as MKIII, MKIV, and AN/USM-715 testers, peculiar support equipment, clamping and torquing fixtures and tools, or other assets that pertain to assembling and testing APKWS or unguided rockets are also procured.
- The Illuminating Flare (H812) and IR illuminating flare (HA06/HB37) warheads provide forward air control aircraft with the target locations from a standoff distance in a hostile environment.

LI 351010 - Rockets

Air Force

Page 1 of 8

P-1 Line #1

Volume 1 - 1

	UNCLA	SSIFIED		
Exhibit P-40, Budget Line Item Justification: PB 2023	3 Air Force			Date: April 2022
Appropriation / Budget Activity / Budget Sub Activity 3011F: Procurement of Ammunition, Air Force / BA 01: A Rockets		P-1 Line Item Number / Tit 351010 / Rockets	tle:	
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B It	ems: N/A	Other Related Pr	ogram Elements: N/A
Line Item MDAP/MAIS Code: N/A				
- The Signal Practice (H872) warhead provides a training capability.				
- The WP (H855) warhead provides forward air control aircraft with tar	rget locations from a standoff distan	ce in a hostile environment.		
- The LAU-131A/A (HA91) and the LAU-68F/A (HA94) are seven tube APKWS II rockets. The extended length launchers are designed to an			icy length 2.75 inch	diameter rockets and the extended length of the
- Items Less Than Five Million Dollars: All items have an annual procu Tactical Air to Ground Munitions (TAGM), PEO Missiles and Space at FY 2008 National Defense Authorization Act (P.L. 110-181), this item responses, and providing military support to civil authorities.	t Redstone Arsenal Alabama, and/or	the U.S. Navy PMA-242 at Patuxer	nt River Naval Air S	Station. In accordance with Section 1815 of the
LA70 is a self-consuming ground launched missile simulator used dur	ring pilot training. The LA70 reaches	an altitude of approximately 500 fee	et over ground leve	al.
Funding may be used to address production Diminishing Manufacturing replacement, to include electronic components used commercially an				
Note: Procurement quantities can change based on negotiated option	ns/pricing bands and available fundir	ng, in accordance with Title 10, U.S.	Code Section 230	8 BUY-TO-BUDGET ACQUISITION.
These funds may also procure inventoried items which may not be proast actual and planned expenditures will be addressed during execution		d be required on an emerging basis.	. Variations to cove	er critical shortfalls to inventory objectives as well
Funding for this exhibit is contained in PE 0207599F and PE 0208030	OF.			

 LI 351010 - Rockets
 UNCLASSIFIED

 Air Force
 Page 2 of 8
 P-1 Line #1

 Volume 1 - 2

Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force Date: April 2022

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F: Procurement of Ammunition, Air Force / BA 01: Ammunition / BSA 11:

351010 / Rockets

Rockets

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

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

	Exhibits Schedule				Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-40a	(H812) WHD ILLUM M257				- / -	- / 1.052	- / 0.999	- / 0.000	- / -	- / 0.000
P-40a	(H855) WHD 2.75 RKT SMK M156 PD M427				- / -	- /2.500	- /2.475	- /2.000	- / -	- /2.000
P-40a	(HA06) WARHEAD, 2.75 ILLUM				- / -	- /2.480	- / 1.498	- / 0.000	- / -	- / 0.000
P-5	APKWS		Α		- / -	- / 28.419	- / 31.600	- / 20.189	- / -	- / 20.189
P-40a	ROCKETS (ITEMS LESS THAN \$5 MILLION)				- / -	- / -	- / -	- / 0.001	- / -	- / 0.001
P-40	Total Gross/Weapon System Cost				- 1 -	- / 34.451	- / 36.572	- / 22.190	- 1 -	- / 22.190

<sup>\*</sup>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:

Funding supports the purchase of rockets, launchers, warheads, and guidance sections to constitute the APKWS II all-up-round (AUR). Additionally, funding supports training and support equipment required for APKWS.

The Air Force procures munitions to maintain appropriate operational quantity levels, as well as 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.

LI 351010 - Rockets
Air Force

UNCLASSIFIED
Page 3 of 8
P-1 Line #1

Volume 1 - 3

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Air ForceDate: April 2022Appropriation / Budget Activity / Budget Sub Activity:P-1 Line Item Number / Title:<br/>351010 / RocketsAggregated Items Title:<br/>(H812) WHD ILLUM M257

									Control of the control							(11012) 1112 122111 111201						
			Р	rior Year	s		FY 2021			FY 2022		FY	′ 2023 Ba	se	FY	/ 2023 OC	:0	F۱	′ 2023 Tot	al		
Item Number / Title [DODIC]	ID CD		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)		
Uncategorized																						
(H812) WHD ILLUM M257	А		-	-	-	-	-	1.052	0.003	336	0.999	-	-	0.000	-	-	-	-	-	0.000		
Subtotal: Uncategorized			-	-	-	-	-	1.052	-	-	0.999	-	-	0.000	-	-	-	-	-	0.000		
Total			-	-	-	-	-	1.052	-	-	0.999	-	-	0.000	-	-	-	-	-	0.000		
N			1 11 11 D 40							*												

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

#### Remarks

No funding for H812 (M257) in FY23. The program will be close to meeting their inventory objective using FY21 and FY22 funds.

LI 351010 - Rockets
Air Force

UNCLASSIFIED
Page 4 of 8
P-1 Line #1

Volume 1 - 4

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Air Force

Date: April 2022

Appropriation / Budget Activity / Budget Sub Activity: 3011F / 01 / 11

P-1 Line Item Number / Title:

351010 / Rockets

**Aggregated Items Title:** (H855) WHD 2.75 RKT SMK M156 PD

M427

			P	rior Years	s		FY 2021	1 FY 2022			FY 2023 Base			FY 2023 OCO			FY 2023 Total			
Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)
Hardware																				
Warhead SMK M156 (H855)	A		-	-	-	-	-	2.500	0.001	2,999	2.475	0.001	2,351	2.000	-	-	-	0.001	2,351	2.000
Subtotal: Hardware			-	-	-	-	-	2.500	-	-	2.475	-	-	2.000	-	-	-	-	-	2.000
Total			-	-	-	-	-	2.500	-	-	2.475	-	-	2.000	-	-	-	-	-	2.000

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

LI 351010 - Rockets Air Force

P-1 Line #1

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Air ForceDate: April 2022Appropriation / Budget Activity / Budget Sub Activity:P-1 Line Item Number / Title:Aggregated Items Title:3011F / 01 / 11351010 / Rockets(HA06) WARHEAD, 2.75 ILLUM

																		(* * * * * * * * * * * * * * * * * * *						
			Р	rior Year	s		FY 2021			FY 2022		FY	′ 2023 Ba	se	FY	/ 2023 OC	0	FY	/ 2023 Tot	al				
Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)																
Uncategorized																								
(HA06) WARHEAD, 2.75 ILLUM	А		-	-	-	-	-	2.480	0.003	498	1.498	-	-	0.000	-	-	-	-	-	0.000				
Subtotal: Uncategorized			-	-	-	-	-	2.480	-	-	1.498	-	-	0.000	-	-	-	-	-	0.000				
Total			-	-	-	-	-	2.480	-	-	1.498	-	-	0.000	-	-	-	-	-	0.000				

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

#### Remarks

No funding for HA06 (M78) in FY23. The program will be close to meeting their inventory objective using FY21 and FY22 funds.

 LI 351010 - Rockets
 UNCLASSIFIED

 Air Force
 Page 6 of 8
 P-1 Line #1

 Volume 1 - 6

Exhibit P-5, Cost Analysis: PB 2023 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3011F / 01 / 11

Date: April 2022

Item Number / Title [DODIC]:

351010 / Rockets

APKWS

ID Code (A=Service Ready, B=Not Service Ready): A		ı	MDAP/MAIS Code:			
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	28.41	9 31.600	20.189	-	20.189
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	28.41	9 31.600	20.189	-	20.189
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	28.41	9 31.600	20.189	-	20.189
(The following Resource Summary rows are for informati	ional purposes only. The cor	responding budget reque	ests are documented elsewhe	re.)		3
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.

	Р	rior Years	3		FY 2021			FY 2022		FY	2023 Bas	se	FY	′ 2023 OC	0	FY	' 2023 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Hardware - Advanced Precisi	on Kill Weapon	System (APK	(WS) Cost				'	'		'		'	'					
Recurring Cost																		
Guidance Section	-	-	-	0.024	949	22.302	0.026	507	13.058	0.026	171	4.492	-	-	-	0.026	171	4.492
(HA07) ROCKET MOTOR MK-66	-	-	-	0.001	1,323	1.001	0.001	12,801	11.000	0.001	11,199	10.000	-	-	-	0.001	11,199	10.000
(HA91) LAU-131A/A ROCKET LAUNCHER	-	-	-	-	-	0.000	0.010	250	2.515	0.010	250	2.583	-	-	-	0.010	250	2.583
Warhead M151	-	-	-	0.001	5,495	2.930	0.001	2,750	1.500	0.001	2,691	1.500	-	-	-	0.001	2,691	1.500
Warhead M282	-	-	-	-	-	0.000	-	-	0.000	-	-	0.000	-	-	-	-	-	0.000
Subtotal: Recurring Cost	-	-	-	-	-	26.233	-	-	28.073	-	-	18.576	-	-	-	-	-	18.576
Subtotal: Hardware - Advanced Precision Kill Weapon System (APKWS) Cost	-	-	-	-	-	26.233	-	-	28.073	-		18.576	-	-	-	-	-	18.576
Support - APKWS Cost																		
PSC Other Government Costs	-	-	-	-	-	2.186	-	-	3.527	-	-	1.613	-	-	-	-	-	1.613
Subtotal: Support - APKWS Cost	-	-	-	-	-	2.186	-	-	3.527	-	-	1.613	-	-	-	-	-	1.613
Gross/Weapon System Cost	-	-	-	-	-	28.419	-	-	31.600	-	-	20.189	-	-	-	-	-	20.189

#### Remarks:

Guidance Section quantities decreased in FY23 due to higher Air Force priorities.

LI 351010 - Rockets Air Force UNCLASSIFIED
Page 7 of 8

P-1 Line #1

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Air Force

P-1 Line Item Number / Title:

3011F / 01 / 11

351010 / Rockets

Aggregated Items Title:

ROCKETS (ITEMS LESS THAN \$5

MILLION)

Date: April 2022

																- /				
			P	Prior Years	s		FY 2021			FY 2022		FY	2023 Ba	se	FY	/ 2023 OC	:0	FY	' 2023 Tot	al
Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)
Uncategorized					,						,									
(LA70) Missile Simulator	A		-	-	-	-	-	-	-	-	-	0.001	1	0.001	-	-	-	0.001	1	0.001
Subtotal: Uncategorized			-	-	-	-	-	-	-	-	-	-	-	0.001	-	-	-	-	-	0.001
Total			-	-	-	-	-	-	-	-	-	-	-	0.001	-	-	-	-	-	0.001

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

#### Remarks:

LA70 procurement for aircrew training assets used to simulate Surface to Air Missile launch.

Appropriation / Budget Activity / Budget Sub Activity:

LI 351010 - Rockets

Air Force

Page 8 of 8

Date: April 2021 Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F: Procurement of Ammunition. Air Force / BA 01: Ammunition / BSA 12:

352010 / Cartridges

Cartridges

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

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	157.799	161.917	124.164	-	124.164	100.490	113.515	116.072	118.665	-	892.622
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	157.799	161.917	124.164	-	124.164	100.490	113.515	116.072	118.665	-	892.622
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	157.799	161.917	124.164	-	124.164	100.490	113.515	116.072	118.665	-	892.622
(The following	Resource Sum	mary rows are fo	r informational p	urposes only. Th	e corresponding	g budget request	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-

# **Description:**

(DWGY) CCU-167/B, (A062) CTG, 5.56MM, (A059) 5.56 BALL, (A164) CTG, 7.62MM, (A363) 9MM BALL, (HA29) 66MM HIGH, (B584) 40MM CART, (CA30) 84MM, and (AC56) COMBAT MIX are new starts.

- FY2021 funding totals include 40.434M appropriated for Overseas Contingency Operations.
- FY2022 funding request included 40.741M requested for Over-The-Horizon and/or Enduring Requirements.
- FY2022 amounts reflect \$7.246M in reductions in the FY22 Appropriation Act.
- FY2023 funding totals include 10.825M requested for Over-the-Horizon and/or Enduring Requirements.

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

#### IMPULSE CARTRIDGES:

- -BBU-35 Impulse Cartridge (MG62): Deploys countermeasure chaff and ignites flares from the aircraft dispenser for multiple aircraft. Applicable to the M206, MJU-61, MJU-66, MJU-64, MJU-71, MJU-73, MJU-75, etc. countermeasure flares and RR170 and RR188 chaff.
- -BBU-36 Impulse Cartridge (MG11): Deploys countermeasure flare on multiple aircraft to protect aircraft from IR weapons. Flare applications include: MJU-7, MJU-10, MJU-40, MJU-53 AND MJU-62.
- -BBU-46 Impulse Cartridge (MT40): Deploys a MJU-23 countermeasure flare on the B-1.
- -BBU-48 Impulse Cartridge (SS27): Deploys countermeasure chaff on multiple aircraft to protect aircraft from radar and radar guided weapons. Chaff applications include: RR-180 and RR-196.
- -BBU-59 Impulse Cartridge (WD01): Deploys a MJU-39 countermeasure flare on the F-22.
- -BBU-63 Impulse Cartridge (SS44): Bomb ejection cartridge used with the BRU-44 bomb rack on the B-2.
- -ARD 446 Impulse Cartridge (WB33): Weapon and store release cartridge.

UNCLASSIFIED

LI 352010 - Cartridges Air Force Page 1 of 14 P-1 Line #2

Date: April 2021 Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: 3011F: Procurement of Ammunition. Air Force / BA 01: Ammunition / BSA 12: 352010 / Cartridges Cartridges Program Elements for Code B Items: N/A Other Related Program Elements: N/A ID Code (A=Service Ready, B=Not Service Ready): A Line Item MDAP/MAIS Code: N/A

- -ARD 863 Impulse Cartridge (M189): Weapon and store release cartridge.
- -RR-170 Chaff (LY07): RF countermeasure; dispensed by BBU-35
- -RR-180 Chaff (SY16): RF countermeasure; dispensed by BBU-48
- -RR-188 Chaff (3W37): RF countermeasure; dispensed by BBU-35
- -RR-196 Chaff (CY94): RF countermeasure; dispensed by BBU-48
- -RR-196(T-1) Chaff (NY02): RF countermeasure; dispensed by BBU-48
- -RR-198/AL: F-35 operational chaff round dispensed by CCU-145. Procurement will be through a Navy managed contract vehicle.
- -RR-199: F-35 training chaff round dispensed by CCU-145. Procurement will be through a Navy managed contract vehicle.
- -CCU-106: Government-owned weapon and stores release cartridge. This cartridge will replace the proprietary ARD 446 cartridge over the next several years. Procurement will be through an Air Force managed contract vehicle.
- -CCU-107 (MT95): Government-owned weapon and stores release cartridge. This cartridge is currently used on the KC-46 and will replace the proprietary ARD 863 cartridge over the next several years. Procurement will be through a Navy managed contract vehicle.
- -CCU-136 (WA83): Deploys towed decoy; used with AN/ALE-70(V)1
- -CCU-145 (WB24): Deploys countermeasure flares from F-35. Applicable to MJU-68 and MJU-71
- -CCU-41 (MF60): Deploys towed decoy for F-15 and B-1; used with ALE-50
- -CCU-167 (DWGY): Cutter cart for steel hoist cables on helicopters and various towed targets on multiple aircraft
- -MK2 (M190): Weapons and pylons release cartridge; tanks and special equipment; cutter cartridge.
- -MK 107 MOD 1 (M943): Used on rotary launcher for B-1. MXU-611 Fuel Tank Release mechanism and LAU-93A Phoenix Missile Launcher
- -M21 (M500): Parachute reefing line cutter on C-17

#### MEDIUM CALIBER AMMO:

-25MM Target Practice (TP), PGU-23/U (A978): 25MM PGU-23 is a target practice round used in the GAU-12/A and GAU-22/A gun systems applicable to the AC-130U and F-35A aircraft. The round is a kinetic energy combat training round. Air Force procures PGU-23 through the Single Manager for Conventional Ammunition (SMCA), Department of the Army.

UNCLASSIFIED LI 352010 - Cartridges Volume 1 - 10 Air Force Page 2 of 14 P-1 Line #2

Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force		Date: April 2021
	<b>P-1 Line Item Number / Title:</b> 352010 / Cartridges	

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

- -25MM Dummy Rounds, PGU-24 (A968 is a dummy round that provides gun system training, and aids in troubleshooting for the GAU-12/A and GAU-22/A gun system applicable to the AC-130U and F-35A aircraft. Air Force procures PGU-24 through Single Manager for Conventional Ammunition (SMCA), Department of the Army.
- -25MM PGU-48/B (AB98): 25MM PGU-48/B (formerly Frangible Armor Piercing (FAP)) round to be used in GAU-22/A gun system on F-35/JSF. Air Force procures PGU-48/B through Hill AFB Contracting.
- -20MM PGU-28A/B (AA22): Primary combat round, high explosive incendiary used with the M61 gun system applicable to the F-15, F-16, and F-22 aircraft gun systems. Designed for use against air-to-air and air-to-ground targets. Both the Air Force and Navy use this ammunition for combat only. Air Force procures PGU-28A/B through the Single Manager for Conventional Ammunition (SMCA), Department of the Army and engineering support from the Navy.
- -20MM TP Round PGU-27A/B (AA24): This round is used for air-to-air and air-to-ground training in the M61 aircraft gun systems on F-15, F-16 and F-22 aircraft. The cartridge is electrically primed and has no fuze. The projectile is a solid slug sized to match the ballistics of the PGU-28A/B. The PGU-27A/B is the primary ammunition used by the Air Force and Navy aircraft gun systems to provide a training capability to complement the PGU-28 high explosive incendiary combat round and ensure training is consistent with combat operations. Air Force procures PGU-27A/B through the Army Single Manager for Conventional Ammunition (SMCA), Department of the Army and engineering support from the Navy.
- -20MM PGU-39 (A931): PGU-39 is a dummy round that provides gun system training, aids in troubleshooting, and is utilized to verify M61 gun system readiness. Air Force procures PGU-39 through Single Manager for Conventional Ammunition (SMCA), Department of the Army and engineering support from the Navy.
- -30MM HEI PGU-13D/B Round (B104): This is a High Explosive Incendiary (HEI) round for the GAU-8/A cannon on the A-10 aircraft. It contains an explosive material for use against light armor and personnel. Air Force procures PGU-13D/B from the Single Manager for Conventional Ammunition (SMCA), Department of the Army.
- -30MM Target Practice (TP) Cartridge PGU-15A/B (B116): A solid, inert projectile used to train aircrew in the use of the GAU-8/A cannon on the A-10 aircraft. The cartridge is mechanically primed and has no fuze, while the projectile is a solid slug designed to match the ballistics of high explosive incendiary and armor piercing incendiary cartridges. Air Force procures PGU-15A/B from the Single Manager for Conventional Ammunition (SMCA), Department of the Army.
- -30MM Combat Mix (AC56) (Formerly B103) consists of two Armor Piercing Incendiary rounds (PGU-14) and one High Explosive Incendiary (PGU-13) round and is employed on the GAU-8 cannon on the A-10 aircraft. Combat Mix is a primary combat ammunition for the A-10. The AF procures this item through Single Manager for Conventional Ammunition (SMCA).
- -30MM Urban Mix (AC29) consists of two High Explosive Incendiary (PGU-13) and one Target Practice (PGU-15) rounds and is employed on the GAU-8 cannon on the A-10 aircraft. Urban Mix is an alternate (lower collateral damage) combat ammunition for the A-10. The AF procures this item through Single Manager for Conventional Ammunition (SMCA).

#### MEDIUM CALIBER AMMO:

- -25MM Target Practice (TP), PGU-23/U (A978): 25MM PGU-23 is a target practice round used in the GAU-12/A and GAU-22/A gun systems applicable to the AC-130U and F-35A aircraft. The round is a kinetic energy combat training round. Air Force procures PGU-23 through the Single Manager for Conventional Ammunition (SMCA), Department of the Army.
- -25MM Dummy Rounds, PGU-24 (A968 is a dummy round that provides gun system training, and aids in troubleshooting for the GAU-12/A and GAU-22/A gun system applicable to the AC-130U and F-35A aircraft. Air Force procures PGU-24 through Single Manager for Conventional Ammunition (SMCA), Department of the Army.
- -25MM PGU-48/B (AB98): 25MM PGU-48/B (formerly Frangible Armor Piercing (FAP)) round to be used in GAU-22/A gun system on F-35/JSF. Air Force procures PGU-48/B through Hill AFB Contracting.

LI 352010 - Cartridges
Air Force

UNCLASSIFIED

Page 3 of 14

P-1 Line #2

Volume 1 - 11

Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force	Date: April 2021
Appropriation / Budget Activity / Budget Sub Activity: 3011F: Procurement of Ammunition, Air Force / BA 01: Ammunition / BSA 12: Cartridges  P-1 Line Item Number / Tit 352010 / Cartridges	ile:

Line Item MDAP/MAIS Code: N/A

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

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

- -20MM PGU-28A/B (AA22): Primary combat round, high explosive incendiary used with the M61 gun system applicable to the F-15, F-16, and F-22 aircraft gun systems. Designed for use against air-to-air and air-to-ground targets. Both the Air Force and Navy use this ammunition for combat only. Air Force procures PGU-28A/B through the Single Manager for Conventional Ammunition (SMCA), Department of the Army and engineering support from the Navy.
- -20MM TP Round PGU-27A/B (AA24): This round is used for air-to-air and air-to-ground training in the M61 aircraft gun systems on F-15, F-16 and F-22 aircraft. The cartridge is electrically primed and has no fuze. The projectile is a solid slug sized to match the ballistics of the PGU-28A/B. The PGU-27A/B is the primary ammunition used by the Air Force and Navy aircraft gun systems to provide a training capability to complement the PGU-28 high explosive incendiary combat round and ensure training is consistent with combat operations. Air Force procures PGU-27A/B through the Army Single Manager for Conventional Ammunition (SMCA), Department of the Army and engineering support from the Navy.
- -20MM PGU-39 (A931): PGU-39 is a dummy round that provides gun system training, aids in troubleshooting, and is utilized to verify M61 gun system readiness. Air Force procures PGU-39 through Single Manager for Conventional Ammunition (SMCA), Department of the Army and engineering support from the Navy.
- -30MM HEI PGU-13D/B Round (B104): This is a High Explosive Incendiary (HEI) round for the GAU-8/A cannon on the A-10 aircraft. It contains an explosive material for use against light armor and personnel. Air Force procures PGU-13D/B from the Single Manager for Conventional Ammunition (SMCA), Department of the Army.
- -30MM Target Practice (TP) Cartridge PGU-15A/B (B116): A solid, inert projectile used to train aircrew in the use of the GAU-8/A cannon on the A-10 aircraft. The cartridge is mechanically primed and has no fuze, while the projectile is a solid slug designed to match the ballistics of high explosive incendiary and armor piercing incendiary cartridges. Air Force procures PGU-15A/B from the Single Manager for Conventional Ammunition (SMCA), Department of the Army.
- -30MM Combat Mix (AC56) (Formerly B103) consists of two Armor Piercing Incendiary rounds (PGU-14) and one High Explosive Incendiary (PGU-13) round and is employed on the GAU-8 cannon on the A-10 aircraft. Combat Mix is a primary combat ammunition for the A-10. The AF procures this item through Single Manager for Conventional Ammunition (SMCA).
- -30MM Urban Mix (AC29) consists of two High Explosive Incendiary (PGU-13) and one Target Practice (PGU-15) rounds and is employed on the GAU-8 cannon on the A-10 aircraft. Urban Mix is an alternate (lower collateral damage) combat ammunition for the A-10. The AF procures this item through Single Manager for Conventional Ammunition (SMCA).

#### SMALL CALIBER/GROUND MUNITIONS:

Funds may also be used to evaluate commercial off the shelf (COTS)/or government off the shelf (GOTS) products as a suitable replacement or enhancement to current capabilities.

- -7.62MM Ball Linked M80 (A143): The M240 Machine Gun requires this linked round, used against personnel and unarmored targets. Air Force procures this item through the Single Manager for Conventional Ammunition (SMCA), Department of the Army.
- -5.56MM Blue Marking Cartridge (AC39): This round is used in force-on-force training of personnel in M16A2 and M4 rifles. It consists of a plastic projectile in a brass cartridge case. Air Force procures this item through the Single Manager for Conventional Ammunition (SMCA), Department of the Army.
- -5.56MM Frangible (AA40): This is the primary training round for the Air Force and consists of a lead-free small rifle primer in a brass cartridge case. These cartridges are more environmentally friendly than standard 5.56MM ball cartridges. The case is made of reusable/recyclable brass, which is the same as 5.56MM ball ammunition. The 5.56MM frangible cartridges are used in M16-series rifles, which include M4 rifles. The Air Force procures this item through the Single Manager for Conventional Ammunition (SMCA), Department of the Army.
- -5.56MM Ball M855 (AB57): This is a lead-free primary combat round used in the M16A2 and M4 rifles, against personnel and unarmored targets. Air Force procures this item through the Single Manager for Conventional Ammunition (SMCA), Department of the Army.

 LI 352010 - Cartridges
 UNCLASSIFIED

 Air Force
 Page 4 of 14
 P-1 Line #2

 Volume 1 - 12

L	UNCLASSIFIED	
Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force		Date: April 2021
Appropriation / Budget Activity / Budget Sub Activity: 3011F: Procurement of Ammunition, Air Force / BA 01: Ammunition / BSA 12 Cartridges	2: <b>P-1 Line Item N</b> 352010 / Cartrid	
ID Code (A=Service Ready, B=Not Service Ready): A Program Elements for	r Code B Items: N/A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A		
-AB67: 5.56 clipped Short Range Training Ammunition SRTA. This round is used at ranges wh areas.	nere traditional ball round ammur	nition would penetrate the back stop, posing a danger to nearby, highly populated
-HB26: M72A8 LAW Fire From Enclosure (FFE) and NVD Mount. This 66MM shoulder fired root defeat lightly armored enemy vehicles. It is compact and highly transportable with anti-structure		
-CA30: 84MM M136A1 AT4CS RS,: shoulder-fired rocket propelled munition. Meant for larger to	targets and embedded personne	el. Allows mobile units multiple target engagement and destruction.
-Items Less Than Five Million Dollars: All items have an annual procurement of less than 5,000	0,000 and are Code A.	
These funds may also procure inventoried items which may not be procured on an annual basi as actual and planned expenditures will be addressed during execution year.	is and could be required on an e	merging basis. Variations to cover critical shortfalls to inventory objectives as well
Funding may be used to address Diminishing Manufacturing Sources (DMS) issues.		
In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-defense missions, domestic emergency responses, and providing military support to civil authorization.		use by the active and reserve components of the Armed Forces for homeland
Funding for this exhibit contained in PEs: 0207580F, 0207599F, 0208015F and 0208030F.		
areas.  -HB26: M72A8 LAW Fire From Enclosure (FFE) and NVD Mount. This 66MM shoulder fired root defeat lightly armored enemy vehicles. It is compact and highly transportable with anti-structure -CA30: 84MM M136A1 AT4CS RS,: shoulder-fired rocket propelled munition. Meant for larger to -Items Less Than Five Million Dollars: All items have an annual procurement of less than 5,000 These funds may also procure inventoried items which may not be procured on an annual basi as actual and planned expenditures will be addressed during execution year.  Funding may be used to address Diminishing Manufacturing Sources (DMS) issues.  In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-defense missions, domestic emergency responses, and providing military support to civil authority.	ocket propelled munition is used fre, anti-personnel and confined qualitative targets and embedded personnel 20,000 and are Code A.  Sis and could be required on an election of the code in the code in the code is a code in the code in	for Forward Operating Base perimeter protection and special mission support to quarters engagement capabilities. el. Allows mobile units multiple target engagement and destruction. emerging basis. Variations to cover critical shortfalls to inventory objectives as well

**UNCLASSIFIED** LI 352010 - Cartridges Volume 1 - 13 Air Force Page 5 of 14 P-1 Line #2

Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force

Date: April 2021

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F: Procurement of Ammunition. Air Force / BA 01: Ammunition / BSA 12:

352010 / Cartridges

Cartridges

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 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-40a	IMPULSE CARTRIDGES				- / -	- / 20.618	- / 26.483	- / -	- / -	- / -
P-40a	Small Cal/Ground Munitions				- / -	- / 54.070	- / 54.549	- / 55.083	- / -	- / 55.083
P-40a	Medium Cal Ammo				- / -	- / 83.111	- / 80.885	- / 69.081	- / -	- / 69.081
P-40	Total Gross/Weapon System Cost				- 1 -	- / 157.799	- / 161.917	- / 124.164	- 1 -	- / 124.164

<sup>\*</sup>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:

FY2023 funds purchase small arms ammunition for use against personnel and unarmored targets; medium caliber ammunition used in aircraft gun systems against air-to-air, air-to-ground and light armored targets. FY2023 funding totals include 10.825M requested for Over-the-Horizon and/or Enduring Requirements. These funds will procure the following Small Caliber items (reference the SMALL CAL/GROUND MUNITIONS P-40a): (HA29) 66MM HIGH EXP LITE WEAPON, (AA16) 9 MM FRANGIBLE, (AA40) 5.56 FRANGIBLE, (BA21) 40MM PRACTICE, (AC20) 9MM BALL, (A557) CTG, CAL .50 BALL/TRACER/ LINKED M2/M9. (A143) 7 62MM L LINKED (M80). (CA30) 84MM M136A1 AT4CS. Variations in final mix and quantities of these items to cover critical shortfalls to inventory objectives, as well as actual and planned expenditures, will be addressed during execution year.

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.

#### MEDIUM CALIBER AMMO:

- -20MM PGU-28 (AA22): This procurement will fulfill WRM requirements. Current stockpile inventory is 49% of total inventory objective and has low combat use.
- -20MM PGU-27 (AA24): NEXT PROCUREMENT ACTION IS PROJECTED IN 2027
- -30MM PGU-15 (B116): Procurement of PGU-15 is critical to replenish of WRM stockpiles to support pilot training and proficiency. Current stockpile inventory is 53% of total inventory objective.
- -30MM PGU-13 (B104): Procurement of PGU-13 is critical to replenishment of WRM stockpiles to support training and combat operations. Current stockpile inventory is 31% of total inventory objective.
- -30MM Combat Mix (AC56): NO PROCUREMENT ACTION IS PENDING. Current stockpile and scheduled deliveries will bring supportability to 100% by FY27.
- -30MM Urban Mix (AC29): NO PROCUREMENT ACTION IS PENDING. Current stockpile and scheduled deliveries will bring supportability to 50% by FY23.
- -25MM PGU-48/B (AB98): Current programmed procurements will fulfill WRM requirements. Current stockpile inventory is 21% of total inventory objective.
- -25MM PGU-23 (A978): NEXT PROCUREMENT ACTION IS PROJECTED IN 2027
- IMPULSE CARTRIDGES: FY23 procurement of Impulse Cartridges has been transferred to Flares/WSC 356010, Expendable Countermeasures, to better align with their purpose/use, and is justified there.

UNCLASSIFIED Page 6 of 14

P-1 Line #2

Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force  Appropriation / Budget Activity / Budget Sub Activity: 3011F: Procurement of Ammunition, Air Force / BA 01: Ammunition / B Cartridges ID Code (A-Service Ready, B-Not Service Ready): A  Program Element  Line Item MDAP/MAIS Code: N/A  SMALL CALIBER/GROUND MUNITIONS: See SMALL CAL/GROUND MUNITIONS P-40a	PB 2023 Air Force	Date: April 2021						
3011F: Procurement of Ammunition, Air Force /		P-1 Line Item Nu 352010 / Cartridg						
	Program Elements for Code	B Items: N/A	Other Related Program Elements: N/A					
SMALL CALIBER/GROUND MUNITIONS: See SMALL CAL/GROUND MUNITIONS P-40a								

LI 352010 - Cartridges
Air Force

UNCLASSIFIED
Page 7 of 14
P-1 Line #2

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Air Force

Date: April 2021

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F / 01 / 12 352010 / Cartridges

Aggregated Items Title: IMPULSE CARTRIDGES

301117 017 12							3320 TO 7 Cartiluges								IIV	IFULSE	CAITH	NDGLS		
			Р	rior Years	<b>;</b>		FY 2021			FY 2022		FY	2023 Bas	se	FY	2023 OC	0	FY	2023 To	tal
Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Impulse Cartridges			,	,		,	,								,	,	,			
(MT40) BBU-46	Α		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(WB33) ARD-446	Α		-	-	-	0.000	106,951	1.000	0.000	158,730	1.500	-	-	-	-	-	-	-	-	-
(3W37) CHAFF, RR-188	Α		-	-	-	0.000	446,717	2.006	0.000	385,463	1.750	-	-	-	-	-	-	-	-	-
(JN31) CU-168 SQUIB	А		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(M189) ARD-863	Α		-	-	-	0.000	165,837	1.000	0.000	164,204	1.000	-	-	-	-	-	-	-	-	-
(M943) MK107 IMPULSE CARTRIDGE	А		-	-	-	0.000	5,902	1.699	-	-	-	-	-	-	-	-	-	-	-	-
(MT95) CCU-107	Α		-	-	-	0.000	19,192	0.096	-	-	-	-	-	-	-	-	-	-	-	-
(YWAP) RR-198	Α		-	-	-	0.000	5,231	1.334	0.000	6,000	1.530	-	-	-	-	-	-	-	-	-
(YWAQ) RR-199	Α		-	-	-	-	-	-	0.000	2,000	0.153	-	-	-	-	-	-	-	-	-
(MG11) CTG, IMPULSE, BBU-36/B	Α		-	-	-	0.000	420,911	1.700	0.000	416,667	1.700	-	-	-	-	-	-	-	-	-
(MG62) BBU-35/ B IMPULSE CARTRIDGE	А		-	-	-	0.000	1,528,439	3.332	0.000	1,795,455	3.950	-	-	-	-	-	-	-	-	-
(MT40) BBU-46 SQUIB, ELECTRIC	А		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(NY02) CHAFF, RR-196(T-1)AL	А		-	-	-	0.000	26,673	1.006	0.000	65,634	2.500	-	-	-	-	-	-	-	-	-
(SS-27) BBU-48/ B IMPULSE CARTRIDGE	A		-	-	-	-	-	-	0.000	545,024	4.600	-	-	-	-	-	-	-	-	-
(SS44) BBU63/ B IMPULSE CARTRIDGE	А		-	-	-	0.001	3,193	1.999	0.001	3,162	2.000	-	-	-	-	-	-	-	-	-
(LY07) RR-170 CHAFF CARTRIDGE	Α		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(SY16) RR-180 CHAFF CARTRIDGE	А		-	-	-	0.000	285,722	3.206	0.000	308,914	3.500	-	-	-	-	-	-	-	-	-
(MF60) CCU-41	Α		-	-	-	0.000	60,000	0.300	0.000	60,000	0.300	-	-	-	-	-	-	-	-	-
(M190) MK-2	Α		-	-	-	0.001	7	0.006	-	-	-	-	-	-	-	-	-	-	-	-
(WB24) CCU-145	Α		-	-	-	0.000	395,499	1.934	0.000	404,858	2.000	-	-	-	-	-	-	-	-	-
Items less than 5 M	Α		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(DWGY) CCU-167/B	Α		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Impulse Cartridg	ges		-	-	-	-	-	20.618	-	-	26.483	-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	20.618	-	-	26.483	-	-	-	-	-	-	-	-	-

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

LI 352010 - Cartridges Air Force UNCLASSIFIED
Page 8 of 14

P-1 Line #2

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Air Force

P-1 Line Item Number / Title:

3011F / 01 / 12 352010 / Cartridges

Appropriation / Budget Activity / Budget Sub Activity:

Aggregated Items Title:

Date: April 2021

Small Cal/Ground Munitions

		Р	rior Year	s		FY 2021			FY 2022		FY	2023 Bas	se	FY	/ 2023 OC	:o	F	/ 2023 Tot	tal
Item Number / Title [DODIC]	ID CD	Unit Cost	Qty (Each)	Total Cost (\$ M)															
MMUNITION CARTRIDG	SES																		
(A014) CTG, 12 GA SHOTGUN, 7-1//2 PLASTIC	A	-	-	-	-	-	-	0.000	14,634	0.012	0.000	55,556	0.025	-	-	-	0.000	55,556	0.02
(A011) CTG 12 GAUGE NO. 00 BUCKSHOT	А	-	-	-	0.000	80,645	0.050	0.000	80,645	0.050	0.000	133,333	0.100	-	-	-	0.000	133,333	0.10
(A017) CTG, 12 GA BUCKSHOT	Α	-	-	-	0.000	71,429	0.025	0.000	71,429	0.025	0.000	31,250	0.025	-	-	-	0.000	31,250	0.02
(A062) CTG, 5.56MM BALL M855 LINKED	Α	-	-	-	0.000	1,630,435	0.750	-	-	0.000	-	-	-	-	-	-	-	-	-
(A059) 5.56 BALL M855 CLIPPED	Α	-	-	-	-	-	-	-	-	0.000	-	-	-	-	-	-	-	-	-
(A080) CTG, 5.56MM BLANK M200	Α	-	-	-	0.000	434,782	0.100	0.000	434,783	0.100	0.000	3,529,412	0.600	-	-	-	0.000	3,529,412	0.6
(A091) CTG, .22 CAL LONG RIFLE	Α	-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(A131) CTG, 7.62MM BALL 4-1 LINKED	Α	-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(A143) 7.62MM BALL LINKED (M80)	Α	-	-	-	0.000	365,854	0.300	0.000	4,634,146	3.800	0.000	5,000,000	3.500	-	-	-	0.000	5,000,000	3.5
(A164) CTG, 7.62MM LINKED	Α	-	-	-	-	-	-	-	-	0.000	-	-	-	-	-	-	-	-	
(A246) CTG, .30 CAL BALL BULK	Α	-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(A165) CARTRIDGE 7.62MM M80	Α	-	-	-	-	-	-	0.000	4,855,073	3.350	-	-	-	-	-	-	-	-	
(A257) CTG, 7.62MM 9-1 DIM TRACER	Α	-	-	-	0.000	285,714	0.200	0.000	285,714	0.200	-	-	-	-	-	-	-	-	
(A363) 9MM BALL NATO XM882 PISTOL	А	-	-	-	-	1	-	-	-	-	0.000	714,286	0.500	-	-	-	0.000	714,286	0.5
(A358) 9MM SUBCAL AT4 TRACER	Α	-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(A404) CTG, .38 CAL SP BALL WADCUTTER	А	-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(A475) CTG, CAL .45 BALL M1911	Α	-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(A482) CTG CAL .45 BALL WADCUTTER	Α	-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(A483) CTG CAL .45 BALL M1911 MTCHGRD	А	-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

LI 352010 - Cartridges Air Force UNCLASSIFIED
Page 9 of 14

P-1 Line #2

Volume 1 - 17

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Air Force

P-1 Line Item Number / Title: Aggregated Items 1

Appropriation / Budget Activity / Budget Sub Activity: 3011F / 01 / 12

352010 / Cartridges

Aggregated Items Title: Small Cal/Ground Munitions

Date: April 2021

011F / 01 / 12							3520107 Carringes								SI		/Ground	iviunitioi	115	
			Р	rior Year	s		FY 2021			FY 2022		FY	′ 2023 Ba	se	FY	2023 OC	ю	FY	/ 2023 Tot	al
Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)
(A552) CTG, .50 CAL BALL SINGLE ROUND, M33	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(A555) CTG, CAL .50 BALL M2 LINKED	А		-	-	-	0.000	769,149	2.000	0.000	961,538	2.500	0.000	1,153,846	3.000	-	-	-	0.000	1,153,846	3.0
(A557) CTG, CAL .50 BALL/TRACER/ LINKED M2/M9	A		-	-	-	0.000	985,524	2.750	0.000	1,218,638	3.400	0.000	1,218,638	3.400	-	-	-	0.000	1,218,638	3.40
(A598) CTG CAL.50 BLNK CRMPD W/M9 LNK	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(A606) CTG, CAL.50 API MK211 MOD 0	Α		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(A607) CTG, .50 CAL ARMOR PIERCING INCENDIARY	A		-	-	-	0.000	59,311	0.599	0.000	59,406	0.600	0.000	99,010	1.000	-	-	-	0.000	99,010	1.00
(AA02) CTG 5.56MM AP/TR M995/M856 4-1	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(AA03) CTG. 7.62 M993 AP	Α		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(AA04) CTG. 7.62MM 4 AP M9331/1TR M62 W/LK M13			-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(AA11) CTG. 7.62 NATO M118 SPEC BALL	A		-	-	-	0.000	1,904,420	1.714	-	-	-	-	-	-	-	-	-	-	-	
(AA16) 9 MILLIME CARTRIDGE FRANG	А		-	-	-	0.000	2,999,715	3.000	0.000	6,000,000	6.000	0.000	12,121,212	4.000	-	-	-	0.000	12,121,212	4.0
(AA40) 5.56 FRANGIBLE	Α		-	-	-	0.000	38,328,282	14.948	0.000	39,487,179	15.400	0.000	43,181,818	19.000	-	-	-	0.000	43,181,818	19.0
(AA51) 12 GA NON- LETHAL PT-CONT	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(AA52) 12 GA NON- LETHAL CROWD	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(AA53) CTG 5.56 SPECIAL MK262 MOD 1	A		-	-	-	0.000	2,500,000	1.000	0.000	1,052,632	0.400	-	-	-	-	-	-	-	-	-
(AB10) 5.56 RED MARKING CARTRIDGES	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(AB13) 9MM BLUE MARKING CARTRIDGE	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(AB14) 9M RED MARKING CARTRIDGE	А		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

LI 352010 - Cartridges Air Force UNCLASSIFIED
Page 10 of 14

P-1 Line #2

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Air Force

Date: April 2021

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F / 01 / 12

352010 / Cartridges

Aggregated Items Title: Small Cal/Ground Munitions

		P	rior Year	s		FY 2021			FY 2022		FY	2023 Bas	se	FY	2023 OC	:0	F۱	/ 2023 Tot	tal
Item Number / Title [DODIC]	ID CD	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Tota Cost
(AB39) 7.62MM SPECIAL BALL, LONG RANGE	А	-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(HA29) 66MM HIGH EXP LITE ANTI TANK WEAPON	А	-	-	-	0.004	1,870	6.912	-	-	-	-	-	-	-	-	-	-	-	
(C995) AT-4 84MM ROCKET	Α	-	-	-	0.003	1,587	4.455	-	-	-	-	-	-	-	-	-	-	-	
(AB16) 5.56 BLUE MARKING CARTRIDGE	A	-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(AB56) 5.56MM M855A1 LINKED LEAD FREE CART	Α	-	-	-	0.000	2,884,615	1.500	0.000	2,884,615	1.500	0.000	711,538	0.370	-	-	-	0.000	711,538	
(AB57) 5.56MM M855A1 CLIPPED, LEAD FREE	А	-	-	-	0.000	1,041,600	0.500	0.000	1,041,667	0.500	0.000	520,833	0.250	-	-	-	0.000	520,833	
(AB46) 5.56MM SINGLE ROUND DUMMY	A	-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(AB47) 7.62MM DUMMY	А	-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(AB48) .50 CAL SINGLE DUMMY CART	Α	-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(AB72) CTG, 7.62MM SINGLE ROUND BLANK (was A112)	Α	-	-	-	0.000	237,804	0.200	0.000	190,476	0.160	-	-	-	-	-	-	-	-	
(AB67) 5.56 MM PLASTIC	Α	-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
AB73) 5.56 M856 A1 EAD FREE	Α	-	-	-	0.000	2,542,373	1.500	0.000	847,458	0.500	0.000	847,458	0.500	-	-	-	0.000	847,458	
AB74) 5.56 TRACER ROUND	Α	-	-	-	0.000	64,103	0.100	0.000	64,103	0.100	-	-	-	-	-	-	-	-	
AB75) 5.56 LINKDED //855A1/M86A1	Α	-	-	-	0.000	114,000	0.114	0.000	500,000	0.500	-	-	-	-	-	-	-	-	
AC20) 9MM BALL	Α	-	-	-	0.000	15,787,082	3.000	0.000	31,431,579	5.972	0.000	15,789,474	3.000	-	-	-	0.000	15,789,474	
AC21) 9MM HOLLOW POINT	А	-	-	-	0.000	1,818,181	0.400	0.000	1,818,182	0.400	0.000	1,818,182	0.400	-	-	-	0.000	1,818,182	
AC36) 9MM BLUE MARKING CARTRIDGE	Α	-	-	-	0.000	303,030	0.200	0.000	757,576	0.500	-	-	-	-	-	-	-	-	
(AC37) 9MM RED MARKING CARTRIDGE	Α	-	-	-	0.000	597,015	0.400	0.000	746,269	0.500	0.000	1,119,403	0.750	-	-	-	0.000	1,119,403	

LI 352010 - Cartridges Air Force UNCLASSIFIED
Page 11 of 14

P-1 Line #2

Volume 1 - 19

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Air Force

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

3011F / 01 / 12 Small Cal/Ground Munitions

71117 / 017 12								0_0.0.	Cartriug									iviuriilioi		
			Р	rior Year	s		FY 2021			FY 2022		FY	2023 Bas	se	FY	2023 OC	0	FY	2023 Tot	tal
Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)												
(AC39) 5.56 BLUE MARKING CARTRIDGE	А		-	-	-	0.000	394,737	0.300	0.000	4,605,263	3.500	0.000	3,947,368	3.000	-	-	-	0.000	3,947,368	3.0
(AC40) 5.56 RED MARKING CARTRIDGE	A		-	-	-	0.000	723,683	0.550	0.000	743,243	0.550	0.000	2,985,075	2.000	-	-	-	0.000	2,985,075	2.0
(AY04) CTG 12 GAGE BIRD SCARE	А		-	-	-	-	-	-	0.000	30,000	0.030	-	-	-	-	-	-	-	-	
(AC42) 5.56 DYE MARKING ROUND BLUE LINKED	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(B508) 40MM CTG GREEN SMOKE M175	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(B509) 40MM CTG YELLOW SMOKE	Α		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(B519) CARTRIDGE, 40MM PRACTICE M781	A		-	-	-	0.000	2,564,101	2.000	0.000	2,000,000	2.000	0.000	371,747	2.000	-	-	-	0.000	371,747	2.0
(B584) 40MM CART LINKED	А		-	-	-	0.000	62,270	2.500	-	-	-	-	-	-	-	-	-	-	-	
(B535) 40MM SWS M583	А		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(B542) 40 MIL CARTRIDGE HEDP	А		-	-	-	0.000	8,270	0.005	-	-	-	-	-	-	-	-	-	-	-	
(B576) CTG, 40MM PRACTICE, LINKED, HIGH VELOCITY	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
AIR FORCE SHOOTING TEAM	А		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(BA21) 40MM PRACTICE, DAY/ NIGHT LINKED	А		-	-	-	0.000	125,000	2.000	0.000	125,000	2.000	0.000	111,111	3.000	-	-	-	0.000	111,111	3.
(BA54) 40MM PRACTICE, DAY/ NIGHT LINKED	Α		-	-	-	-	-	-	-	-	-	0.000	30,769	0.500	-	-	-	0.000	30,769	0
(CA30) 84MM M136A1 AT4CS RS	А		-	-	-	-	-	-	-	-	-	0.003	107	0.300	-	-	-	0.003	107	0
(HB26) M72A8 LAW Fire From Enclosure (FFE) and NVD Mount	А		-	-	-	-	-	-	-	-	-	0.009	454	3.863	-	-	-	0.009	454	3
(LA51) SIMULATOR, SMALL ARMS FIRE	А		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(LA52) SIMULATOR, SMALL ARMS FIRE	Α		-	_	0.000	_	-	_	_	-	_	_	_	_	_	_	_	_	_	

LI 352010 - Cartridges Air Force UNCLASSIFIED
Page 12 of 14

P-1 Line #2

Date: April 2021

Aggregated Items Title:

Exhibit P-40a, Budget Item Justification For Aggregated Ite	ms: PB 2023 Air Force	Date: April 2021
Appropriation / Budget Activity / Budget Sub Activity: 3011F / 01 / 12		Aggregated Items Title: Small Cal/Ground Munitions

			F	Prior Year	s		FY 2021			FY 2022		FY	′ 2023 Bas	se	FY	/ 2023 OC	0	FY	2023 Tot	tal
Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Subtotal: AMMUNITION CARTRIDGES				-	-	-	-	54.070	-	-	54.549		-	55.083		-	-		-	55.083
Total			-	-	-	-	-	54.070	-	-	54.549	-	-	55.083	-	-	-	-	-	55.083

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

#### Remarks:

All Ammunition Cartridges:

Prices are provided by the Single Manager for Conventional Ammunition (SMCA), Department of the Army. Prices shown represent the SMCA efforts to obtain munitions items for the DoD Military Services purchasing the same or similar items. Cost drivers include economic price adjustments, currency rate fluctuations, price of complex or scarce materials and orders from other Military Services (increases/decreases). Prices can change based on contracts with Lake City Army Ammo Plant (LCAAP) and the planned procurements of other customers.

The Navy procures Frangible rounds such as DODIC AA16, 9MM for the Air Force and prices provided based on vendor estimates and AF and Navy combined planned procurements.

All Chaff and Impulse Cartridges:

The Navy procures Chaff and some Impulse Cartridge (all CCU and MK cartridges) items based on planned Air Force and Navy requirements.

LI 352010 - Cartridges
Air Force

UNCLASSIFIED
Page 13 of 14
P-1 Line #2

Volume 1 - 21

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Air Force

Date: April 2021

Appropriation / Budget Activity / Budget Sub Activity: 3011F / 01 / 12

P-1 Line Item Number / Title:

352010 / Cartridges

Medium Cal Ammo

Aggregated Items Title:

3011F / 01 / 12							3	52010 <i>1</i>	Cartriag	es					IVI	ealum C	ai Amm	10		
			Р	rior Years	s		FY 2021			FY 2022		FY	2023 Ba	se	FY	/ 2023 OC	0	FY	/ 2023 Tot	tal
Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)
ledium Cal			'		'				'		'				· · · · · · · · · · · · · · · · · · ·					
(A931) 20MM, PGU -29	А		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(A968) PGU-24 DUMMY ROUND	Α		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(A978) CTG, 25MM, TP (PGU-23/U)	Α		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(AA22) 20MM, PGU-28 A/B Semi-AP, HEI	Α		-	-	-	0.000	530,390	4.950	0.000	223,663	7.000	0.000	239,360	6.800	-	-	-	0.000	239,360	6.8
(AA11) 7.62MM, SP Ball M118	А		-	-	-	-	-	-	0.000	6,666	0.200	-	-	-	-	-	-	-	-	
(AA24), 20MM, TP PGU-27 A/B	А		-	-	-	-	-	-	0.000	228,612	3.196	-	-	-	-	-	-	-	-	
(AA94) 30MM, PGU-15	Α		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(AB18) 30MM, PGU-13 D/B	А		-	-	-	-	-	0.004	-	-	-	-	-	-	-	-	-	-	-	
(AB98) 25MM PGU-48/B	А		-	-	-	0.000	97,054	20.002	0.000	97,054	14.400	0.000	89,162	14.381	-	-	-	0.000	89,162	14.3
(AC29) 30MM, URBAN MIX	А		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(AC56) COMBAT MIX 2:1	Α		-	-	-	-	-	0.008	-	-	-	-	-	-	-	-	-	-	-	
(B103) COMBAT MIX	Α		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(B104) 30MM, PGU-13/B	Α		-	-	-	0.000	650,000	20.788	0.000	971,599	13.000	0.000	321,603	19.600	-	-	-	0.000	321,603	19.6
(B116) 30MM PGU-15/B, TP	Α		-	-	-	0.000	1,644,469	36.259	0.000	1,927,477	43.089	0.000	1,142,577	28.300	-	-	-	0.000	1,142,577	28.3
PMA	Α		-	-	-	-	-	1.100	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: Medium Cal			-	-	-	-	-	83.111	-	-	80.885	-	-	69.081	-		-	-	-	69.08
otal			-	-	_	_	_	83.111	-	-	80.885	-	-	69.081	-		_	-	_	69.08

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

Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force Date: April 2021

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F: Procurement of Ammunition, Air Force / BA 01: Ammunition / BSA 13:

353010 / Practice Bombs

Bombs

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

Line Item MDAP/MAIS Code: N/A

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

Line item widar/wais code. N/A												
	Prior			FY 2023	FY 2023	FY 2023					То	
Resource Summary	Years	FY 2021	FY 2022	Base	oco	Total	FY 2024	FY 2025	FY 2026	FY 2027	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	34.313	48.745	0.000	-	0.000	0.000	0.000	0.000	0.000	-	83.058
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	34.313	48.745	0.000	-	0.000	0.000	0.000	0.000	0.000	-	83.058
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	34.313	48.745	0.000	-	0.000	0.000	0.000	0.000	0.000	-	83.058
(The following	g Resource Sum	mary rows are fo	or informational p	urposes only. Th	ne corresponding	g budget request	s are documente	ed elsewhere.)			ĺ	
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-

# **Description:**

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

- BDU-56D/B: A 2,000-pound, non-explosive training shape, without internal plumbing, used to provide combat forces with aircrew weapons delivery training. The BDU-56 simulates the drop trajectory of a live MK-84/BLU-117. This item is procured through the Single Manager for Conventional Ammunition (SMCA)/Army.
- BDU-50/B: A 500-pound thick-wall cast ductile iron, non-explosive training shape used to provide combat air forces with aircrew weapons delivery training. The BDU-50 simulates the drop trajectory of a live MK-82/BLU-111. This item is procured through the SMCA/Army.
- MK-84 Inert: A 2,000-pound, non-explosive training shape, with internal plumbing, used to provide combat forces with aircrew weapons delivery training. The MK-84 Inert simulates the drop trajectory of a live MK-84/BLU-117. This item is procured through the SMCA/Army.
- BDU-33: A 25-pound, non-explosive, tear shaped, practice bomb used to simulate the 500 lb. MK-82/BLU-111 and 2000 lb. MK-84/BLU-117general purpose, non-guided, bombs in a low drag configuration. Upon impact the bomb drives a firing pin assembly against a primer activating the signal charge, permitting visual evaluation of accuracy. This item is procured through the SMCA/Army.
- MK4 Mod 3, Signal Cartridge: The cartridge consists of an aluminum case. The rim end has a percussion primer, and the opposite end is sealed with an aluminum disk. The cartridge produces a flash of light and a puff of smoke. The MK4 Mod 3 is primarily used for night operations as a visual indication of bomb impact and fuze function. This item is procured through the SMCA/Army.
- CXU-3A/B, Signal Cartridge: The cartridge consists of an aluminum case. The rim end has a percussion primer, and the opposite end is sealed with an aluminum disk. The cartridge produces a dense, white smoke display. The CXU-3A/B is primarily used for day operations as a visual indication of bomb impact and fuze function. This item is procured through the SMCA/Army.

Funds may be used to address production Diminishing Manufacturing Sources (DMS)/Material Shortages/Obsolescence issues through studies, bridge buys, life of type buys, supplier/parts replacement, to include electronic components used commercially and in short supply, and qualification activities to preserve future production capabilities and capacities.

LI 353010 - Practice Bombs

Air Force

UNCLASSIFIED

Page 1 of 2

P-1 Line #3

Volume 1 - 23

	0.1102	ASSIFIED	
Exhibit P-40, Budget Line Item Justification: PB 20	023 Air Force		Date: April 2021
Appropriation / Budget Activity / Budget Sub Activity / Brocurement of Ammunition, Air Force / BA 0 Bombs		P-1 Line Item N 353010 / Praction	
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code E	3 Items: N/A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A			·
In accordance with Section 1815 of the FY 2008 National Defense defense missions, domestic emergency responses, and providing		nis item is necessary for	use by the active and reserve components of the Armed Forces for homeland
			emerging basis. Variations to cover critical shortfalls to inventory objectives as well 6/B, BDU-50C/B, MK-84 Inert, BDU-33, MK4 Mod 3 Signal Cartridge, and CXU-3A/B
Funding for this exhibit contained in PE 0207599F.			
Justification: FY2023 funding for P-1 Line Item 353010/Practice Bombs has been	en transferred to P-1 Line Item 3530	20/General Purpose Bor	ombs and is justified in that line item.

LI 353010 - Practice Bombs Air Force

Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force

Date: April 2021

Appropriation / Budget Activity / Budget Sub Activity:

∣P

P-1 Line Item Number / Title:

3011F: Procurement of Ammunition, Air Force / BA 01: Ammunition / BSA 13:

353020 / General Purpose Bombs

Bombs

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

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

	Prior			FY 2023	FY 2023	FY 2023					То	
Resource Summary	Years	FY 2021	FY 2022	Base	oco	Total	FY 2024	FY 2025	FY 2026	FY 2027	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	369.566	160.976	162.800	-	162.800	141.161	138.962	171.248	174.905	-	1,319.618
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	_
Net Procurement (P-1) (\$ in Millions)	-	369.566	160.976	162.800	-	162.800	141.161	138.962	171.248	174.905	-	1,319.618
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	_
Total Obligation Authority (\$ in Millions)	-	369.566	160.976	162.800	-	162.800	141.161	138.962	171.248	174.905	-	1,319.618
(The following	g Resource Sum	mary rows are fo	or informational p	urposes only. Th	e corresponding	g budget requests	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-

### **Description:**

- FY2021 funding totals include 369.566M appropriated for Overseas Contingency Operations.
- FY2022 funding request included 169.590M requested for Over-The-Horizon and/or Enduring Requirements. FY22 amounts reflect \$15.589M in reductions in the FY22 Appropriation Act.

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 2000 pound (lb) 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, UT.
- 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.
- BLU-117/MK-84 is a 2,000lb 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). The MK-84 is a tritonal-filled variant.

UNCLASSIFIED
Page 1 of 11

Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force		Date: April 2021
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	
3011F: Procurement of Ammunition, Air Force / BA 01: Ammunition / BSA 13:	353020 / General Purpose Bombs	
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

- BLU-111 (all variants) is a 500lb General Purpose Bomb, based on the tritonal-filled MK-82. It has a relatively thin case with a slender body designed for improved ballistics. It can be employed as a general purpose/penetrator bomb delivered in high and low drag modes with ground burst, delayed, or air burst fuzes, and as precision-guided munitions (GBU-12,-38, or -54) and aerial mines depending on the fin/airfoil group and fuzing. Funding may be used to correct BLU-111 (all variants) deficiencies resulting in new fielding nomenclatures.
- BLU-109 warhead is a 2000lb hard target penetrator bomb 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). Variants are filled with tritonal or with a more Insensitive munitions (IM) compliant fill.
- BLU-137 Advanced 2,000lb 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 is an advanced/modernized design to the BLU-109 warhead with increased reliability and survivability to prosecute increased target sets. Procurement started in FY18 at Eglin AFB (AFLCMC/EBD) and is forecast to begin transition to Hill AFB (AFLCMC/EBH)FY23.
- BLU-129/B Composite Case Warhead Carbon fiber composite case for high near-field lethality to deliver 3x reduction in collateral damage. This item is procured through the Army Single Manager for Conventional Ammunition (SMCA).
- BLU-138/GBU-72 Advanced 5,000lb Penetrator (A5K) has optimized performance against the HTM AoA priority target set of tunnels and bunkers. With enhanced survivability, increased lethality, smart fuzing and utilization of fielded JDAM Navigation tailkits, the GBU-72 significantly improved performance reducing the number of weapons required to achieve a kill at lower AUR cost. A5K will replace the GBU-28 and Procurement will begin in FY22.
- MK-81 is a 250lb class general purpose bomb. The bomb is designed for soft, fragment sensitive targets, such as troops, POL, and radars. The item is procured through Army Single Manager for Conventional Ammunition (SMCA).
- Next Generation Area Attack Weapons (NGAAWs) are a family of unitary area attack weapons which meet the DoD policy on cluster munitions. It consists of both the BLU-134/B and BLU-136/B warheads with a height of burst sensor. The BLU-134/B, Improved Lethality Warhead (ILW), Next Generation Area Attack Weapon Increment I, is a 500lb area attack warhead with improved lethality against personnel and materiel targets. The unitary warhead meets DoD policy on cluster munitions. EBH pursued to qualify a Tritonal filled version of the BLU-134 A/B and secured an IM waiver and funding was used to procure the BLU-134A/B Tritonal variant. The BLU-136/B, Next Generation Area Attack Weapon Increment II, is a 2,000lb area attack warhead which, augmented by the BLU-134/B, provides for significant improved lethality against personnel and materiel targets and meets DoD policy on cluster munitions.
- Items Less Than Five Million Dollars: All items have an annual procurement of less than 5,000,000 and are Code A. These items may include but not limited to lugs, pallets, etc.
- BDU-56: A 2,000-pound, non-explosive training shape, without internal plumbing, used to provide combat forces with aircrew weapons delivery training. The BDU-56 simulates the drop trajectory of a live MK-84/BLU-117. This item is procured through the Single Manager for Conventional Ammunition (SMCA)/Army.
- BDU-50: A 500-pound thick-wall cast ductile iron, non-explosive training shape used to provide combat air forces with aircrew weapons delivery training. The BDU-50 simulates the drop trajectory of a live MK-82/BLU-111. This item is procured through the SMCA/Army.
- MK-84 Inert: : A 2,000-pound, non-explosive training shape, with internal plumbing, used to provide combat forces with aircrew weapons delivery training. The MK-84 Inert simulates the drop trajectory of a live MK-84/BLU-117. This item is procured through the SMCA/Army.
- BDU-33: A 25-pound, non-explosive, tear shaped, practice bomb used to simulate the 500 lb. MK-82/BLU-111 and 2000 lb. MK-84/BLU-117general purpose, non-guided, bombs in a low drag configuration. Upon impact the bomb drives a firing pin assembly against a primer activating the signal charge, permitting visual evaluation of accuracy. This item is procured through the SMCA/Army.

UNCLASSIFIED
Page 2 of 11

LI 353020 - General Purpose Bombs Air Force

P-1 Line #4

Volume 1 - 26

	UNCLA	SSIFIED	
Exhibit P-40, Budget Line Item Justification: PB 2	023 Air Force		Date: April 2021
Appropriation / Budget Activity / Budget Sub Acti 3011F: Procurement of Ammunition, Air Force / BA 0 Bombs	_		Number / Title: eral Purpose Bombs
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B I	tems: N/A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A			
<ul> <li>MK4 Mod 3, Signal Cartridge: The cartridge consists of an alumand a puff of smoke. The MK4 Mod 3 is primarily used for night of smoke.</li> </ul>			opposite end is sealed with an aluminum disk. The cartridge produces a flash of light nction. This item is procured through the SMCA/Army.
- CXU-3A/B, Signal Cartridge: The cartridge consists of an alumi smoke display. The CXU-3A/B is primarily used for day operation:			pposite end is sealed with an aluminum disk. The cartridge produces a dense, white his item is procured through the SMCA/Army.
Funds may be used to address production Diminishing Manufactu include electronic components used commercially and in short su			ues through studies, bridge buys, life of type buys, supplier/parts replacement, to on capabilities and capacities.
In accordance with Section 1815 of the FY 2008 National Defense defense missions, domestic emergency responses, and providing		item is necessary fo	or use by the active and reserve components of the Armed Forces for homeland
			emerging basis. Variations to cover critical shortfalls to inventory objectives as well 56/B, BDU-50C/B, MK-84 Inert, BDU-33, MK4 Mod 3 Signal Cartridge, and CXU-3A/B
Portion of FY20-FY24 funding will be used for facilitization efforts. explosive fills.	This will enhance production line capa	city required to repl	enish inventory, accommodate large caliber warheads, and provide for alternative
Funding for this exhibit is contained in PEs 0208030F and 020759	99F.		

LI 353020 - General Purpose Bombs Air Force

Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force

Date: April 2021

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F: Procurement of Ammunition, Air Force / BA 01: Ammunition / BSA 13:

353020 / General Purpose Bombs

**Bombs** 

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

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 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-40a	500LB GP Bomb Variants				- / -	- / 99.234	- / 51.816	- / 1.000	- / -	- / 1.000
P-40a	(EE59) BLU-137/A2K				- / -	- / 66.560	- / 33.600	- / 19.376	- / -	- / 19.376
P-40a	2000lbs GP Bombs Variants				- / -	- / 135.944	- / 0.000	- / -	- / -	- / -
P-40a	A5K (GBU-72)				- / -	- / -	- / 36.000	- / 24.170	- / -	- / 24.170
P-40a	BLU-136/B 2000LB GP BOMB				- / -	- / 34.132	- / 27.600	- / 28.475	- / -	- / 28.475
P-40a	GENERAL PURPOSE BOMBS (ITEMS LESS THAN \$5 MILLION)				- / -	- / 33.696	- / 11.960	- /40.066	- / -	- /40.066
P-40a	PRACTICE BOMBS				- / -	- / -	- / -	- / 49.713	- / -	- / 49.713
P-40	Total Gross/Weapon System Cost				- 1 -	- / 369.566	- / 160.976	- / 162.800	- 1 -	- / 162.800

<sup>\*</sup>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:

FY2023 funds purchase 250, 500, 1,000, 2,000, and 5,000 pound conventional general purpose bombs, guidance and control kits, and energetics to provide precision bombing capability. In addition, funds may be used for equipment or support required to enhance production line capacity as required for inventory replenishment, as well as obsolescence and deficiency corrections. 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 USAF Practice Bombs budget has been consistently underfunded to replenish annual expenditures and to be able to support HAF/A4 training requirements. The FY2023 budget submission was calculated to provide enough funding to replace the average annual expenditures for the BDU-56, BDU-50, and BDU-33 non-explosive training bombs and also MK4 Mod 3 and CXU-3A/B Signal Cartridges to provide combat air forces with weapons build-up and aircrew weapons delivery training. These practice bombs simulate drop trajectory and weight of explosive-filled weapons. If the Practice Bombs budget continues to be reduced/cut then inventory levels will drop below inventory objectives within the FYDP, BDU-56s and MK4 Mod 3 signal cartridges are currently below inventory objectives.

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.

LI 353020 - General Purpose Bombs Air Force UNCLASSIFIED
Page 4 of 11

P-1 Line #4

Volume 1 - 28

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Air ForceDate: April 2021Appropriation / Budget Activity / Budget Sub Activity:P-1 Line Item Number / Title:Aggregated Items Title:3011F / 01 / 13353020 / General Purpose Bombs500LB GP Bomb Variants

30111 / 01 / 13							'	JJJUZU 1	Genera	i i uipos	e Donno	3			50	JULD GI	DOITID	variants		
			Р	rior Year	s		FY 2021			FY 2022		F	′ 2023 Ba	se	FY	/ 2023 OC	ю	F	Y 2023 Tot	tal
Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	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)
500 LB Variants			,						*			•								
(ED15) BLU-111 A/B 500LB GP BOMB	Α		-	-	-	-	-	0.000	-	-	0.000	-	-	-	-	-	-	-	-	-
(485) MK-82 500LB GP BOMB, Tritonal	Α		-	-	-	0.005	7,428	40.109	-	-	-	-	-	-	-	-	-	-	-	-
BLU-111 500LB Penetrator (UON)	Α		-	-	-	0.055	1,075	59.125	0.051	1,016	51.816	-	-	1.000	-	-	-	-	-	1.00
Subtotal: 500 LB Variant	s		-	-	-	-	-	99.234	-	-	51.816	-	-	1.000	-	-	-	-	-	1.00
Total			-	-	-	-	-	99.234	-	-	51.816	-	-	1.000	-	-	-	-	-	1.00
Note: Subtotals or To	tale in	thic E	vhihit P-40a	may not be	evact or si	ım eyactly o	lue to roun				,,,,,,,			1						

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

#### Remarks:

BLU-111 ECP AUR unit cost for FY21 is \$51,624 per bomb; FY22 is \$52,282 per bomb; FY23 is \$53,686 per bomb. BLU-111 ECP AUR has other government costs which make up the delta in the funding line.

Exhibit P-40a, Budget Item Justification For Aggregated Ite	ms: PB 2023 Air Force	Date: April 2021
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Aggregated Items Title:
3011F / 01 / 13	353020 / General Purpose Bombs	(EE59) BLU-137/A2K

															١,	,				
			F	Prior Year	s		FY 2021			FY 2022		FY	′ 2023 Bas	se	FY	′ 2023 OC	0	FY	2023 Tot	al
Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Unit Cost	Qty (Each)	Total Cost (\$ M)															
Hardware																				
BLU-137/A2K	Α		-	-	-	0.064	1,040	66.560	0.061	550	33.600	0.057	337	19.376	-	-	-	0.057	337	19.376
Subtotal: Hardware			-	-	-	-	-	66.560	-	-	33.600	-	-	19.376	-	-	-	-	-	19.376
Total			-	-	-	-	-	66.560	-	-	33.600	-	-	19.376	-	-	-	-	-	19.376
Mata, Cubtatala as Ta																				

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

### Remarks:

A2K actual AUR unit cost for FY21 \$55,323 per bomb; for FY22 is \$56,319; and for FY23 is \$57,346.

A2K has other government costs which make up the delta in the funding line

Exhibit P-40a, Budget Item Justification For Aggregated It	ems: PB 2023 Air Force	Date: April 2021
Appropriation / Budget Activity / Budget Sub Activity: 3011F / 01 / 13	P-1 Line Item Number / Title: 353020 / General Purpose Bombs	Aggregated Items Title: 2000lbs GP Bombs Variants

									- 1					I					
		Р	rior Year	s		FY 2021			FY 2022		FY	7 2023 Ba	se	FY	7 2023 OC	0	FY	2023 To	tal
Item Number / Title [DODIC]	ID CD	Unit Cost	Qty (Each)	Total Cost (\$ M)															
Hardware																,			•
(ED09) BLU-117, 2000LB GP BOMB	А	-	-	-	-	-	0.000	-	-	0.000	-	-	-	-	-	-	-	-	-
(F275) MK-84, 2000LB GP BOMB, Tritonal	A	-	-	-	0.015	9,063	135.944	-	-	0.000	-	-	-	-	-	-	-	-	-
Subtotal: Hardware		-	-	-	-	-	135.944	-	-	0.000	-	-	-	-	-	-	-	-	-
Total		-	-	-	-	-	135.944	-	-	0.000	-	-	-	-	-	-	-	-	-

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

Exhibit P-40a, Budget Item Justification For Aggregated Ite	ms: PB 2023 Air Force	Date: April 2021
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Aggregated Items Title:
3011F / 01 / 13	353020 / General Purpose Bombs	A5K (GBU-72)

							-					_				- (	,			
			F	Prior Year	's		FY 2021			FY 2022		FY	′ 2023 Bas	se	FY	/ 2023 OC	0	FY	/ 2023 Tot	:al
Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
BLU-138/A5K	Α		-	-	-	-	-	-	0.288	125	36.000	0.302	80	24.170	-	-	-	0.302	80	24.170
Subtotal: Uncategorized			-	-	-	-	-	-	-	-	36.000	-	-	24.170	-	-	-	-	-	24.170
Total			-	-	-	-	-	-	-	-	36.000	-	-	24.170	-	-	-	-	-	24.170
Note: Subtotals or To	tale in	thic Ex	hihit D 10a	may not he	ovact or ci	im ovactly c	tuo to round	lina												

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

### Remarks:

BLU-138 AUR unit cost for FY22 is \$202,981 per bomb; and for FY23 is \$207,951 per bomb. BLU-138 has other government costs which make up the delta in the funding line.

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Air ForceDate: April 2021Appropriation / Budget Activity / Budget Sub Activity:P-1 Line Item Number / Title:Aggregated Items Title:3011F / 01 / 13353020 / General Purpose BombsBLU-136/B 2000LB GP BOMB

							I .			•										
			Р	rior Year	s		FY 2021			FY 2022		FY	2023 Bas	se	F	7 2023 OC	:0	FY	2023 Tot	al
Item Number / Title [DODIC]	ID CD		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)
Uncategorized																				
BLU-136/B, 2,000 lb.	Α		-	-	-	0.053	644	34.132	0.044	627	27.600	0.067	425	28.475	-	-	-	0.067	425	28.475
Subtotal: Uncategorized			-	-	-	-	-	34.132	-	-	27.600	-	-	28.475	-	-	-	-	-	28.475
Total			-	-	-	-	-	34.132	-	-	27.600	-	-	28.475	-	-	-	-	-	28.475
Matai Cubtatala ar Tat	-l- :-	thia Ev	hihit D 10a																	

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 weapons which meet the DoD policy on cluster munitions. It consists of the BLU-134/B and BLU-136/B warheads with a cockpit-selectable height of burst sensor.

BLU-136/B, NGAAW Increment II, is a 2,000lb area attack warhead which, augmented by the BLU-134/B, provides for significant improvement of lethality against personnel and materiel targets while meeting the DoD policy on cluster munitions.

BLU-136/B unit cost for FY21 is \$55,375; FY22 is \$44,334 per bomb; FY23 is \$44,186 per bomb. BLU-136/B has other government costs which make up the Delta in the funding line.

FY22 amount reflects a \$15.589M reduction in the FY22 Appropriations Act.

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F / 01 / 13

353020 / General Purpose Bombs

Date: April 2021

Aggregated Items Title:

GENERAL PURPOSE BOMBS (ITEMS

LESS THAN \$5 MILLION)

			P	rior Year	s		FY 2021			FY 2022		FY	′ 2023 Ba	se	FY	2023 OC	0	FY	2023 Tot	tal
Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
FEM Conversion	Α		-	-	-	-	-	-	-	-	0.000	-	-	-	-	-	-	-	-	-
MXU-651 AFG, GBU-10 (EC31)	Α		-	-	-	-	-	-	-	-	0.000	-	-	-	-	-	-	-	-	-
Facilitization	Α		-	-	-	-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-
BOMB FUZE PROTECTION ASSEMBLY (ED67)	Α		-	-	-	-	-	0.500	-	-	0.000	-	-	0.500	-	-	-	-	-	0.50
Energetics	Α		-	-	-	-	-	5.083	-	-	-	-	-	9.266	-	-	-	-	-	9.26
MK84 FIN ASSEMBLY (F607)	Α		-	-	-	-	-	1.000	-	-	0.000	-	-	1.000	-	-	-	-	-	1.00
FIN ASSY BSU-33B/ B (EE10)	Α		-	-	-	-	-	3.000	-	-	0.000	-	-	3.000	-	-	-	-	-	3.00
(ED41) BLU-110B/B GENERAL PURPOSE BOMB	Α		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IM	Α		-	-	-	-	-	5.500	-	-	0.000	-	-	1.900	-	-	-	-	-	1.90
LWIP	Α		-	-	-	-	-	3.000	-	-	0.000	-	-	3.000	-	-	-	-	-	3.00
WEAPS/IMEA	Α		-	-	-	-	-	1.400	-	-	3.300	-	-	2.700	-	-	-	-	-	2.70
DOTC	Α		-	-	-	-	-	-	-	-	-	-	-	3.500	-	-	-	-	-	3.50
First Destination Transportation Costs	Α		-	-	-	-	-	4.500	-	-	2.000	-	-	-	-	-	-	-	-	-
Support Cups	Α		-	-	-	-	-	1.500	-	-	0.000	-	-	1.500	-	-	-	-	-	1.50
Nose Plugs	Α		-	-	-	-	-	2.200	-	-	0.000	-	-	2.200	-	-	-	-	-	2.20
Lugs	Α		-		-	-	-	-	-	-	-	-	-	6.000	-	-	-	-	-	6.00
PMA OTHER GOVERNMENT COSTS	A		-	-	-	-	-	6.013	-	-	6.660	-	-	5.500	-	-	-	-	-	5.50
Subtotal: Uncategorized			-	-	-	-	-	33.696	-	-	11.960	-	-	40.066	-	-	-	-	-	40.06
Total .			-	-	-	-	-	33.696	-	-	11.960	-	-	40.066	-	-	_	-	-	40.060

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

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3011F / 01 / 13

Date: April 2021

Aggregated Items Title:

353020 / General Purpose Bombs

PRACTICE BOMBS

00111 7 017 10								0000207	Concra	i dipoo	C DOIND	3			'	1010110	L DOWN	50		
			F	Prior Year	s		FY 2021			FY 2022		FY	2023 Ba	se	F	/ 2023 OC	0	F	Y 2023 To	tal
Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Uncategorized																	. , ,			
(ED96) BDU-56D/B	Α		-	-	-	-	-	-	-	-	-	-	-	10.000	-	-	-	-	-	10.00
(E756) BDU-50/B	Α		-	-	-	-	-	-	-	-	-	-	-	33.777	-	-	-	-	-	33.77
(F262) MK-84 Inert Prac Bomb	Α		-	-	-	-	-	-	-	-	-	-	-	0.000	-	-	-	-	-	0.00
(E969) BDU-33	Α		-	-	-	-	-	-	-	-	-	-	-	3.436	-	-	-	-	-	3.43
(F562) MK 4 MOD 3 Signal Cart	А		-	-	-	-	-	-	-	-	-	-	-	1.000	-	-	-	-	-	1.00
(F470) CXU-3A/B Signal Cart	А		-	-	-	-	-	-	-	-	-	-	-	1.000	-	-	-	-	-	1.00
FDT	Α		-	-	-	-	-	-	-	-	-	-	-	0.500	-	-	-	-	-	0.50
Subtotal: Uncategorized			-	-	-	-	-	-	-	-	-	-	-	49.713	-	-	-	-	-	49.71
Total		F	-	-	<u> </u>	-	-	-	-	-	-	-	-	49.713	-	-	-	-	-	49.713

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

#### Remarks:

FY2021/22 funding for Practice Bombs was justified in the P-1 Line Item 353010/Practice Bombs; the funding is contained in PE 0207599F.



Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force

Date: April 2021

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F: Procurement of Ammunition, Air Force / BA 01: Ammunition / BSA 13:

353190 / Massive Ordnance Penetrator (MOP)

Bombs

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

Program Elements for Code B Items: N/A

Other Related Program Elements: 0604327F

Line Item MDAP/MAIS Code: 527

Line item MDAI /MAIO OCC. 527												
December Summany	Prior	EV 2024	EV 2022	FY 2023	FY 2023	FY 2023	EV 2024	EV 2025	EV 2026	EV 2027	To	Total
Resource Summary	Years	FY 2021	FY 2022	Base	oco	Total	FY 2024	FY 2025	FY 2026	FY 2027	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	0.000	15.500	19.743	-	19.743	13.979	8.420	0.000	0.000	-	57.642
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	0.000	15.500	19.743	-	19.743	13.979	8.420	0.000	0.000	-	57.642
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	0.000	15.500	19.743	-	19.743	13.979	8.420	0.000	0.000	-	57.642
(The following	Resource Sum	mary rows are fo	or informational p	urposes only. Th	e corresponding	budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-

# **Description:**

Massive Ordnance Penetrator (MOP) is a 30,000 lb class precision-quided penetrator designed to defeat hard and deeply buried targets.

Funding may be used for non-recurring engineering, integration, test, qualification, production readiness and operational readiness of engineering change proposals to resolve safety, reliability or other operational deficiencies, decrease weapon system cost, preserve future production capabilities and capacities, and meet Congressional, National Agency and Defense Department mandates. For example, the integration of Military Code (M-Code) receivers with Enhanced Anti-Jam (EAJ) in order to provide advanced Positioning, Navigation, and Timing (PNT) capabilities to allow operations in anti-access/area denial (A2/AD) environments. M-Code and EAJ also provide increased accuracy, better signal acquisition, and advanced security.

Funding may be used to address Diminishing Manufacturing Sources (DMS) issues. For example through studies, bridge buys, life of type buys, supplier/parts replacement, to include electronic components used commercially and in short supply, energetics, and qualification activities to preserve future production capabilities and capacities.

This requirement supports performance of a full financial audit as required by title 10 U.S.C. Chapter 9A, Sec 240-D.

Funding for this exhibit is contained in PE 0208030F, project 353190.

Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force

Date: April 2021

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F: Procurement of Ammunition, Air Force / BA 01: Ammunition / BSA 13:

353190 / Massive Ordnance Penetrator (MOP)

Bombs

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

Program Elements for Code B Items: N/A

Other Related Program Elements: 0604327F

Line Item MDAP/MAIS Code: 527

	Exhibits Schedule				Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	Massive Ordnance Penetrator (MOP)		Α		- / -	- / 0.000	- / 15.500	- / 19.743	- / -	- / 19.743
P-40	Total Gross/Weapon System Cost				- 1 -	- / 0.000	- / 15.500	- / 19.743	- 1 -	- / 19.743

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

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

#### Justification:

FY23 funding includes integration of M-code and additional MOP assets to include warheads, guidance kits, fuzes, and associated support equipment.

LI 353190 - Massive Ordnance Penetrator (MOP) Air Force UNCLASSIFIED Page 2 of 3

P-1 Line #5

Exhibit P-5, Cost Analysis: PB 2023 Air Force

Appropriation / Budget Activity / Budget Sub Activity:
3011F / 01 / 13

Date: April 2021

P-1 Line Item Number / Title:
353190 / Massive Ordnance Penetrator (MOP)

Massive Ordnance Penetrator (MOP)

ID Code (A=Service Ready, B=Not Service Ready): A MDAP/MAIS Code: **Prior Years FY 2023 Base** FY 2023 Total **Resource Summary** FY 2021 FY 2022 **FY 2023 OCO** Procurement Quantity (Units in Each) Gross/Weapon System Cost (\$ in Millions) 0.000 15.500 19.743 19.743 Less PY Advance Procurement (\$ in Millions) Net Procurement (P-1) (\$ in Millions) 0.000 15.500 19.743 19.743 Plus CY Advance Procurement (\$ in Millions) \_ Total Obligation Authority (\$ in Millions) 0.000 15.500 19.743 19.743 (The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.) Initial Spares (\$ in Millions) Gross/Weapon System Unit Cost (\$ in Millions) \_ \_

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

	l I	Prior Years	S		FY 2021			FY 2022		F	′ 2023 Ba	se	F'	Y 2023 OC	0	F'	Y 2023 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Hardware - Massive Ordnanc	e Penetrator (I	MOP) Cost																
Recurring Cost																		
MOP Equipment	-	-	-	-	-	0.000	-	-	14.800	-	-	19.027	-	-	-	-	-	19.02
Subtotal: Recurring Cost	-	-	-	-	-	0.000	-	-	14.800	-	-	19.027	-	-	-	-	-	19.02
Subtotal: Hardware - Massive Ordnance Penetrator (MOP) Cost	-	-	-	-	-	0.000	-	-	14.800	-	-	19.027	-	-	-	-	-	19.02
Support - Massive Ordnance	Penetrator (Mo	OP) Cost		'						,					'	'		
PSC Other Government Costs	-	-	-	-	-	-	-	-	0.700	-	-	0.716	-	-	-	-	-	0.716
Subtotal: Support - Massive Ordnance Penetrator (MOP) Cost	-	-	-	-	-	-	-	-	0.700	-	-	0.716	-	-	-	-	-	0.71
Gross/Weapon System Cost	-	-	-	-	-	0.000	-	-	15.500	-	-	19.743	-	-	-	-	-	19.74

#### Remarks:

Program Support Costs (PSC) Other Government Costs: Travel, Government Purchase Card (GPC)

MOP was treated as a new start in FY22 due to new requirements/funding to incorporate M-Code capability.



Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force

Date: April 2021

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F: Procurement of Ammunition, Air Force / BA 01: Ammunition / BSA 13:

353620 / Joint Direct Attack Munition

**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: 503

and tell may a may as seed to see												
	Prior			FY 2023	FY 2023	FY 2023					То	
Resource Summary	Years	FY 2021	FY 2022	Base	oco	Total	FY 2024	FY 2025	FY 2026	FY 2027	Complete	Total
Procurement Quantity (Units in Each)	370,495	17,300	1,180	4,200	-	4,200	1,772	1,375	5,600	1,583	-	403,505
Gross/Weapon System Cost (\$ in Millions)	8,647.655	346.985	48.584	251.956	-	251.956	131.472	120.793	341.818	135.782	0.000	10,025.045
Less PY Advance Procurement (\$ in Millions)	-	-	=	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	8,647.655	346.985	48.584	251.956	-	251.956	131.472	120.793	341.818	135.782	0.000	10,025.045
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	8,647.655	346.985	48.584	251.956	-	251.956	131.472	120.793	341.818	135.782	0.000	10,025.045
(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)											ĺ	
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Millions)	0.023	0.020	0.041	0.060	-	0.060	0.074	0.088	0.061	0.086	-	0.025

# **Description:**

FY2021 funding totals include \$237.723M appropriated for Overseas Contingency Operations (OCO).

The Joint Direct Attack Munition (JDAM) program is a joint Air Force/Navy program with the Air Force as the lead service. Designated ACAT 1C, this program upgrades the existing inventory of general purpose bombs by integrating the bombs with a field installed guidance kit using a Global Positioning System-aided Inertial Navigation System (GPS/INS). JDAM provides an accurate, adverse weather capability. JDAM is integrated with the B-52H, B-2A, B-1B, F-16 (all variants), F/A-18A+/C/D/E/F, F-15E, AV-8B, A-10C and F-22A aircraft. Integration with the MQ-9 and F-35 are in progress.

Under an Urgent Operational Need (UON), the Air Force is procuring Strategic Anti-Jam Beamforming Receiver Y-Code (SABR-Y) guidance kits which are enhanced GPS-denied environment guidance systems. Unit costs increased with SABR-Y GPS receivers starting in FY2019. Leveraging the SABR-Y follow-on requirement, the Air Force is developing M-Code (SABR-M) capable guidance kits to meet section 913 of the National Defense Authorization Act for FY 2011 (Public Law 111-383) M-Code GPS requirements and is targeting FY2024 award to Lot 28 for production. The M-Code Phase 3 project is integrating the Anti-Jam Application Specific Integrated Circuit (AJ ASIC) based M-Code Enhanced Anti-Jam Receiver (EAJR) JDAM onto representative launch platform(s). This effort focuses on qualification and testing of production representative M-Code weapon system hardware and software along with planning for the transition to production.

Pursuant to section 2308 of Title 10, U.S. Code, this program will seek cost efficiencies where available through production lot negotiations. This program will continue procurement past FY2027 due to evolving warfighter requirements driven by ongoing combat expenditures.

Funding may be used to address Diminishing Manufacturing Sources (DMS) issues. Through studies, bridge buys, life of type buys, supplier/parts replacement, to include electronic components used commercially and in short supply; and qualification activities to preserve future production capabilities and capacities.

Funding for this exhibit is contained in PE 0207583F.

UNCLASSIFIED
Page 1 of 9

Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force

Date: April 2021

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F: Procurement of Ammunition, Air Force / BA 01: Ammunition / BSA 13:

353620 / Joint Direct Attack Munition

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: 503

Exhibits Schedule					Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)						
P-5	Joint Direct Attack Munition	P-5a, P-21	Α		370,495 / 8,647.655	17,300 / 346.985	1,180 / 48.584	4,200 / 251.956	- / -	4,200 / 251.956	
P-40	P-40 Total Gross/Weapon System Cost				370,495 / 8,647.655	17,300 / 346.985	1,180 / 48.584	4,200 / 251.956	- 1 -	4,200 / 251.956	

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

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

#### Justification:

FY2023 budget request will procure 4,200 JDAM guidance kits.

This program procures JDAM guidance kits, laser sensors, airborne test equipment, and supporting activities to include software block upgrades, integration, and other technical services. The hardware purchase includes a mixture of JDAM guidance kits as well as precision laser guidance sensors, and airborne test equipment for flight test.

This procurement is critical to providing Strategic Anti-Jam Beamforming Receiver Y-Code (SABR-Y) capable guidance kits which are enhanced GPS-denied environment guidance systems in support of an increased Inventory Objective.

Procurement quantities can change based on negotiated options/pricing curves and available funding, in accordance with Title 10, U.S. Code Section 2308 BUY-TO-BUDGET ACQUISITION.

UNCLASSIFIED

							O.	NCLAS		,								
Exhibit P-5, Cost	Analysis	s: PB 20	23 Air Fo	rce										Date: A	pril 2021			
Appropriation / B 3011F / 01 / 13	udget A	ctivity /	Budget \$	Sub Acti	ivity:			Numbe							imber / Trect Attac			
ID Code (A=Service Read	ly, B=Not Serv	ice Ready):	Α						М	DAP/MAIS	Code:							
	Resource				F	Prior Yea	ars	FY 20	)21	FY	2022	FY 2	2023 Bas	se F	Y 2023 C	OCO	FY 2023	Total
Procurement Quantity (Uni		Jannin	u. y		-		370.495		17.300	• •	1,18			1.200	. 2020	_		4,200
Gross/Weapon System Co		16)					647.655		346.985		48.58			1.956				251.956
Less PY Advance Procure							-		-		-			-		_		
Net Procurement (P-1) (\$ i	· · · · · · · · · · · · · · · · · · ·					8	647.655		346.985		48.58	34	251	1.956		_		251.956
Plus CY Advance Procure		lions)				0,	-		-		-		20	-		_		
Total Obligation Authorit	•					8,	647.655		346.985		48.58	34	251	1.956		-		251.956
(TI	he following i	Resource St	ımmary rows	are for info	rmational pu	irposes only	. The corres	ponding bud	get request	s are docum	ented elsew	here.)				<del></del>		
Initial Spares (\$ in Millions)						, ,	-		-		_	.		-		-		
Gross/Weapon System Ur	nit Cost (\$ in I	Millions)					0.023		0.020		0.04	41	(	0.060		-		0.060
		· · · · · · · · · · · · · · · · · · ·			- 1													
Note: Subtotals or Totals in	n this Exhibit	P-5 may no	t be exact or	sum exactl	y due to rou	nding.		'		'								
	F	Prior Years	3		FY 2021			FY 2022		FΥ	′ 2023 Bas	e	F۱	/ 2023 O	co	FY	/ 2023 Tota	al
Cost Elements	Unit Cost	<b>Qty</b> (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost
Hardware - END ITEM Cost	(\$ IVI)	(Eacri)	(\$ IVI)	(\$ IVI)	(Eacii)	(\$ IVI)	(\$ IVI)	(Eacii)	(\$ IVI)	(\$ IVI)	(Eacii)	(\$ IVI)	(\$ IVI)	(Eacri)	(\$ IVI)	(\$ IVI)	(Eacii)	(\$ IVI)
Recurring Cost																		
JDAM TAIL KIT <sup>(†)</sup>	0.023	337,337	7,762.973	0.039	7,100	277.158	0.039	1,180	46.454	0.039	4,200	165.690	-	-	0.000	0.039	4,200	165.690
LASER SENSOR	0.013	33,030	442.680	0.018	3,000	53.334	-	-	0.000	0.019	2,500	47.530	-	-	-	0.019	2,500	47.530
Subtotal: Recurring Cost	-	-	8,205.653	-	-	330.492	-	-	46.454	-	-	213.220	-	-	0.000	-	-	213.220
Subtotal: Hardware - END ITEM Cost	-	-	8,205.653	-	-	330.492	-	-	46.454	-	-	213.220	-	-	0.000	-	-	213.220
Ancillary Equipment - TEST E	QUIPMENT C	ost		'												'		
Recurring Cost															,			
AIRBORNE TEST EQUIPMENT	-	-	104.804	-	-	1.207	-	-	0.000	-	-	8.792	-	-	-	-	-	8.792
Subtotal: Recurring Cost	-	-	104.804	-	-	1.207	-	-	0.000	-	-	8.792	-	-	-	-	-	8.792
Subtotal: Ancillary Equipment - TEST EQUIPMENT Cost	-	-	104.804	-	-	1.207	-	-	0.000	-	-	8.792	-	-	-	-	-	8.792
Support - END ITEM SUPPOR	RT Cost																	
PRODUCTION SUSTAINING ENGINEERING	-	-	274.423	-	-	11.410	-	-	2.000	-	-	25.944	-	-	-	-	-	25.944
PSC Other Government Costs	-	-	42.105	-	-	0.488	-	-	0.130	-	-	0.657	-	-	-	-	-	0.65
PSC Contractor Services	-	-	20.670	-	-	3.388	-	-	0.000	-	-	3.343	-	-	-	-	-	3.343
Subtotal: Support - END ITEM SUPPORT Cost	-	-	337.198	-	-	15.286	-	-	2.130	-	-	29.944	-	-	-	-	-	29.94

LI 353620 - Joint Direct Attack Munition Air Force

UNCLASSIFIED
Page 3 of 9

P-1 Line #6

Exhibit P-5, Cost Analysis: PB 2023 Air Force

Appropriation / Budget Activity / Budget Sub Activity:
3011F / 01 / 13

P-1 Line Item Number / Title:
353620 / Joint Direct Attack Munition

Date: April 2021

Item Number / Title [DODIC]:
Joint Direct Attack Munition

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

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

	F	Prior Years	3		FY 2021			FY 2022		FY	7 2023 Bas	se	F	Y 2023 OC	0	FY	Y 2023 Tota	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Gross/Weapon System Cost	0.023	370,495	8,647.655	0.020	17,300	346.985	0.041	1,180	48.584	0.060	4,200	251.956	-	-	-	0.060	4,200	251.956

#### Remarks:

Increased funding for Airborne Test Equipment will be used to procure the next generation HCTM (High Bandwidth Compact Telemetry kits). FY2023 will be the first year of production of the new variant, funds will be used to procure an estimated 200 TM kits with associated accessories.

Increased funding for Production Sustaining Engineering in FY2023 will be used for integration of SABR-Y and M-Code FPGA. Also associated systems test and evaluation cost for block 12S and M-code integration.

(†) indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: PB 2023 A	Air Force	Date: April 2021
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
3011F / 01 / 13	353620 / Joint Direct Attack Munition	Joint Direct Attack Munition

Cost Elements	0 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue Date
JDAM TAIL KIT <sup>(†)</sup>		2020	BOEING / ST CHARLES, MO	SS / FFP	AFLCMC Hill AFB	Mar 2020	Feb 2021	23,301	0.035	Υ		Aug 2017
JDAM TAIL KIT <sup>(†)</sup>		2021	BOEING / ST CHARLES, MO	SS / FFP	AFLCMC Hill AFB	Feb 2023	Feb 2024	7,100	0.039	Y		Aug 2017
JDAM TAIL KIT <sup>(†)</sup>		2022	BOEING / ST CHARLES, MO	SS / FFP	AFLCMC Hill AFB	Feb 2023	Feb 2024	1,180	0.039	Y		Aug 2017
JDAM TAIL KIT <sup>(†)</sup>		2023	BOEING / ST CHARLES, MO	SS / FFP	AFLCMC Hill AFB	Feb 2023	Feb 2024	4,200	0.039	Y		Aug 2017

<sup>(†)</sup> indicates the presence of a P-21

#### Remarks

FY2021 through FY2023 JDAM guidance kit increased unit costs include the SABR-Y upgraded GPS receiver and the modified JDAM guidance kit hardback design used for the BLU-137 penetrator warhead, along with lower procurement quantities from USG and FMS combined.

The USAF procured Lots 24-26 with FY20 funding driven by a large FY20 budget and delayed SABR-Y contract negotiations. The USN procurement for Lot 26 is FY22, remainder will be used in combination with FY23 for procurement of Lot 27.

The Air Force is developing the BLU-137 which is a modernized 2,000-lb. penetrator warhead. The BLU-137 will increase fuze survivability when used against bunkers, aircraft shelters, and reinforced targets.

Under an Urgent Operational Need (UON), the Air Force is procuring Strategic Anti-Jam Beamforming Receiver Y-Code (SABR-Y) guidance kits which are enhanced GPS-denied environment guidance systems. As a stop-gap capability, the Air Force is working to procure SABR-Y as a follow-on requirement until M-Code integration is achieved. The SABR-Y guidance kit will increase anti-jam capabilities in GPS degraded theaters, and leverages existing JDAM guidance kit designs.

			9-21, Pro																						: Apri						
			<b>ation</b> / 1	Budge	t Acti	vity /	Budg	jet Sı	ub Ac	ctivity	:		-		-		Title: ack M	unitio	า									[DOD unitio			
			Cost El (Units in T	ements housands,	ı							Fiscal Y	ear 2020	)									F	iscal Ye	ar 2021			·			i i
$\top$					ACCEPT									(	Calendar	Year 20	20								Calend	dar Year	2021				1
0   I C   I	F R			PROC	PRIOR TO 1 OCT	BAL DUE AS OF	0	N O	D E	J A	F E	M A	A P	M A	Ŋ	Ŋ	A U	S E	0 0	N O	D E	J A	F E	M A	A P	M A	ΩL	Ŋ	A U	S E	
0 :		FY	SERVICE	QTY	2019	1 OCT	Т	V	С	N	В	R	R	Y	N	L	G	Р	Т	V	С	N	В	R	R	Y	N	L	G	Р	
		AIL KI	liveries: 3140	136																											
110		2020		23.301	.000	23.301						Α -	_	_	_	_		-	_	l -	_	-	1.509	1.508	1.509	1.508	1.509	1.508	1.509	1.508	11.
1	_		FMS <sup>(‡)</sup>	1.533	.000							Α -	-	-	-	-	-	-	-	-	-	-	.128	.128	.128	.128	.128	.128	.128	.128	Ι.
$\top$	-		NAVY (‡)	3.261	.000	3.261						Α -	_	_	_	-	_	-	-	_	-	-	.272	.272	.272	.272	.272	.272	.272	.272	1.
+	_		Total	28.095	.000							-	-	_	_	_	_	_	_	_	-	-	1.909	1.908	1.909	1.908	1.909		1.909		-
$\top$	_		AF	7.100	.000																										7.
$\top$	1 2	2021	FMS <sup>(‡)</sup>	3.348	.000	3.348																									3.
	1 2		NAVY (‡)	2.982	.000	2.982																									2.
+	1 2	2021	Total	13.430	.000	13.430																									13.
	1 2	2022	AF	1.180	.000	1.180																									1.
$\top$	1 2	2022	FMS (‡)	7.351	.000	7.351																									7.
	1 2	2022	NAVY (‡)	1.122	.000	1.122																									1.
	1 2	2022	Total	9.653	.000	9.653																									9.
	1 2	2023	AF	4.200	.000	4.200																									4.
	1 2	2023	FMS (‡)	1.646	.000	1.646																									1.
	1 2	2023	NAVY (‡)	1.660	.000	1.660																									1.
	1 2	2023	Total	7.506	.000	7.506																									7.
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N N J	J L	A U G	S E P	

LI 353620 - Joint Direct Attack Munition Air Force

UNCLASSIFIED Page 6 of 9

P-1 Line #6 Volume 1 - 46

	hib	it P-2	1, Pro	oducti	on Sc	hedul	e: PB	202	3 Air F	orce														Date	: Apr	il 202	1				
		<b>priat</b> i / 01 /		Budge	et Acti	vity /	Budg	et Sı	ıb Ac	tivity	!		_		Numb Direc	-		ınitior	า							<b>ber</b> /					
	٠	(1	Cost Ele Units in Ti		)				,			Fiscal Y	ear 2022							,			ı	iscal Ye	ear 2023						
					ACCEPT PRIOR	BAL								С	alendar Y	ear 202	2	,		·				,	Calen	dar Year	2023				]
)   [	F R			PROC	TO 1 OCT	DUE AS OF	o c	N O	D E	J A	F E	M A	A P	M A	J U	n n	A U	S E	0	N O	D E	J A	F E	M A	A P	M A	J U	J U	A U	S E	
ם ו		IL KIT	ERVICE	QTY	2021	1 OCT	Т	V	С	N	В	R	R	Y	N	L	G	Р	Т	V	С	N	В	R	R	Y	N	L	G	Р	L
			ries: 3140	136																											_
	_	020 AF		23.301	12.068	11.233	1.508	1.508	1.508	1.508	.340	.341	.340	.341	.340	.341	.340	.340	.340	.340	.340	.340	.093	.093	.093	.093	.093	.093	.093	.093	$\top$
$\top$	1 20	020 FM:	1S <sup>(‡)</sup>	1.533	1.024	.509	.128	.127	.127	.127	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
$\top$		_	VY <sup>(‡)</sup>	3.261	2.176	1.085	.272	.271	.271	.271	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	T
	1 20	020 Tot		28.095	15.268	12.827	1.908	1.906	1.906	1.906	.340	.341	.340	.341	.340	.341	.340	.340	.340	.340	.340	.340	.093	.093	.093	.093	.093	.093	.093	.093	T
	1 20	)21 AF		7.100	.000	7.100										'				,	,		Α -	-	-	-	-	-	-	-	7
	1 20	021 FM:	1S <sup>(‡)</sup>	3.348	.000	3.348																	A -	-	-	-	-	-	-	-	
	1 20	021 NA	VY <sup>(‡)</sup>	2.982	.000	2.982																	A.018	-	-	-	-	-	-	-	
	1 20	)21 Tot	tal	13.430	.000	13.430																	.018	-	-	-	-	-	-	-	7
4	1 20	022 AF		1.180	.000	1.180			-														A -	-	-	-	-	-	-	-	1
	1 20	022 FM:	1S <sup>(‡)</sup>	7.351	.000	7.351																	A.613	.613	.612	.613	.612	.613	.612	.613	2
	1 20	022 NA	VY <sup>(‡)</sup>	1.122	.000	1.122																	A.043	.043	.043	.043	.043	.043	.043	.043	
	_	022 Tot		9.653	.000																		.656	.656	.655	.656	.655	.656	.655	.656	_
	_	023 AF		4.200	.000	-																	A -	-	-	-	-	-	-	-	4
	_		1S <sup>(‡)</sup>	1.646	.000																		Α -	-	-	-	-	-	-	-	1
4			VY <sup>(‡)</sup>	1.660	.000				-														A -	-	-	-	-	-	-	-	1
	1 20	D23 Total	tal	7.506	.000	7.506	_							1	. 1	. 1		_					-	-		-	-	-	-	-	7
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	U J	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	U L	A U G	S E P	

LI 353620 - Joint Direct Attack Munition Air Force

		P-21, Pro																					Date						
		<b>oriation</b> / 01 / 13	Budge	et Acti	vity /	Budg	et Su	ıb Act	tivity:		- 1	<b>Line</b> I 620 / .					unitior	1									[DOI lunitio		
			lements Thousands	)							Fiscal Ye	ar 2024											Fiscal Ye	ar 2025					
T				ACCEPT		•							С	alendar `	ear 202	4	-				_			Caler	dar Yea	2025			
N F F F O #		SERVICE	PROC QTY	PRIOR TO 1 OCT 2023	BAL DUE AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N U	n n	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N N	J U	A U G	S E P
JDAI	/ TAIL	KIT																											
Prior		Deliveries: 3140																											
_ 1	-	0 AF	23.301	22.927	.374	.093	.093	.094	.094																				
1	2020	0 FMS (‡)	1.533	1.533	.000	-	-	-	-																				
1	2020	0 NAVY (‡)	3.261	3.261	.000	-	-	-	-																				
1	2020	0 Total	28.095	27.721	.374	.093	.093	.094	.094	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
_   1	202	1 AF	7.100	.000	7.100	-	-	-	-	.592	.591	.592	.591	.592	.591	.592	.592	.592	.592	.592	.591								
1	202	1 FMS (‡)	3.348	3.348	.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
1	202	1 NAVY (‡)	2.982	2.966	.016	-	-	-	-	.016	-	-	-	-	-	-	-	-	-	-	-								
1	2021	1 Total	13.430	6.314	7.116	-	-	-	-	.608	.591	.592	.591	.592	.591	.592	.592	.592	.592	.592	.591	-	-	-	-	-	-	-	-
1	2022		1.180	.000	1.180	-	-	-	-	.098	.098	.098	.098	.098	.098	.098	.098	.099	.099	.099	.099								
1	2022	2 FMS (‡)	7.351	4.901	2.450	.612	.613	.612	.613	-	-	-	-	-	-	-	-	-	-	-	-								
1	2022	2 NAVY (‡)	1.122	.344	.778	.043	.043	.043	.043	.050	.051	.050	.051	.050	.051	.050	.051	.050	.051	.050	.051								
1	2022	2 Total	9.653	5.245	4.408	.655	.656	.655	.656	.148	.149	.148	.149	.148	.149	.148	.149	.149	.150	.149	.150	-	-	-	-	-	-	-	-
1	2023	3 AF	4.200	.000	4.200	-	-	-	-	.350	.350	.350	.350	.350	.350	.350	.350	.350	.350	.350	.350								
1	2023	3 FMS <sup>(‡)</sup>	1.646	.000	1.646	-	-	-	-	.137	.138	.137	.138	.137	.137	.137	.137	.137	.137	.137	.137								
1	2023	3 NAVY (‡)	1.660	.000	1.660	-	-	-	-	.138	.139	.138	.139	.138	.139	.138	.139	.138	.138	.138	.138								
1	2023	3 Total	7.506	.000	7.506	-	-	-	-	.625	.627	.625	.627	.625	.626	.625	.626	.625	.625	.625	.625	- [	-	_	-	-	-	-	-
	-		1			0	N	D	J	F	М	Α	М	J	J	Α	S	0	N	D	J	F	М	Α	М	J	J	Α	S
						C T	0 V	E	A N	E B	A R	P R	A Y	U N	U L	U G	E P	C T	O V	E C	A N	E B	A R	P R	A Y	U N	U L	U G	E P

Exhibit P-21, Production Schedule: PB 2023 Air Force		Date: April 2021
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
3011F / 01 / 13	353620 / Joint Direct Attack Munition	Joint Direct Attack Munition

		Produc	ction Rates (Each	/ Year)				Procurement Le	adtime (Months)			
MFR						Init	ial			Reo	rder	
Ref #	Manufacturer Name - Location	MSR For 2023	1-8-5 For 2023	MAX For 2023	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	BOEING - ST CHARLES, MO	10,500	18,900	45,000	0	0	0	0	0	5	12	17

#### Remarks:

Minimum Sustainment Rate (MSR) includes US Air Force, US Navy and Foreign Military Sales (FMS) procurement.

The USAF procured Lots 24-26 with FY20 funding driven by a large FY20 budget and delayed SABR-Y contract negotiations. USN procurement for Lot 26 is FY22, remainder will be used in combination with FY23 for procurement of Lot 27.

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

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



Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force

Date: April 2021

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

354040 / B-61

Bombs

3011F: Procurement of Ammunition. Air Force / BA 01: Ammunition / BSA 13:

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

Program Elements for Code B Items: 0101125F

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: 468

	Prior			FY 2023	FY 2023	FY 2023					То	
Resource Summary	Years	FY 2021	FY 2022	Base	oco	Total	FY 2024	FY 2025	FY 2026	FY 2027	Complete	Total
Procurement Quantity (Units in Each)	873	-	-	-	-	-	-	-	-	-	-	873
Gross/Weapon System Cost (\$ in Millions)	277.778	21.189	2.709	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	301.676
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	277.778	21.189	2.709	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	301.676
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	277.778	21.189	2.709	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	301.676
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	ne corresponding	budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Millions)	0.318	-	-	-	-	-	-	-	-	-	-	0.346

### Description:

The purpose of this program is to conduct and support United States Air Force (USAF) and Joint Department of Defense (DoD) / Department of Energy (DOE) acquisition activities for the modernization of nuclear weapons.

B61-12 Life Extension Program (LEP): The B61-12 LEP will integrate DOE efforts to extend the service life of the warhead with DoD efforts to develop a guided Tail Kit Assembly (TKA) required to maintain current B61 mission characteristics. Programmatic integration of the Air Force-led, joint DoD-DOE program is accomplished through the B61 LEP Project Officers Group (POG) and its subgroups. In accordance with Air Force Materiel Command mission assignment memo (dated 17 Feb 11) and National Nuclear Security Administration (NNSA)-Air Force Nuclear Weapons Center (AFNWC) Memorandum of Understanding (MOU, dated 28 Jun 12), the USAF is responsible for development, acquisition and delivery of a guided TKA and for All Up Round (AUR) technical integration, system qualification and fielding of the B61-12 variant on multiple platforms. The production effort for the B61 TKA includes the production and delivery of TKAs, accessories, spares, ancillary equipment. Code Management System equipment. TKA and AUR trainers, lot acceptance test assets, and support. The B61 Developmental Test program is complete. Milestone C approved October 2018; the Milestone Decision Authority (MDA) approved proceeding into LRIP/Lot 1, as well as Lot 2 Advanced Procurement in support of Full Rate Production. Initial Operational Test and Evaluation activities were completed in 1QFY20; the DOT&E Beyond Low Rate Initial Production final report was published in September 2020. The Full Rate Production decision was approved by the MDA on 19 Oct 20, which included an additional 60 units to fulfill the 90/10/2 surveillance requirements.

The program also plans to use some funds to evaluate Diminishing Manufacturing Sources (DMS) material shortages, obsolescence issues, and reliability improvement, including flight testing.

Due to database transfer errors, the advance procurement (AP) lines in the Resource Summary Table are not depicted. FY20 was the last year of AP. Prior Years "Plus AP totaled \$65.413M. Prior Years "Less AP totaled \$63.728, which is in error by 1.685M due to a previous database discrepancy. The Total Obligation Authority for PAAF funds should be \$321.121M.

Due the aforementioned database transfer error, Gross/Weapon System Cost data does not match Resource Summary data.

UNCLASSIFIED Page 1 of 4

Volume 1 - 51

P-1 Line #7

Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force

Date: April 2021

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F: Procurement of Ammunition, Air Force / BA 01: Ammunition / BSA 13:

354040 / B-61

Bombs

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

Program Elements for Code B Items: 0101125F

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: 468

	Exhibits Schedule				Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	B-61		В		873 / 277.778	- /21.189	- /2.709	- / 0.000	- / -	- / 0.000
P-40	Total Gross/Weapon System Cost				873 / 277.778	- / 21.189	- / 2.709	- / 0.000	- 1 -	- / 0.000

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

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

#### Justification:

The B61-12 LEP TKA program is in Full Rate Production and executing contracts for build and delivery of two production lots.

No FY23 funding requested.

Fiscal Year 2021/2022 funds will be applied to contract closeout costs, non-recurring costs for transition to sustainment, ancillary equipment such as bomb assembly trainers purchased from DOE/NNSA, and program management administration costs.

LI 354040 - B-61
Air Force

UNCLASSIFIED
Page 2 of 4
P-1 Line #7

Volume 1 - 52

# LINCL ASSIFIED

							U	NCLAS	SILIER	,								
Exhibit P-5, Cost	Analysis	s: PB 20	23 Air Fo	orce										Date: A	pril 2021			
<b>Appropriation / B</b> 3011F / 01 / 13					ivity:		<b>ine Iten</b> 40 / B-6	n Numbe	er / Title:						ımber / 1	itle [DO	DIC]:	
ID Code (A=Service Read	y, B=Not Servi	ce Ready):	3			'			М	DAP/MAIS	Code:		,					
R	esource	Summa	arv		l l	Prior Yea	ars	FY 20	021	FY	2022	FY	2023 Bas	se F	Y 2023 (	ОСО	FY 2023	Total
Procurement Quantity (Unit							873		_		-			-		-		_
Gross/Weapon System Co		s)					277.778		21.189		2.7	09	(	0.000		-		0.00
Less PY Advance Procure	ment (\$ in Mil	lions)					-							-		-		
Net Procurement (P-1) (\$ ir	•	/					277.778		21.189		2.7	09	(	0.000		-		0.00
Plus CY Advance Procurer		lions)					-							-		-		_
Total Obligation Authorit	•						277.778		21.189		2.7	09	(	0.000		-		0.00
(Th	e following l	Resource Su	ımmary rows	s are for info	rmational p	urposes only	. The corres	sponding bud	dget request	s are docum	ented elsew	here.)						
Initial Spares (\$ in Millions)	<u> </u>		,				-	. 5	0.000		0.0			-		-		_
Gross/Weapon System Un	it Cost (\$ in I	Aillions)					0.318							-		-		_
	• • • • • • • • • • • • • • • • • • • •				l		<u> </u>					I		l		l l		
Note: Subtotals or Totals in	this Exhibit	P-5 may no	t be exact or	r sum exactl	y due to rou	nding.												
	F	Prior Years	<b>s</b>		FY 2021			FY 2022		F۱	2023 Bas	se	F	Y 2023 O	co	F	Y 2023 Tot	al
<b>.</b> . <del>.</del>	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost
Cost Elements	(\$ M)	(Each)	(\$ M)	(\$ M)	(Each)	(\$ M)	(\$ M)	(Each)	(\$ M)	(\$ M)	(Each)	(\$ M)	(\$ M)	(Each)	(\$ M)	(\$ M)	(Each)	(\$ M)
Hardware - B61 Cost																		
Recurring Cost  Hardware End Item																		
(TKA)	0.090	754	67.976	-	-	0.032	-	-	0.000	-	-	0.000	-	-	-	-	-	0.00
TKA Trainers	0.086	119	10.238	-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	78.214	-	-	0.032	-	-	0.000	-	-	0.000	-	-	-	-	-	0.00
Subtotal: Hardware - B61 Cost	-	-	78.214	-	-	0.032	-	-	0.000	-	-	0.000	-	-	-	-	-	0.00
Logistics - B61 Cost	'		·												<u>'</u>	,		
Non Recurring Cost																		
CMS	-	-	23.086	-	-	0.100	-	-	-	-	-	-	-	-	-	-	-	-
Technical Data	-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Non Recurring Cost	-	-	23.086	-	-	0.100	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Logistics - B61 Cost	-	-	23.086	-	-	0.100	-	-	-	-	-	_	-	-	-	-	-	-
Ancillary Equipment - B61 Cos	it	,						-										
Recurring Cost																		
TKA Containers	-	-	2.525	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	2.525	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non Recurring Cost	<u> </u>	1	Т				1											
Bomb Assembly (BA) Trainers	-	-	75.149	-	-	5.280	-	-	-	-	-	-	-	-	-	-	-	-

**UNCLASSIFIED** LI 354040 - B-61 Page 3 of 4 Air Force

Exhibit P-5, Cost Analysis: PB 2023 Air Force	Date: April 2021
---	------------------

Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Item Number / Title [DODIC]: 354040 / B-61

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

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

	F	Prior Years	6		FY 2021			FY 2022		F۱	1 2023 Ba	se	F	1 2023 OC	0	FY	/ 2023 Tot	:al
Cost Elements	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Test Equipment (SATS)	-	-	2.726	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
T&H Gear	-	-	16.266	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Non Recurring Cost	-	-	94.141	-	-	5.280	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Ancillary Equipment - B61 Cost	-	-	96.666	-	-	5.280	-	-	-	-	-	-	-	-	-	-	-	-
Support - B61 Cost																		
PMA	-	-	3.924	-	-	2.433	-	-	2.644	-	-	-	-	-	-	-	-	-
NWC Mission Support	-	-	-	-	-	0.000	-	-	0.000	-	-	-	-	-	-	- 1	-	-
System T&E	-	-	70.146	-	-	13.344	-	-	0.065	-	-	-	-	-	-	-	-	-
Training	-	-	-	-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-
Production Sustaining Engineering	-	-	5.742	-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Support - B61 Cost	-	-	79.812	-	-	15.777	-	-	2.709	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost	0.318	873	277.778	-	-	21.189	-	-	2.709	-	-	0.000	-	-	-	-	-	0.00

#### Remarks:

Due to database transfer errors, the advance procurement (AP) lines in the Resource Summary Table are not depicted. FY20 was the last year of AP. Prior Years "Plus AP totaled \$65.413M. Prior Years "Less AP totaled \$63.728, which is in error by \$1.685M due to a previous database discrepancy. The Total Obligation Authority for PAAF funds should be \$321.121M.

Due the aforementioned database transfer error, Gross/Weapon System Cost data does not match Resource Summary data.

LI 354040 - B-61
Air Force

UNCLASSIFIED
Page 4 of 4
P-1 Line #7

Volume 1 - 54

Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force Date: April 2021

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F: Procurement of Ammunition, Air Force / BA 01: Ammunition / BSA 15: Other | 355100 / Cad/Pad

Items

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

- MAD A D/MA A 10 O - -1 - - N 1/A

Line Item MDAP/MAIS Code: N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	47.830	59.010	50.473	-	50.473	51.141	52.155	53.234	54.323	-	368.166
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	47.830	59.010	50.473	-	50.473	51.141	52.155	53.234	54.323	-	368.166
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	47.830	59.010	50.473	-	50.473	51.141	52.155	53.234	54.323	-	368.166
(The followin	g Resource Sum	mary rows are fo	or informational p	ourposes only. Ti	ne correspondin	g budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Millions)	_	_	_	_	_	_	_	_	_	-	-	_

### Description:

- Cartridge Actuated Devices/Propellant Actuated Devices (CAD/PAD) are energetic life-limited critical safety items used in emergency egress, fire suppression, aerial refueling, data destruction, aircrew flight equipment and survival equipment. CAD/PAD items are used in all mission areas, i.e. combat, training, force protection, search & rescue, and humanitarian relief. These energetic devices have a defined shelf/ service life and are replaced based on time-change during scheduled aircraft maintenance. The CAD/PAD category supports 1,100+ distinct National Stock Numbers used on the following airframes: A-10, AC-130, B-1, B-2, B-52, C-5, C-17, C-130, CV-22, E-3, E-8, EC-130, F-15, F-16, F-22, HC-130, HH-60, KC-10, KC-46, KC-135, LC-130, MC-130, NC-136, OC-135, QF-16, RC-135, T-1, T-6, T-38, TE-8, TU-2, T-10, T U-2, UH-1, WC-130, and WC-135.
- Funds may be used to address production Diminishing Manufacturing Sources (DMS)/Material Shortages/Obsolescence issues through studies, bridge buys, life of type buys, supplier/parts replacement, to include electronic components used commercially and in short supply, and qualification activities to preserve future production capabilities and capacities.
- CAD/PAD items are purchased for AF by AFLCMC/EBHJ, CAD/PAD Joint Program Office at Hill AFB, UT.
- Funding for this exhibit contained in PE 0708070F.

UNCLASSIFIED LI 355100 - Cad/Pad Volume 1 - 55 Air Force Page 1 of 3 P-1 Line #8

Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force	Date: April 2021	

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F: Procurement of Ammunition, Air Force / BA 01: Ammunition / BSA 15: Other | 355100 / Cad/Pad

Items

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 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-40a	Cad/Pad				- / -	- / 47.830	- / 59.010	- / 50.473	- / -	- / 50.473
P-40	Total Gross/Weapon System Cost				- 1 -	- / 47.830	- / 59.010	- / 50.473	- 1 -	- / 50.473

<sup>\*</sup>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:

FY2023 funds will be used to maintain Aircraft operational availability and pilot safety. CAD/PAD assets expire due to established item shelf/service life, or mandatory "time-change" procedures for installed devices. In accordance with Technical Order (T.O.) 00-20-1, the aircraft becomes grounded until reliable assets are obtained and installed.

**UNCLASSIFIED** LI 355100 - Cad/Pad Volume 1 - 56 Air Force Page 2 of 3 P-1 Line #8

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

3011F / 01 / 15

Date: April 2021

Aggregated Items Title:

355100 / Cad/Pad

Cad/Pad

			Р	rior Year	s		FY 2021			FY 2022		FY	′ 2023 Ba	se	F	7 2023 OC	ю	FY	' 2023 Tot	tal
Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Uncategorized																				
BOMBER AIRCRAFT	Α		-	-	-	-	-	7.000	-	-	7.515	-	-	5.679	-	-	-	-	-	5.679
CARGO AIRCRAFT	Α		-	-	-	-	-	13.000	-	-	11.900	-	-	3.184	-	-	-	-	-	3.184
FIGHTER AIRCRAFT	Α		-	-	-	-	-	10.000	-	-	4.203	-	-	4.665	-	-	-	-	-	4.665
TRAINING AIRCRAFT	Α		-	-	-	-	-	11.000	-	-	12.893	-	-	17.564	-	-	-	-	-	17.564
COMMON EGRESS ITEMS	А		-	-	-	-	-	4.000	-	-	16.422	-	-	9.670	-	-	-	-	-	9.670
COMMON LIFE SUPPORT ITEMS	Α		-	-	-	-	-	2.680	-	-	3.905	-	-	4.353	-	-	-	-	-	4.353
COMMON MISC ITEMS	Α		-	-	-	-	-	0.150	-	-	2.172	-	-	5.358	-	-	-	-	-	5.358
Subtotal: Uncategorized			-	-	-	-	-	47.830	-	-	59.010	-	-	50.473	-	-	-	-	-	50.473
Total			-	-	-	-	-	47.830	-	-	59.010	-	-	50.473	-	-	-	-	-	50.473

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

LI 355100 - Cad/Pad Air Force UNCLASSIFIED
Page 3 of 3

P-1 Line #8

Volume 1 - 57



Date: April 2021 Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F: Procurement of Ammunition, Air Force / BA 01: Ammunition / BSA 15: Other | 355450 / Explosive Ordnance Disposal (EOD) Items

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

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

		1		T	1		i		T			
	Prior			FY 2023	FY 2023	FY 2023					То	
Resource Summary	Years	FY 2021	FY 2022	Base	oco	Total	FY 2024	FY 2025	FY 2026	FY 2027	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	6.232	5.151	6.343	-	6.343	6.662	6.794	6.934	7.076	-	45.192
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	6.232	5.151	6.343	-	6.343	6.662	6.794	6.934	7.076	-	45.192
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	6.232	5.151	6.343	-	6.343	6.662	6.794	6.934	7.076	-	45.192
(The following	g Resource Sum	mary rows are fo	or informational p	ourposes only. Th	ne corresponding	g budget request	s are documente	ed elsewhere.)	i e	*		
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Millions)	_	_	_	_	_	_	_	_	_	_	_	

### Description:

(M097) INERT, (M131) - CAP, (M591) - DYNAMITE, (MM52) DEMO ECT, (MM48) CHG DEMO, (MM38) CHG, DEMO, (MN07) - N/E 70FT, (M039) CHG DEMO, (M985) Charge, and (ML03) FIRING are new starts.

The FY 2023 funding request was reduced by \$0.224 million to account for the availability of prior year execution balances.

Explosive Ordnance Disposal (EOD) materials support Civil Engineer, EOD, Security Forces Military Working Dogs, RED HORSE, Special Forces operations and training, and formal schools with demolition munitions. The materials are used in deployment packages, base response assets and range clearance resources in support of peacetime and contingency operations. These items are certified for use by the Air Force Non-Nuclear Munitions Safety Board (NNMSB) and the Department of Defense Explosives Safety Board (DDESB).

Funds may be used to address production Diminishing Manufacturing Sources (DMS)/Material Shortages/Obsolescence issues through studies, bridge buys, life of type buys, supplier/parts replacement, to include electronic components used commercially and in short supply, and qualification activities to preserve future production capabilities and capacities.

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.

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.

Funding for this exhibit is contained in PE 0204424F.

UNCLASSIFIED Page 1 of 5

Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force Date: April 2021

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F: Procurement of Ammunition, Air Force / BA 01: Ammunition / BSA 15: Other 355450 / Explosive Ordnance Disposal (EOD) Items

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 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-40a	Explosive Ordnance Disposal (EOD)				- / -	- / 6.232	- / 5.151	- / 6.343	- / -	- / 6.343
P-40	Total Gross/Weapon System Cost				- 1 -	- / 6.232	- / 5.151	- / 6.343	- 1 -	- / 6.343

<sup>\*</sup>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:

FY2023 funds purchase Explosive Ordnance Disposal (EOD), Demolition Material, Civil Engineering Tools and Equipment including all explosives, explosive tools and related equipment to render unexploded ordnance safe. Assets provide support for Counter Improvised Explosive Devices (IED) operations, Special Operations teams, formal schools, and Military Working Dog training. EOD/Demolition Munitions items are used in deployment packages, base response assets, and range clearance resources in support of peacetime and contingency operations.

> **UNCLASSIFIED** Page 2 of 5

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Air Force

Date: April 2021

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F / 01 / 15

355450 / Explosive Ordnance Disposal (EOD)

Aggregated Items Title:
Explosive Ordnance Disposal (EOD)

			_				EV 6001		· ·	F)/ 0000			, 0000 5						, 0000 T	1
			Р	rior Year	S		FY 2021			FY 2022		FY	2023 Ba	se	FY	2023 OC	0	FY	2023 Tot	tal
Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Tota Cost (\$ M)									
ncategorized																				
(AA62) 12 GAUGE M274 ULTRA CARTRIDGE	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(M023) - CHARGE, DEMOLITION C4- M112	А		-	-	-	0.000	24,319	1.000	0.000	22,442	1.000	0.000	19,996	0.891	-	-	-	0.000	19,996	0.
(M031) CHG DEMO TNT 1/2LB	Α		-	-	-	-	-	-	0.000	50,637	0.693	-	-	-	-	-	-	-	-	
(M097) INERT, NON- ELECTRIC CAP	Α		-	-	-	-	-	-	-	-	-	0.000	10,000	0.100	-	-	-	0.000	10,000	0
(M130) - CAP BLASTING ELECTRIC M6	Α		-	-	-	0.000	8,276	0.300	-	-	0.000	-	-	-	-	-	-	-	-	
(DWEC) CTG, MK 277 ENHANCED BLANK	Α		-	-	-	-	-	-	0.000	2,786	0.010	-	-	-	-	-	-	-	-	
(M131) - CAP, BLASTING NON- ELECTRIC-M7	Α		-	-	-	0.000	20,713	0.500	-	-	0.000	0.000	42,148	0.891	-	-	-	0.000	42,148	(
(M456) - CORD ASBLY DETONATING	Α		-	-	-	-	-	-	-	-	0.000	-	-	-	-	-	-	-	-	
(M591) - DYNAMITE MILITARY M1 1LB BLOCK	Α		-	-	-	-	-	-	-	-	-	0.000	750	0.015	-	-	-	0.000	750	(
(M980) - DETA SHEET	Α		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(M993) CHARGE, DEMO, C1.5 DETA SHEET .062	Α		-	-	-	-	-	-	-	-	0.000	-	-	-	-	-	-	-	-	
(ML47) - B CAP W/30 FT SHOCK TUBE	Α		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(MM24) DEMO ECT, MK 142, 300GPF	А		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(MM30) CHARGE, 20 GRAM MK 140 MOD 0	А		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(MM51) DEMO ECT, MK 143, 600GPF	Α		-	-	-	-	-	-	-	-	0.000	-	-	-	-	-	-	-	-	
(MM52) DEMO ECT, MK144, 1200GPF	Α		-	-	-	-	-	-	-	-	-	0.000	2,186	0.200	-	-	-	0.000	2,186	
(MM48) CHG DEMO LIN SHAPED 600 GR/ FT	Α		-	-	-	-	-	-	-	-	-	0.000	3,080	0.308	-	-	-	0.000	3,080	

LI 355450 - Explosive Ordnance Disposal (EOD) Air Force

UNCLASSIFIED
Page 3 of 5

P-1 Line #9

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Air Force

Date: April 2021

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F / 01 / 15 355450 / Explosive Ordnance Disposal (EOD)

Aggregated Items Title:
Explosive Ordnance Disposal (EOD)

			Р	rior Year	s		FY 2021			FY 2022		FY	2023 Bas	se	FY	/ 2023 OC	0	FY	/ 2023 Tot	tal
Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Unit Cost	Qty (Each)	Total Cost (\$ M)															
(MM38) CHG, DEMO, LIN SHAPED 225 GR/ FT	A		-	-	-	-	-	-	-	-	-	0.000	3,158	0.300	-	-	-	0.000	3,158	0.30
(MM53) - DEMO ECT, MK145, 2400GPF	А		-	-	-	0.000	1,058	0.200	0.000	1,432	0.100	0.000	1,432	0.100	-	-	-	0.000	1,432	0.10
(MM54) - EXPLOSIVE CUTTING TAPE	А		-	-	-	0.000	2,156	0.200	-	-	0.000	0.000	5,390	0.500	-	-	-	0.000	5,390	0.50
(M421) CHG DEMO SHPD M3A2 COMP B	A		-	-	-	-	-	0.200	0.001	247	0.200	0.001	247	0.200	-	-	-	0.001	247	0.20
(MM56) DETONATOR, PERCUSSION 175MS DELAY	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(MN07) - N/E 70FT DELAY SHOCK TUBE	A		-	-	-	-	-	-	-	-	-	0.000	4,167	0.050	-	-	-	0.000	4,167	0.05
(MN06) M14 SET UP, N/E CAP WITH TIME FUZE	A		-	-	-	-	-	-	0.000	25,489	0.300	-	-	-	-	-	-	-	-	-
(MN08) - IGNITER TIME BLASTING	А		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(MN23) - DEMO ECT, MK152, 900GPF (LHFLSC)	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(MN82) - SEMTEX A	Α		-	-	-	-	-	-	-	-	0.000	-	-	-	-	-	-	-	-	
(MN85) - DYNAMITE, 75% AMMON NITRATE	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(MN86) CAP, BLAST NON-ELEC W/200 FT MINI-TUBE M19	A		-	-	-	-	-	0.232	-	-	0.000	-	-	-	-	-	-	-	-	-
(MN88) - SHOCK TUBE W/BLASTING CAP 500	A		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(MN90) - M-13 1,000 FT SHOCK TUBE W/ CAP M23	Α		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(MP29) DETONATOR, NONELEC, DUEL 40 FT MK 164 MOD 0	A		-	-	-	-	-	0.100	-	-	0.000	-	-	-	-	-	-	-	-	
(SS01) - CTG, 50 CAL ELEC BLANK MK209 MOD 1	A		-	-	-	0.000	14,707	1.800	0.000	7,965	0.970	0.000	3,251	0.600	-	-	-	0.000	3,251	0.6
(M039) CHG DEMO 40LB CRATERING W/ WELL	Α		-	-	-	-	-	0.100	-	-	0.000	0.000	1,097	0.200	-	-	-	0.000	1,097	0.2

LI 355450 - Explosive Ordnance Disposal (EOD) Air Force

UNCLASSIFIED
Page 4 of 5

P-1 Line #9

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Air Force

Date: April 2021

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F / 01 / 15

355450 / Explosive Ordnance Disposal (EOD)

Aggregated Items Title:
Explosive Ordnance Disposal (EOD)

												-1				'			,	
			Р	rior Year	s		FY 2021			FY 2022		FY	′ 2023 Ba	se	FY	/ 2023 OC	0	FY	′ 2023 Tot	al
Item Number / Title [DODIC]	ID	MDAP/ MAIS Code	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
(M670) FUZE, BLASTING TIME	Α		-	-	-	-	-	-	0.000	211,290	0.131	0.000	7,419	0.460	-	-	-	0.000	7,419	0.4
(M420) CHG DEMO SHPD M2A4 15LB COMP B	Α		-	-	-	-	-	1.400	0.002	726	1.394	0.002	556	1.068	-	-	-	0.002	556	1.
(M986) CHB, DEMOLITION C7 DETA SHEET 1.333	A		-	-	-	-	-	-	-	-	0.000	-	-	-	-	-	-	-	-	
(M985) Charge, Demolition, C7 Deta Sheet .291	Α		-	-	-	-	-	-	-	-	-	0.000	2,000	0.200	-	-	-	0.000	2,000	С
(YY34) - SHOCK TUBE	Α		-	-	-	-	-	0.200	0.000	704	0.150	0.000	935	0.200	-	-	-	0.000	935	0
(M456) CORD ASSEMBLY, DETONATING	A		-	-	-	-	-	-	0.000	250,000	0.100	-	-	-	-	-	-	-	-	
(M482) CONTNR SHAP CHRG, MK 7 MOD 6	A		-	-	-	-	-	-	0.000	719	0.030	-	-	-	-	-	-	-	-	
(ML05) CUTTER, HE MK 24 MOD 0	Α		-	-	-	-	-	-	0.000	272	0.050	-	-	-	-	-	-	-	-	
(ML03) FIRING DEVICE DEMO M142	А		-	-	-	-	-	-	-	-	-	0.000	950	0.020	-	-	-	0.000	950	(
(M981) CHARGE, DEMOLITION	Α		-	-	-	-	-	-	0.000	898	0.020	-	-	-	-	-	-	-	-	
PMA	Α		-	-	-	-	-	-	-	-	0.003	-	-	0.040	-	-	-	-	-	(
btotal: Uncategorized			-	-	-	-	-	6.232	-	-	5.151	-	-	6.343	-	-	-	-	-	6
tal			-	-	-	-	-	6.232	-	-	5.151	-	-	6.343	-	-	-	-	-	6

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



Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force Date: April 2021

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F; Procurement of Ammunition, Air Force / BA 01; Ammunition / BSA 15; Other | 355900 / Spares And Repair Parts Items

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

Line item wdariwais code. N/A												
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	0.542	0.535	0.573	-	0.573	0.581	0.592	0.604	0.617	-	4.044
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	0.542	0.535	0.573	-	0.573	0.581	0.592	0.604	0.617	-	4.044
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	0.542	0.535	0.573	-	0.573	0.581	0.592	0.604	0.617	-	4.044
(The following	g Resource Sum	mary rows are fo	or informational p	urposes only. Th	ne corresponding	g budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	- [	-
Flyaway Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-

### Description:

This P-1 line funds spares and repair parts for Procurement of Ammunition, Air Force (PAAF) items. Initial spares consist of repairable components, assemblies and subassemblies, as well as consumable items required in support of newly fielded end items. Requirements are based on historical failure/demand data on similar items. Replenishment spares consist of repairable components, assemblies and subassemblies required for follow-on sustainment of end items. Munitions replenishment spare levels are based on item-specific failure/demand driven computations.

Provide Area Attack telemetry kit Weapon System Evaluation Program (WSEP) analysis for Wind Corrected Munitions Dispenser (WCMD). Contractor will perform engineering study, installation, delivery and testing for WCMD weapons with telemetry kits.

Funds may be used to address production Diminishing Manufacturing Sources (DMS)/Material Shortages/Obsolescence issues through studies, bridge buys, life of type buys, supplier/parts replacement, to include electronic components used commercially and in short supply, and qualification activities to preserve future production capabilities and capacities.

Funding for this exhibit contained in PE 0208030F.

#### Justification:

The FY2023 request funds spares and repair parts for Procurement of Ammunition, Air Force (PAAF) items. Initial spares consist of repairable components, assemblies and sub-assemblies, as well as consumable items required in support of newly fielded end items. Requirements are based on historical failure/demand data on similar items. Replenishment spares consist of reparable components, assemblies and sub-assemblies required for follow on sustainment of end items. Munitions replacement spare levels are based on item-specific failure /demand driven computations. Examples of spares include Flight Test Telemetry packages, telemetry kits, batteries, fuzes, cables, electronic components to support and maintain fielded end items, and test support equipment. Initial or Replenishment spares and repair parts are necessary for the following Air Force (PAAF) P-1 end items: Rockets, Cartridges, Practice Bombs, General Purpose Bombs, Cartridge Actuated Devices /Propellant Actuated Devices (CAD/PAD), Explosive Ordnance Disposal, Flares, and Fuzes.

The Air Force procures munitions to maintain appropriate quantities in the War Reserve Material (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.&tr./span&qt;

> UNCLASSIFIED Page 1 of 1



Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force		Date: April 2021
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	

3011F: Procurement of Ammunition, Air Force / BA 01: Ammunition / BSA 15: Other | 355970 / Modifications

Items

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

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2023	FY 2023	FY 2023					То	
Resource Summary	Years	FY 2021	FY 2022	Base	oco	Total	FY 2024	FY 2025	FY 2026	FY 2027	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	1.310	0.292	0.000	-	0.000	0.000	0.000	0.000	0.000	-	1.602
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	1.310	0.292	0.000	-	0.000	0.000	0.000	0.000	0.000	-	1.602
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	1.310	0.292	0.000	-	0.000	0.000	0.000	0.000	0.000	-	1.602
(The following	Resource Sum	mary rows are fo	r informational p	urposes only. Th	ne corresponding	budget request	s are documente	d elsewhere.)	•			
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-

## **Description:**

This budget line encompasses both new and on-going modification efforts for guided bomb and munitions systems. Permanent modifications consist of configuration changes to in-service systems and equipment which correct material or other deficiencies and can be used to add or remove capability. Safety modifications correct deficiencies which may create personnel, system, or equipment hazards.

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.

Funds may be used to address production Diminishing Manufacturing Sources/Material Shortages/Obsolescence issues through studies, bridge buys, life of type buys, supplier/parts replacement, to include electronic components used commercially and in short supply, and qualification activities to preserve future production capabilities and capacities.

Funding for this exhibit contained in PE 0208030F.

#### Justification:

No FY23 funding requested.

**UNCLASSIFIED** LI 355970 - Modifications Volume 1 - 67 Air Force Page 1 of 1 P-1 Line #11



Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force Date: April 2021

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F: Procurement of Ammunition, Air Force / BA 01: Ammunition / BSA 15: Other | 355980 / First Destination Transportation Items

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

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

P-1 Line #12

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2023	FY 2023	FY 2023					То	
<b>Resource Summary</b>	Years	FY 2021	FY 2022	Base	ОСО	Total	FY 2024	FY 2025	FY 2026	FY 2027	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	0.000	0.000	1.903	-	1.903	2.284	2.779	2.808	2.837	-	12.611
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	0.000	0.000	1.903	-	1.903	2.284	2.779	2.808	2.837	-	12.611
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	0.000	0.000	1.903	-	1.903	2.284	2.779	2.808	2.837	-	12.611
(The following	Resource Sum	mary rows are fo	r informational p	urposes only. Th	e corresponding	g budget request	s are documente	ed elsewhere.)	•			
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	- [	-
Flyaway Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-

## **Description:**

Transportation funds are required to support the distribution of USAF 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 Air Force Supply System, to CONUS Customers, to CONUS Arsenals, or to ports of embarkation in support of Call Forward, i.e., Training, War Reserve Materials (WRM) or Overseas Contingency Operations (OCO).

Funding for this exhibit is contained in PE 0208030F. The Air Force previously requested First Destination Transportation costs in WSC 353020/General Purpose Bombs.

#### Justification:

The FY2023 request supports centrally funded distribution of Air Force ammunition end items and components from the point of manufacture to initial receipt into the Air Force supply system.



Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force Date: April 2021

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F: Procurement of Ammunition, Air Force / BA 01: Ammunition / BSA 15: Other 355990 / Items Less Than \$5,000,000

Items

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

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total	FY 2024	FY 2025	FY 2026	FY 2027	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	4.753	9.164	5.014	-	5.014	5.080	5.183	5.290	5.396	-	39.880
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	4.753	9.164	5.014	-	5.014	5.080	5.183	5.290	5.396	-	39.880
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	4.753	9.164	5.014	-	5.014	5.080	5.183	5.290	5.396	-	39.880
(The following	Resource Sum	mary rows are fo	r informational p	urposes only. Th	ne corresponding	budget request	s are documente	d elsewhere.)		*		
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	_	-	-	-

## **Description:**

This category includes various munitions items to support air base ground defense, air rescue and aircrew/ground training.

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.

All items have an annual procurement value of less than 5 million and are code A.

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.

PEs associated with this P-1 Line are 0207580F and 0207599F.

Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force Date: April 2021

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F: Procurement of Ammunition, Air Force / BA 01: Ammunition / BSA 15: Other | 355990 / Items Less Than \$5,000,000 Items

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 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-40a	Items Less Than \$5,000,000				- / -	- /4.753	- / 9.164	- /5.014	- / -	- / 5.014
P-40	Total Gross/Weapon System Cost				- 1 -	- / 4.753	- / 9.164	- / 5.014	- 1 -	- / 5.014

<sup>\*</sup>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:

FY2023 funding purchases miscellaneous munitions such as hand grenades, grenades with colored smoke for signaling aircrews and air-rescue, and ground-burst simulators primarily used for air-base and ground support missions.

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Air Force

Date: April 2021

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F / 01 / 15

355990 / Items Less Than \$5,000,000

Aggregated Items Title: Items Less Than \$5,000,000

Drior Years								3339907 Items Less Than \$5,000,000													
			F	Prior Year	s		FY 2021			FY 2022		F۱	/ 2023 Ba	se	FY	2023 OC	0	FY 2023 Total			
Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	
Uncategorized				,	,	,										·					
IMEA	Α		-	-	-	-	-	-	-	-	4.475	-	-	-	-	-	-	-	-	-	
(J007) Claymore	Α		-	-	-	-	-	-	0.001	4,471	4.002	-	-	-	-	-	-	-	-	-	
(HB25) LAW Rockets	Α		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(YW33) Smokey Sams	Α		-	-	-	-	-	-	-	-	-	-	-	2.233	-	-	-	-	-	2.23	
(G870) FZE HAND GRN PRACTICE	Α		-	-	-	-	-	-	-	-	0.000		-	-	-	-	-	-	-	-	
(G878) FUZE, GRENADE HAND, PRAC	А		-	-	-	-	-	-	-	-	0.000	-	-	-	-	-	-	-	-	-	
(G881) GRN, HAND PRAC M228	Α		-	-	-	-	-	-	-	-	0.000	-	-	-	-	-	-	-	-	-	
(G940) GRENADE, SMOKE, GREEN M18	Α		-	-	-	-	-	0.450	-	-	0.000	-	-	0.250	-	-	-	-	-	0.250	
(G945) GRENADE, SMOKE, YELLOW	Α		-	-	-	-	-	0.150	-	-	0.000	-	-	-	-	-	-	-	-	-	
(G950) GRENADE, SMOKE, RED	Α		-	-	-	-	-	0.400	-	-	0.000	-	-	-	-	-	-	-	-	-	
(G955) GRENADE, SMOKE, VIOLET M18	Α		-	-	-	-	-	1.500	-	-	0.000	-	-	0.500	-	-	-	-	-	0.50	
(GG04) GRENADE, NON-LETHAL MODEL 9590	А		-	-	-	-	-	0.199	-	-	0.000	-	-	-	-	-	-	-	-	-	
(G982) GRENADE, HAND, SMOKE, M83	Α		-	-	-	-	-	-	-	-	0.000	-	-	0.250	-	-	-	-	-	0.250	
(GG09) GRENADE, HAND NON-LETHAL	Α		-	-	-	-	-	0.750	-	-	0.000	-	-	-	-	-	-	-	-	-	
(KM02) PEPPER SPRAY, POCKET	Α		-	-	-	-	-	-	-	-	0.000	-	-	-	-	-	-	-	-	-	
(L594) SIMULATOR, GROUND BURST M115A2	A		-	-	-	-	-	-	-	-	0.000	-	-	-	-	-	-	-	-	-	
(L601) SIMULATOR, HAND GRENADE M116A1	А		-	-	-	-	-	0.250	-	-	-	-	-	0.370	-	-	-	-	-	0.37	
SIMULATOR BOOBY TRAP M117	Α		-	-	-	-	-	-	-	-	0.000	-	-	-	-	-	-	-	-	-	
(GG36) GRENADE, MK20 FLASH NONLETHAL	А		-	-	-	-	-	0.421	-	-	0.000	-	-	-	-	-	-	-	-	-	
(GG44) Flash Bang Grenade Fuze	Α		-	-	-	-	-	-	-	-	-	-	-	0.700	-	-	-	-	-	0.70	
(GG45) Flash Bang Grenade Body	Α		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

LI 355990 - Items Less Than \$5,000,000 Air Force UNCLASSIFIED
Page 3 of 4

P-1 Line #13

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Air Force

Appropriation / Budget Activity / Budget Sub Activity:
3011F / 01 / 15

Date: April 2021

Aggregated Items Title:
355990 / Items Less Than \$5,000,000

Items Less Than \$5,000,000

											,	•						, , -		
			Р	rior Year	s		FY 2021			FY 2022		FY	/ 2023 Bas	se	F	/ 2023 OC	ю	F	7 2023 To	tal
Title [DODIC]	ID CD	MDAP/ MAIS Code	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
(LA51) SIMULATOR, SMALL ARMS FIRE	А		-	-	-	-	-	-	-	-	0.000	-	-	-	-	-	-	-	-	-
(LA52) SIMULATOR, SMALL ARMS FIRE	А		-	-	-	-	-	-	-	-	0.000	-	-	-	-	-	-	-	-	-
NUCLEAR TRAINERS	А		-	-	-	-	-	0.633	0.000	687,000	0.687	-	-	0.711	-	-	-	-	-	0.7
ALE 50	Α		-	-	-	-	-	-	-	-	0.000	-	-	-	-	-	-	-	-	-
Subtotal: Uncategorized			-	-	-	-	-	4.753	-	-	9.164	-	-	5.014	-	-	-	-	-	5.01
Total			-	-	-	-	-	4.753	-	-	9.164	-	-	5.014	-	-	-	-	-	5.01

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

Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force Date: April 2021

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F: Procurement of Ammunition, Air Force / BA 01: Ammunition / BSA 16: Flares 356010 / Expendable Countermeasures

ID Code (A=Service Ready). A Program Elements for Code B Items: N/A Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2023	FY 2023	FY 2023					То	
Resource Summary	Years	FY 2021	FY 2022	Base	oco	Total	FY 2024	FY 2025	FY 2026	FY 2027	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	61.259	85.934	120.548	-	120.548	79.250	80.797	82.203	83.664	-	593.655
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	61.259	85.934	120.548	-	120.548	79.250	80.797	82.203	83.664	-	593.655
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	61.259	85.934	120.548	-	120.548	79.250	80.797	82.203	83.664	-	593.655
(The following	Resource Sum	mary rows are fo	r informational p	urposes only. Th	e corresponding	g budget request	s are documente	ed elsewhere.)	•			
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-

#### **Description:**

- FY2021 funding totals include 21.171M appropriated for Overseas Contingency Operations.
- FY2022 funding request included \$5.406M requested for Over-The-Horizon and/or Enduring Requirements.
- FY2022 amounts reflect \$9.363M in reductions in the FY22 Appropriation Act.

NOTE: Impulse Carts were justified in WSC 352010 in FY22 and prior and are not a new start. They were transferred to Flares/XCM to better align with their purpose/use.

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

- -(L410) M206 Flare is an infrared countermeasures flare used by A-10, F-16, C-17, C-130, and other aircraft against heat seeking missiles. This item is procured through the Single Manager for Conventional Ammunition (SMCA)/Army. The M206 is being replaced by the MJU-61 in FY24.
- -(L461) MJU-10 flare, which has been used primarily by the F-15 aircraft against heat seeking missiles, was partially replaced in FY18 by the MJU-53/B and will be completely replaced in FY20. The MJU-53/B is procured by the USAF.
- -(L462) MJU-23 Infrared Countermeasure Flare used on the B-1B aircraft against heat seeking missiles. The MJU-23 flare includes a specially designed high ejection cartridge (BBU-46) that propels the burning flare pellet upward with sufficient velocity to clear the aircraft during high speed, low level flight. Currently there is no planned procurement thru the FYDP for the MU-23.
- -(L463) MJU-7 IR Flare is an infrared countermeasures flare applicable to the A-10, F-15, F-16, F-22 and other aircraft. It creates an infrared signature and acts as a decoy against heat seeking missiles. Will be replaced by MJU-53 in 2020. The Air Force transitioned in FY18 to MJU-53 for wartime and other operational uses; MJU-7 is currently used only for training. This item is procured through the Single Manager for Conventional Ammunition (SMCA)/Army.
- -(L225) Red/Red star M37A2 Signal.

UNCLASSIFIED
Page 1 of 18

Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force

Date: April 2021

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F: Procurement of Ammunition, Air Force / BA 01: Ammunition / BSA 16: Flares | 356010 / Expendable Countermeasures

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

- -(LA21) MJU-53/B Flare is a magnesium base IR countermeasure. It consists of an aluminum case, crimped and sealed plastic end cap, rubber spacer, plastic piston, safe and ignition device, flare pellet and sealed cartridge cup. It is dispensed and ignited in flight by a BBU-36 impulse cartridge cup. Used on C-17, C-5 aircraft. This item is procured through USAF. The MJU-53 will be replaced by the MJU-75 in FY24.
- -(LA36) MJU-62 Flare is a multi-spectral countermeasure designed to be used as part of a flare cocktail pattern to confuse advanced infrared threat missiles. Used primarily on the C-17 and C-5 aircraft which require a 1 inch by 2 inch by 8 inch flare size to accommodate desired cocktail flare mixes. MJU-62 is being evaluated for use on other types of aircraft such as F-16, A-10 and HH-60. This item is procured through USAF.
- -(LA60) MK-124 is a hand-held devise carried by personnel in life vests, flight suit pockets, or life raft survival kits used to identify the location of personnel during rescue and recovery missions. It consists of an aluminum case approximately 5.375 inches long, 1.625 inches in diameter and 8 oz. in weight with a protective rubber cap on each end.
- -(LA61) MJU-66 decoy Countermeasure Flare is an improved version of the MJU-64 providing increased decoy effectiveness and protection for the A-10, C-130 aircraft as well as HH-53 and HH-60 helicopters and is being evaluated for other aircraft. It is a one-piece aluminum case containing a payload of advanced special material elements, loaded into a multiple jettison unit magazine installed on a countermeasure dispenser. When deployed into the air stream, the special material reacts to emit an infrared signal to decoy infrared seeking missiles. This item is procured through Navy PMA-272.
- -(LA66) MJU-61 is an infrared countermeasure flare used by F-35 aircraft against heat seeking missiles. The MJU-61 will replace the M206 in FY24 and will be used on multiple aircraft. This item is procured through the Navy PMA-272.
- -(LA67) MJU-71 IR Flare is a magnesium based thrusted flare used in a cocktail mix of flares on aircraft to improve the effectiveness of the countermeasures against heat-seeking missile threats. The 1x1x8 inch size provides better protection of the aircraft and flight crew. Other versions of thrusted flares are larger and use more space in the flare dispensers, severely limiting the number of ejection events. Initially approved for use on the C-130, A-10 and F-16 aircraft with on-going tests for use on other platforms. This item is procured through the Navy. MJU-71 will be replaced by the MJU-76.
- -(LA68) MJU-68 Flare is a magnesium based countermeasure and was developed specifically for and only used on the F-35/JSF aircraft to provide protection from advanced infrared threat missiles. This item is used for combat only. This item is procured through Navy PMA-272.
- -(LA76) MJU-73 is a spectral flare that is used in a cocktail mix of 1 for 1 with the M219 flare to increase protection against heat-seeking missile threats. This 1x1x8 inch sized flare is primarily used on the HH-60, and is expected to be qualified on several fixed-wing aircraft in the near future. This item is procured through the US Air Force.
- -(LA78) XM219 is a bundled flare that is used in a cocktail mix of 1 for 1 with the M219 flare to increase protection against heat-seeking missile threats. This 1x1x8 inch sized flare provides a unique dispensing pattern and is primarily used on the HH-60. This item is procured by the US Army/SOCOM.
- -(LA84) MJU-52A/B Decoy is an infrared countermeasure decoy used by F-15 aircraft against heat seeking missiles. This item is procured through USAF and is sole source to Alloy Surfaces. It is an unique form factor mechanically dispensed from a BOL dispenser.
- -(LA85) MJU-75 Flare is a magnesium base IR countermeasure. It consists of an aluminum case, crimped and sealed plastic end cap, rubber spacer, plastic piston, safe and ignition device, flare pellet and sealed cartridge cup. It is dispensed and ignited in flight by a BBU-35 impulse cartridge. Used on C-17, C-5, and being evaluated for future use on other aircraft such as A-10 and F-16. The MJU-75 will replace the MJU-53, which is also replacing the MJU-10 and MJU-7. This item is procured through USAF.
- -(LA88) MJU-76 Flare is a thrusted magnesium base IR countermeasure. It consists of a 1x1 aluminum case, crimped and sealed plastic end cap, compression pad, safe and ignition device with sealing O-ring, finned aluminum flight body containing the flare grain with a molded PEEK nozzle and a weighted nose. The case uses a sealed cartridge cup and the flare is dispensed and ignited in flight by a BBU-35 or CCU-145 impulse cartridge. Used on C-17, C-130, and being evaluated for future use on other aircraft such as A-10, F-16, and F-35. MJU-76 will replace the MJU-71.

UNCLASSIFIED
Page 2 of 18

Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force Date: April 2021

# Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F: Procurement of Ammunition, Air Force / BA 01: Ammunition / BSA 16: Flares 356010 / Expendable Countermeasures

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

-(L580) MK-58 is a marine location marker consisting of an aluminum body containing two pyrotechnic candles of a red phosphorus composition. The ignition end of the marker has three holes, two for smoke and flame emission and one for water to enter the MK72 Mod 1 seawater-activated battery. Adhesive foil discs hermetically seal the two emission holes. A reinforced adhesive foil strip with a rectangular pull ring hermetically seals the battery. The adhesive foil seals are protected during handling and shipping by a replaceable polyethylene protective cover. MK-58 is procured through Navy Crane.

- -(LY12) ALA-17C is an infrared countermeasure used by B-52 aircraft against heat seeking missiles. This item is procured through the US Air Force Global Strike Command and is currently upgrading to the ALE-47 dispenser system which may eliminate the ALA-17 and provide the ability to use common flares.
- -(LA70) Missile Simulator is a self-consuming ground launched missile simulator used during pilot training. The LA70 reaches an altitude of approximately 500 feet over ground level.
- -Items Less Than Five Million Dollars: All items have an annual procurement of less than 5,000,000 and are Code A.

#### IMPULSE CARTRIDGES:

- -BBU-35 Impulse Cartridge (MG62): Deploys countermeasure chaff and ignites flares from the aircraft dispenser for multiple aircraft. Applicable to the M206, MJU-61, MJU-64, MJU-71, MJU-73, MJU-75, etc. countermeasure flares and RR170 and RR188 chaff.
- -BBU-36 Impulse Cartridge (MG11): Deploys countermeasure flare on multiple aircraft to protect aircraft from IR weapons. Flare applications include: MJU-7, MJU-10, MJU-40, MJU-53 AND MJU-62.
- -BBU-46 Impulse Cartridge (MT40): Deploys a MJU-23 countermeasure flare on the B-1.
- -BBU-48 Impulse Cartridge (SS27): Deploys countermeasure chaff on multiple aircraft to protect aircraft from radar and radar guided weapons. Chaff applications include: RR-180 and RR-196.
- -BBU-59 Impulse Cartridge (WD01): Deploys a MJU-39 countermeasure flare on the F-22.
- -BBU-63 Impulse Cartridge (SS44): Bomb ejection cartridge used with the BRU-44 bomb rack on the B-2.
- -ARD 446 Impulse Cartridge (WB33): Weapon and store release cartridge.
- -ARD 863 Impulse Cartridge (M189): Weapon and store release cartridge.
- -RR-170 Chaff (LY07): RF countermeasure; dispensed by BBU-35
- -RR-180 Chaff (SY16): RF countermeasure; dispensed by BBU-48
- -RR-188 Chaff (3W37): RF countermeasure; dispensed by BBU-35
- -RR-196 Chaff (CY94): RF countermeasure; dispensed by BBU-48
- -RR-196(T-1) Chaff (NY02): RF countermeasure; dispensed by BBU-48
- -RR-198/AL: F-35 operational chaff round dispensed by CCU-145. Procurement will be through a Navy managed contract vehicle.
- -RR-199: F-35 training chaff round dispensed by CCU-145. Procurement will be through a Navy managed contract vehicle.

Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force

Date: April 2021

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F: Procurement of Ammunition, Air Force / BA 01: Ammunition / BSA 16: Flares 356010 / Expendable Countermeasures

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

- -CCU-106: Government-owned weapon and stores release cartridge. This cartridge will replace the proprietary ARD 446 cartridge over the next several years. Procurement will be through an Air Force managed contract vehicle.
- -CCU-107 (MT95): Government-owned weapon and stores release cartridge. This cartridge is currently used on the KC-46 and will replace the proprietary ARD 863 cartridge over the next several years. Procurement will be through a Navy managed contract vehicle.
- -CCU-136 (WA83): Deploys towed decoy; used with AN/ALE-70(V)1
- -CCU-145 (WB24): Deploys countermeasure flares from F-35. Applicable to MJU-68 and MJU-71
- -CCU-41 (MF60): Deploys towed decoy for F-15 and B-1; used with ALE-50
- -CCU-167 (DWGY): Cutter cart for steel hoist cables on helicopters and various towed targets on multiple aircraft
- -MK2 (M190): Weapons and pylons release cartridge; tanks and special equipment; cutter cartridge.
- -MK 107 MOD 1 (M943): Used on rotary launcher for B-1, MXU-611 Fuel Tank Release mechanism and LAU-93A Phoenix Missile Launcher
- -M21 (M500): Parachute reefing line cutter on C-17

These funds may also procure inventoried items which may not be procured on an annual basis and could be required on an emerging basis. Variations to cover critical shortfalls to inventory objectives as well as actual and planned expenditures will be addressed during execution year.

Funding may be used to address Diminishing Manufacturing Sources (DMS) issues.

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

This program element may include necessary test or evaluation equipment required to assess Advanced Infrared Countermeasure weapons system capabilities.

Funding for this exhibit contained in PEs: 0208030F and 0207599F.

Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force Date: April 2021

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F: Procurement of Ammunition, Air Force / BA 01: Ammunition / BSA 16: Flares 356010 / Expendable Countermeasures

ID Code (A=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 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-40a	(L410) M206 FLARE				- / -	- /7.250	- / -	- / -	- / -	- / -
P-40a	(L580) MK-58				- / -	- / -	- / 0.750	- / -	- / -	- / -
P-40a	(LA21) MJU-53/B IR CM FLARE				- / -	- / 1.760	- / -	- / -	- / -	- / -
P-40a	(LA36) MJU-62/B IR CM FLARE				- / -	- / 6.218	- /1.500	- /1.000	- / -	- / 1.000
P-40a	(LA61) MJU-66 CM ACFT FLARE				- / -	- /2.880	- /4.750	- /3.700	- / -	- / 3.700
P-40a	(LA66) MJU-61 IR CM FLARE				- / -	- /7.500	- /27.000	- /8.650	- / -	- / 8.650
P-40a	(LA76) MJU-73 MTVR FLARE				- / -	- / 3.936	- / 1.500	- /1.000	- / -	- / 1.000
P-40a	(LA84) MJU-52 BOL/IR FLARE				- / -	- / -	- /1.700	- / 0.500	- / -	- / 0.500
P-40a	(LA85) MJU-75 Flare				- / -	- / 19.965	- / 31.806	- / 33.779	- / -	- / 33.779
P-40a	(LA88) MJU-76 Flare				- / -	- /8.000	- / 14.000	- / 10.000	- / -	- / 10.000
P-40a	Flares (Items less than 5 Million)				- / -	- / 3.750	- /2.928	- /2.419	- / -	- / 2.419
P-40a	IMPULSE CARTRIDGES				- / -	- / -	- / -	- / 23.400	- / -	- / 23.400
P-40	Total Gross/Weapon System Cost				- 1 -	- / 61.259	- / 85.934	- / 120.548	- 1 -	- / 120.548

<sup>\*</sup>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:

FY2023 funds purchase countermeasures and flares used by A-10, AC-130, F-15, F-16, C-5, C-17 and F-35/JSF aircraft, HH-53 and HH-60 helicopters and other aircraft to protect the warfighter against advanced air-to-air and ground-to-air infrared and heat seeking attack weapon systems and missiles. FY2023 funding totals include 0.000M requested for Direct War and/or Enduring Requirements.

### IMPULSE CARTRIDGES:

- BBU-35A/B IMPULSE CARTRIDGE (MG62): This procurement is critical to replenish WRM stockpiles/requirements. Approximately 1.5M assets are expended annually and 52K assets in the current stockpile are projected to expire by the end of FY22 if unused. Current stockpile inventory is 62% of the total inventory objective requirement. Air Force procures BBU-35 using a 5 year Indefinite Delivery Indefinite Quality (IDIQ) contract, which was awarded in June 2016. The most recent delivery order was awarded 16 September 2020 for a total of 2.2M cartridges for 4.9M. Items were delivered by 16 September 2021. The next 5 year IDIQ is projected to award by April 2022.

Impulse Cartridges are not an FY23 new start and were justified in WSC 352010 in FY22 and prior. They were transferred to Flares/XCM to better align with their purpose/use.

- BBU-36A/B IMPULSE CARTRIDGE (MG11): This procurement is critical to replenish WRM stockpiles/requirements. Approximately 270K assets are expended annually and no assets in the current stockpile are projected to expire by the end of FY22 if unused. Current stockpile inventory is 50% of the total inventory objective and this item is currently under a HAF Call. Air Force procures BBU-36 using a 5 year IDIQ contract, which was awarded in July 2016. The most recent delivery order was awarded 20 Dec 2020 for a total of 512K cartridges for 2M. Items are to be delivered by September 2022. The next 5 year IDIQ is projected to award by April 2022.
- BBU-48A/B IMPULSE CARTRIDGE (SS27): This procurement is critical to replenish WRM stockpiles/requirements. Approximately 50K assets are expended annually and 528K assets in the current stockpile are projected to expire by the end of FY22 if unused. Current stockpile inventory is 36% of the total inventory objective requirement. Air Force procures BBU-48 using a 5 year Indefinite Delivery Indefinite Quality (IDIQ) contract, which was awarded in December 2016. The most recent delivery order was awarded 23 April 2019 for a total of 483K cartridges for 4M. Items are to be delivered by June 2022. The next 5 year IDIQ is projected to award by February 2023.

**UNCLASSIFIED** 

Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force

Date: April 2021

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F: Procurement of Ammunition, Air Force / BA 01: Ammunition / BSA 16: Flares 356010 / Expendable Countermeasures

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

- BBU-59/B IMPULSE CARTRIDGE (WD01): NO PROCUREMENT ACTION IS PENDING
- BBU-63/B IMPULSE CARTRIDGE (SS44): This procurement is critical to replenish WRM stockpiles/requirements. Approximately 500 assets are expended annually and no assets in the current stockpile are projected to expire by the end of FY22 if unused. Current stockpile inventory is 100% of the total inventory objective requirement. The most recent delivery order was awarded 1 September 2021 for a total of 2,336 units for 727K and expect to deliver by January 2024. This cartridge is specific to the B-2 aircraft, and complex due to complexity of the design, deliveries are expected within four years.
- ARD-446-1B IMPULSE CARTRIDGE (WB33): This procurement is critical to replenish WRM stockpiles/requirements. Approximately 45K assets are expended annually and no assets in the current stockpile are projected to expire by the end of FY22 if unused. Current stockpile inventory is 199% of the total inventory objective requirement. Air Force procures ARD-446 using a 3 year IDIQ contract, which was awarded in April 2021. The most recent delivery order was awarded 18 August 2021 for a total of 112K cartridges for 16M. Items are to be delivered by September 2023. Procurements are to support Aircrew stateside training requirements which are currently at risk.
- ARD-863-1A1W IMPULSE CARTRIDGE (M189): This procurement is critical to replenish WRM stockpiles/requirements. Approximately 82K assets are expended annually and no assets in the current stockpile are projected to expire by the end of FY22 if unused. Current stockpile inventory is 183% of the total inventory objective requirement. Air Force procures ARD-863 using a 3 year IDIQ contract, which was awarded in April 2021 The most recent delivery order was awarded 18 August 2021 for a total of 91K cartridges for 500K Items are to be delivered by November 2024.
- CCU-41/B IMPULSE CARTRIDGE (MF60): This procurement is to replenish WRM stockpiles/requirements. Approximately 84 assets are expended annually and 87K assets in the current stockpile are projected to expire by the end of FY22 if unused. Current stockpile inventory is 107% of the total inventory objective requirement. Air Force procures CCU-41 through a Navy IDIQ contract, which expires November 2025. The most recent delivery order was awarded 05 November 2020 for a total of 72K cartridges that were delivered by 28 February 2022. The unit cost was 8.32/each and total spent was 600K
- CCU-107 IMPULSE CARTRIDGE (MT95): This is a procurement of a new item to build the WRM stockpile. Air Force will procure CCU-107 through a Navy contract.
- CCU-145/A IMPULSE CARTRIDGE (WB24): This procurement is to replenish WRM stockpiles/requirements. Approximately 67K assets are expended annually and 321 assets in the current stockpile are projected to expire by the end of FY22 if unused. Current stockpile inventory is 171% of the total inventory objective requirement. Air Force procures CCU-145 through a Navy IDIQ contract. The most recent delivery order was awarded 24 February 2020 for a total of 400K cartridges to be delivered by 28 February 2022. The unit cost was 4.84/each and total spent was 2M.

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.

UNCLASSIFIED

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Air Force Date: April 2021 Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Aggregated Items Title: 3011F / 01 / 16 (L410) M206 FLARE 356010 / Expendable Countermeasures

							1								\ -	,		—		
			P	rior Year	s		FY 2021			FY 2022		FY	/ 2023 Ba	se	FY	/ 2023 OC	ю	FY	/ 2023 To	tal
Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Unit Cost	Qty (Each)	Total Cost (\$ M)															
Uncategorized																				
M206 FLARE - L410	Α		-	-	-	0.000	179,144	7.250	-	-	-	-	-	-	-	-	-	-	-	-
PRODUCTION ENGINEERING	Α		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
QUALITY ASSURANCE	А		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Uncategorized			-	-	-	-	-	7.250	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	7.250	-	-	-	-	-	-	-	-	-	-	-	-

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

LI 356010 - Expendable Countermeasures

Air Force

The Single Manager for Conventional Ammunition (SMCA), Department of Army provides this cost analysis with estimates obtained from industry based on quantity range matrices and forecasted cost of materials.

P-1 Line #14

Exhibit P-40a, Budget Item Justification For Aggregated Ite	Date: April 2021	
	P-1 Line Item Number / Title: 356010 / Expendable Countermeasures	Aggregated Items Title: (L580) MK-58

									•						` `					
			Р	rior Year	s		FY 2021			FY 2022		FY	2023 Bas	se	FY	Y 2023 OC	o	FY	2023 To	tal
Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)
Uncategorized																				
MK-58 (L580)	Α		-	-	-	-	-	-	0.000	1,890	0.750	-	-	-	-	-	-	-	-	-
Subtotal: Uncategorized			-	-	-	-	-	-	-	-	0.750	-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	-	-	-	0.750	-	-	-	-	-	-	-	-	-

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Air ForceDate: April 2021Appropriation / Budget Activity / Budget Sub Activity:P-1 Line Item Number / Title:Aggregated Items Title:3011F / 01 / 16356010 / Expendable Countermeasures(LA21) MJU-53/B IR CM FLARE

00 1 11 7 0 1 7 10							'		_xpoa.	ub.0 00.		uou. 00			\-	., ,	00,5			
			P	rior Year	s		FY 2021			FY 2022		FY	′ 2023 Ba	se	F	7 2023 OC	0	FY	/ 2023 To	tal
Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Unit Cost	Qty (Each)	Total Cost (\$ M)															
UNCATEGORIZED																				
(LA21) MJU-53/ B INFRARED COUNTERMEASURE FLARE	A		-	-	-	0.000	14,768	1.760	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: UNCATEGORIZ	ED		-	-	-	-	-	1.760	-	-	-	-	-	-	-	-	-	-	-	-
Total			-	-	-	-	-	1.760	-	-	-	-	-	-	-	-	-	-	-	-

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

#### Remarks

The MJU-53 Infrared Countermeasure Flare is procured by the Munitions Division, AFMC. Unit prices are estimates from industry.

Exhibit P-40a, Budget Item Justification For Aggregated Ite	ems: PB 2023 Air Force	Date: April 2021
Appropriation / Budget Activity / Budget Sub Activity:		Aggregated Items Title:
3011F / 01 / 16	356010 / Expendable Countermeasures	(LA36) MJU-62/B IR CM FLARE

• • • • • • • • • • • • • • • • • • •															\ -					
			P	rior Year	s		FY 2021			FY 2022		FY	2023 Bas	se	FY	/ 2023 OC	o	FY	/ 2023 Tot	al
Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)
Uncategorized					,					,		,	·							
(LA36) MJU-62 IR CM FLARE	А		-	-	-	0.000	24,383	6.218	0.000	5,882	1.500	0.000	2,311	1.000	-	-	-	0.000	2,311	1.000
Subtotal: Uncategorized			-	-	-	-	-	6.218	-	-	1.500	-	-	1.000	-	-	-	-	-	1.000
Total			-	-	-	-	-	6.218	-	-	1.500	-	-	1.000	-	-	-	-	-	1.000
11 1 0 1 1 T 1		· · · —	T :: D																	

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

#### Remarks

The MJU-62 Infrared Countermeasure Flare is procured by the Munitions Division, AFMC. Unit prices are estimates from industry.

Exhibit P-40a, Budget Item Justification For Aggregated Ite	ms: PB 2023 Air Force	Date: April 2021
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Aggregated Items Title:
3011F / 01 / 16	356010 / Expendable Countermeasures	(LA61) MJU-66 CM ACFT FLARE

							1								\	,				
			Р	rior Year	s		FY 2021			FY 2022		FY	2023 Bas	e	FY	/ 2023 OC	o	FY	' 2023 Tot	al
Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)									
Uncategorized			*																	
(LA61) MJU-66 Decoy ACFT Flare	А		-	-	-	0.000	25,880	2.880	0.000	42,262	4.750	0.000	31,645	3.700	-	-	-	0.000	31,645	3.700
Subtotal: Uncategorized			-	-	-	-	-	2.880	-	-	4.750	-	-	3.700	-	-	-	-	-	3.700
Total			-	-	-	-	-	2.880	-	-	4.750	-	-	3.700	-	-	-	-	-	3.700

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

#### Remarks

The MJU-66 Decoy is procured through Navy PMA-272. The cost analysis is provided to the Navy with estimates obtained from industry based on quantity range matrices and forecasted cost of materials.

Exhibit P-40a, Budget Item Justification For Aggregated Ite	ms: PB 2023 Air Force	Date: April 2021
Appropriation / Budget Activity / Budget Sub Activity: 3011F / 01 / 16	P-1 Line Item Number / Title: 356010 / Expendable Countermeasures	Aggregated Items Title: (LA66) MJU-61 IR CM FLARE

			F	Prior Year	s		FY 2021			FY 2022		FY	2023 Bas	se	FY	2023 OC	:0	FY	2023 Tot	al
Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Unit Cost	Qty (Each)	Total Cost	Unit Cost	<b>Qty</b> (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost (\$ M)
Uncategorized	11		(0 111)	(2001)	(\$)	(\$)	(2001)	(\$)	(\$)	(200.1)	(0)	(\$)	(2001)	(\$ 11.7	(\$)	(2001.)	(\$)	(\$)	(20011)	(0)
(LA66) MJU-61 IR CM Flare	А		-	-	-	0.000	106,188	7.500	0.000	378,493	27.000	0.000	110,855	8.650	-	-	-	0.000	110,855	8.650
Subtotal: Uncategorized			-	-	-	-	-	7.500	-	-	27.000	-	-	8.650	-	-	-	-	-	8.650
Total			-	-	-	-	-	7.500	-	-	27.000	-	-	8.650	-	-	-	-	-	8.650

Exhibit P-40a, Budget Item Justification For Aggregated Ite	xhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Air Force									
Appropriation / Budget Activity / Budget Sub Activity: 3011F / 01 / 16	P-1 Line Item Number / Title: 356010 / Expendable Countermeasures	Aggregated Items Title: (LA76) MJU-73 MTVR FLARE								

									<u>'</u>						١,	,				
			P	rior Year	s		FY 2021			FY 2022		FY	′ 2023 Bas	se	FY	/ 2023 OC	0	FY	2023 Tot	al
Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)									
Uncategorized			,		,	,				,			,				,			
(LA76) MJU-73 MTVR FLARE	А		-	-	-	0.001	5,550	3.936	0.001	2,115	1.500	0.001	1,435	1.000	-	-	-	0.001	1,435	1.000
Subtotal: Uncategorized			-	-	-	-	-	3.936	-	-	1.500	-	-	1.000	-	-	-	-	-	1.000
Total			-	-	-	-	-	3.936	-	-	1.500	-	-	1.000	-	-	-	-	-	1.000

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Air ForceDate: April 2021Appropriation / Budget Activity / Budget Sub Activity:P-1 Line Item Number / Title:Aggregated Items Title:3011F / 01 / 16356010 / Expendable Countermeasures(LA84) MJU-52 BOL/IR FLARE

									'						١,	,				
			Р	rior Year	s		FY 2021			FY 2022		FY	2023 Bas	se	FY	/ 2023 OC	0	FY	′ 2023 Tot	al
Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)
Uncategorized		·																		
MJU-52 BOL/IR FLARE	А		-	-	-	-	-	-	0.001	2,083	1.700	0.000	9,773	0.500	-	-	-	0.000	9,773	0.500
Subtotal: Uncategorized			-	-	-	-	-	-	-	-	1.700	-	-	0.500	-	-	-	-	-	0.500
Total			-	-	-	-	-	-	-	-	1.700	-	-	0.500	-	-	-	-	-	0.500

Exhibit P-40a, Budget Item Justification For Aggregated Ite	ems: PB 2023 Air Force	Date: April 2021
Appropriation / Budget Activity / Budget Sub Activity: 3011F / 01 / 16	P-1 Line Item Number / Title: 356010 / Expendable Countermeasures	Aggregated Items Title: (LA85) MJU-75 Flare

									•						'	,				
			F	rior Year	'S		FY 2021			FY 2022		FY	2023 Bas	se	FY	2023 OC	:O	FY	2023 Tota	al
Item Number / Title [DODIC]	ID CD		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)
Uncategorized																				
MJU-75 (LA85)	Α		-	-	-	0.002	12,624	19.965	0.002	15,903	31.806	0.000	232,941	33.779	-	-	-	0.000	232,941	33.779
Subtotal: Uncategorized			-	-	-	-	-	19.965	-	-	31.806	-	-	33.779	-	-	-	-	-	33.779
Total			-	-	-	-	-	19.965	-	-	31.806	-	-	33.779	-	-	-	-	-	33.779
Motor Cubtotale or To	4ala :	- thia [-\	chihit D 40a	man, mat ha				J:												

Exhibit P-40a, Budget Item Justification For Aggregated Ite	ems: PB 2023 Air Force	Date: April 2021
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Aggregated Items Title:
3011F / 01 / 16	356010 / Expendable Countermeasures	(LA88) MJU-76 Flare

Item Number / Title [DODIC]   ID   MAIS   Code																					
Item Number /   ID   MAIS   Unit Cost   Code   Co	_			Р	rior Year	's		FY 2021			FY 2022		FY	′ 2023 Bas	se	FY	/ 2023 OC	:0	FY	2023 Tot	al
MJU-76 (LA88) A 0.001 9,901 8.000 0.001 17,155 14.000 0.000 43,253 10.000 0.000 43,253 10		ID	MAIS			Cost			Cost			Cost			Cost			Cost			Total Cost (\$ M)
	Uncategorized																				
Subtotal: Uncategorized 8.000 14.000 10.000 10.000	MJU-76 (LA88)	Α		-	-	-	0.001	9,901	8.000	0.001	17,155	14.000	0.000	43,253	10.000	-	-	-	0.000	43,253	10.000
	Subtotal: Uncategorized			-	-	-	-	-	8.000	-	-	14.000	-	-	10.000	-	-	-	-	-	10.000
Total 8.000 14.000 10.000 10.000				-	-	-		-	8.000	-	-	14.000	-	-	10.000	-	-	-	-	-	10.000

Exhibit P-40a, Budget Item Justification For Aggregated Ite	ems: PB 2023 Air Force	Date: April 2021
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Aggregated Items Title:
3011F / 01 / 16	356010 / Expendable Countermeasures	Flares (Items less than 5 Million)

00111701710										ub.0 000		u0u.00			١٠.	00 (			•••••	
			F	Prior Year	's		FY 2021			FY 2022		FY	′ 2023 Bas	se	FY	Y 2023 OC	ю	FY	′ 2023 Tot	al
Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	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)
Uncategorized																				
(LA70) Missile Simulator	Α		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Items Less than 5M	Α		-	-	-	0.001	3,750	3.750	0.001	2,928	2.928	0.001	2,419	2.419	-	-	-	0.001	2,419	2.419
Subtotal: Uncategorized			-	-	-	-	-	3.750	-	-	2.928	-	-	2.419	-	-	-	-	-	2.419
Total			-	-	-	-	-	3.750	-	-	2.928	-	-	2.419	-	-	-	-	-	2.419
Note: Subtetals or Tet	alc ir	thic E	hihit D 10a	may not be	Ovact or ci	im exactly c	luo to rour	dina												

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Air Force

Date: April 2021

Appropriation / Budget Activity / Budget Sub Activity: 3011F / 01 / 16

P-1 Line Item Number / Title:

356010 / Expendable Countermeasures

Aggregated Items Title: IMPULSE CARTRIDGES

30111 / 01 / 16							3	300107	Expenda	able Cot	лпеппе	asures			IIV	IFULSE	CART	NIDGES		
			P	rior Year	's		FY 2021			FY 2022		FY	2023 Bas	se	FY	2023 OC	0	FY	' 2023 Tot	tal
Item Number / Title [DODIC]	ID CD	MDAP/ MAIS Code	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
mpulse Cartridges			· · · · · ·						· · · · · ·	,		'	,		'			'		
(MT40) BBU-46	Α		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(WB33) ARD-446	Α		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(3W37) CHAFF, RR-188	Α		-	-	-	-	-	-	-	-	-	0.000	635,273	3.000	-	-	-	0.000	635,273	3.0
(JN31) CU-168 SQUIB	Α		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(M189) ARD-863	Α		-	-	-	-	-	-	-	-	-	0.000	78,291	0.500	-	-	-	0.000	78,291	0.5
(M943) MK107 IMPULSE CARTRIDGE	А		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(MT95) CCU-107	Α		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(YWAP) RR-198	Α		-	-	-	-	-	-	-	-	-	0.000	6,479	1.511	-	-	-	0.000	6,479	1.5
(YWAQ) RR-199	Α		-	-	-	-	-	-	-	-	-	0.000	2,940	0.156	-	-	-	0.000	2,940	0.1
(MG11) CTG, IMPULSE, BBU-36/B	Α		-	-	-	-	-	-	-	-	-	0.000	40,487	1.700	-	-	-	0.000	40,487	1.7
(MG62) BBU-35/ B IMPULSE CARTRIDGE	Α		-	-	-	-	-	-	-	-	-	0.000	961,169	3.000	-	-	-	0.000	961,169	3.0
(MT40) BBU-46 SQUIB, ELECTRIC	А		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(NY02) CHAFF, RR-196(T-1)AL	А		-	-	-	-	-	-	-	-	-	0.000	63,722	2.500	-	-	-	0.000	63,722	2.5
(SS-27) BBU-48/ B IMPULSE CARTRIDGE	Α		-	-	-	-	-	-	-	-	-	0.000	361,224	4.600	-	-	-	0.000	361,224	4.6
(SS44) BBU63/ B IMPULSE CARTRIDGE	Α		-	-	-	-	-	-	-	-	-	0.001	1,571	2.000	-	-	-	0.001	1,571	2.0
(LY07) RR-170 CHAFF CARTRIDGE	Α		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(SY16) RR-180 CHAFF CARTRIDGE	Α		-	-	-	-	-	-	-	-	-	0.000	161,495	2.000	-	-	-	0.000	161,495	2.0
(MF60) CCU-41	Α		-	-	-	-	-	-	-	-	-	0.000	31,411	0.300	-	-	-	0.000	31,411	0.3
(M190) MK-2	Α		-	-	-	-	-	-	-	-	-	0.001	575	0.500	-	-	-	0.001	575	0.5
(WB24) CCU-145	Α		-	-	-	-	-	-	-	-	-	0.000	283,263	1.500	-	-	-	0.000	283,263	1.5
Items less than 5 M	Α		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
(DWGY) CCU-167/B	Α		-	-	-	-	-	-	-	-	-	0.002	87	0.133	-	-	-	0.002	87	0.1
ubtotal: Impulse Cartrid	iges		-	-	-	-	-	-	-	-	-	-	-	23.400	-	-	-	-	-	23.4
otal			-	-	-	-	-	-	-	-	-	-	-	23.400	- 1	-	-	- 1	-	23.4

Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force Date: April 2021

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F: Procurement of Ammunition, Air Force / BA 01: Ammunition / BSA 18: Fuzes 356120 / FUZES

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

1 11 1 1 1 1 1												
	Prior			FY 2023	FY 2023	FY 2023					То	
Resource Summary	Years	FY 2021	FY 2022	Base	oco	Total	FY 2024	FY 2025	FY 2026	FY 2027	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	102.918	20.795	121.528	-	121.528	108.824	146.904	149.869	152.938	-	803.776
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	102.918	20.795	121.528	-	121.528	108.824	146.904	149.869	152.938	-	803.776
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	102.918	20.795	121.528	-	121.528	108.824	146.904	149.869	152.938	-	803.776
(The following	Resource Sum	mary rows are fo	or informational p	urposes only. Th	ne corresponding	g budget request	s are documente	ed elsewhere.)			ĺ	
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-

### **Description:**

- FY2021 funding totals include \$91.017M appropriated for Overseas Contingency Operations, which reflects a \$16.838M reduction in the FY21 Appropriation Act.
- FY2022 funding totals include \$5.406M requested for Over-The-Horizon and/or Enduring Requirements. FY22 amounts reflect \$30M in reductions in the FY22 Appropriation Act.
- The FY 2023 funding request was reduced by \$69.509M to account for the availability of prior year execution balances.

Procure advanced fuze/sensor systems and modernization capabilities required by US and Allied warfighters to support the commander's intent. These fuze/sensor systems provide the DoD with reliable and effective weapon safing, arming, sensing, and attack capabilities. Characterize how fuzing impacts the survivability, producibility, and lethality of various weapon systems; including internal pressures, warhead effects, and ignition characteristics.

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

- FMU-152A/B Joint Programmable Fuze (JPF) (EC11) is a multi-function unitary fuze developed and procured for the Joint Direct Attack Munition and other conventional inventory weapons. The FMU-152A/B provides a highly reliable bomb fuze with multiple arm times, instantaneous and multiple short and long delay detonation times, hard target survivability, cockpit programmability, and increased service/shelf life. The JPF is compatible with MK-80 series guided and unguided bombs. It has replaced and/or supplemented the FMU-139A/B and FMU-139C/B, FMU-143, and M904/M905 fuzes, and provides fuzing capability for hard target, general purpose, and guided bombs. The Air Force is the lead service for procurement/sustainment.
- FMU-139D/B is a Navy-led general purpose fuze Engineering Change Proposal (ECP) program to replace the FMU-139C/B and FMU-152A/B in the USN and USAF inventories. This effort is a low cost option that meets both services' requirements for a better buying power business case. The original contract for this effort was competitively awarded by the Navy on 17 September 2015. USAF production buy decision for Lot-2 (36,000 fuzes) was approved in September 2019. Air Force deliveries began in 4QFY21. USAF production buy decision for Lot-3 (20,000 fuzes) was awarded in May 2021 and delivery order award for Lot-4 (20,000 fuzes) is expected in May 2022. The USAF continues to monitor weapon usage rates in the AOR and adjust fuze inventory objectives accordingly. In the case of the FMU-139D/B, lower than anticipated combat expenditures of general purpose fuzes, coupled with a newly established FY28 inventory objective of 100,000 units, drove the decision to reduce annual purchase quantities to 20,000 fuzes. This reduction ensures a gradual build to the desired FY28 inventory objective, while safeguarding the fuze industry base and FMU-139D/B production line. Manufacturing capacity for the FMU-139D/B remains at 50,000 fuzes per year, providing a delta of 30,000 units per year available for USN, FMS, or increased USAF requirements.

 LI 356120 - FUZES
 UNCLASSIFIED

 Air Force
 Page 1 of 5

 P-1 Line #15
 Volume 1 - 93

Exhibit P-40, Budget Line Item Justification: PB 2023	Air Force			Date: April 2021
<b>Appropriation / Budget Activity / Budget Sub Activity</b> 3011F: Procurement of Ammunition, Air Force / BA 01: A		P-1 Line Item Number / Tit 356120 / FUZES	le:	
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Ite	ems: N/A	Other Related Pr	rogram Elements: N/A

Line Item MDAP/MAIS Code: N/A

- DSU-33D/B Proximity Sensor (KY70) is a battery operated, RF, Doppler radar proximity sensor. It is used to provide low altitude proximity function to the bomb fuze. The sensor interfaces with FMU-139 and FMU-152 fuzes. This line item includes existing sensor production, Engineering Change Proposals (ECPs), and product improvement efforts, for example, modifications to eliminate obsolescence. DSU-33D/B will be replaced by Cockpit Selectable Height-of-Burst Sensor (C-HOBS; DSU-43) because of obsolescence issues. Final contract closed 31 Mar 2021 with no future procurements.
- FMU-167 Hard Target Void Sensing Fuze (HTVSF) (EE27), is an advanced system designed to provide fuzing and void sensing functions, enabling a weapon to penetrate and destroy hardened, deeply buried targets protected by multiple layers of soil and/or reinforced concrete. The HTVSF provides for in-flight cockpit programmability, safing and arming, multi-function (time delay and void sensing) and multi-delay arming capabilities. USAF and USN will employ HTVSF in penetrator warheads, contributing to the ability to strike and functionally defeat high value/high payoff targets in order to achieve strategic and operational objectives. HTVSF completed MS-C in May FY 2015 & Low-Rate Initial Production (LRIP) was awarded in July 2015. LRIP II was awarded in September 2016 and Full Rate Production was awarded in September 2017. FRP 2 & 3 awarded in October 2019. Inventory Objective increases may necessitate additional sustainment acquisition. The Air Force is the lead service for procurement/sustainment.
- DSU-43/B Cockpit Selectable Height-of-Burst Sensor (C-HOBS) replaces the current DSU-33D/B proximity sensor. C-HOBS eliminates two obsolescence issues the DSU-33D/B is currently experiencing and will replace the single factory height-of-burst setting with the addition of multiple height-of-burst options selectable via both a manual switch and a cockpit-selectable interface. These selection options allow flexibility during flight to address a wide array of targets. The C-HOBS is intended to optimize the effects of Next Generation Attack Weapons (NGAAWs), and interface with and provide a cockpit-selectable proximity function to general and special purpose weapons. EMD contract awarded March 2019. MS-C action items closure and LRIP award expected 3QFY22.
- Items Less Than Five Million Dollars: Various fuzes, to include inert training items, that have an annual procurement value of less than 5,000,000 and are code A.

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

Funding may be used to address Diminishing Manufacturing Sources (DMS) issues.

Funding for this exhibit contained in PEs: 0208030F and 0207599F.

 LI 356120 - FUZES
 UNCLASSIFIED

 Air Force
 Page 2 of 5

 P-1 Line #15
 Volume 1 - 94

Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force Date: April 2021

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F: Procurement of Ammunition, Air Force / BA 01: Ammunition / BSA 18: Fuzes | 356120 / FUZES

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 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	C-HOBS		Α		- / -	4,500 / 27.000	2,250 / 14.598	10,002 / 60.339	- / -	10,002 / 60.339
P-5	FMU-139D/B		Α		- / -	29,013 / 75.918	2,150 / 6.197	20,000 / 61.189	- / -	20,000 / 61.189
P-40	Total Gross/Weapon System Cost				- 1 -	- / 102.918	- / 20.795	- / 121.528	- 1 -	- / 121.528

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

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

#### Justification:

FY23 funding purchases fuzes and associated items.

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.

 LI 356120 - FUZES
 UNCLASSIFIED

 Air Force
 Page 3 of 5

 P-1 Line #15
 Volume 1 - 95

Exhibit P-5, Cost Analysis: PB 2023 Air Force

Appropriation / Budget Activity / Budget Sub Activity:
3011F / 01 / 18

Date: April 2021

Item Number / Title [DODIC]:
C-HOBS

ID Code (A=Service Ready, B=Not Service Ready): A		ME	DAP/MAIS Code:			
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Procurement Quantity (Units in Each)	-	4,500	2,250	10,002	-	10,002
Gross/Weapon System Cost (\$ in Millions)	-	27.000	14.598	60.339	-	60.339
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	27.000	14.598	60.339	-	60.339
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	27.000	14.598	60.339	-	60.339
(The following Resource Summary rows are for information	onal purposes only. The cor	responding budget requests	s are documented elsewher	e.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Millions)	-	0.006	0.006	0.006	-	0.006

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

	F	Prior Years	S		FY 2021			FY 2022		FY	7 2023 Bas	se	F	7 2023 OC	0	FY 2023 Total		
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Hardware - Hardware End Iter	m Cost Cost																	
Recurring Cost																		
C-HOBS	-	-	-	0.006	4,500	24.810	0.006	2,250	12.648	0.006	10,002	58.778	-	-	-	0.006	10,002	58.778
Subtotal: Recurring Cost	-	-	-	-	-	24.810	-	-	12.648	-	-	58.778	-	-	-	-	-	58.778
Subtotal: Hardware - Hardware End Item Cost Cost	-	-	-	-	-	24.810	-	-	12.648	-	-	58.778	-	-	-	-	-	58.778
Support - Support Cost																		
PSC Contractor Services	-	-	-	-	-	2.040	-	-	1.800	-	-	1.411	-	-	-	-	-	1.411
PSC Other Government Costs	-	-	-	-	-	0.150	-	-	0.150	-	-	0.150	-	-	-	-	-	0.150
Subtotal: Support - Support Cost	-	-	-	-	-	2.190	-	-	1.950	-	-	1.561	-	-	-	-	-	1.561
Gross/Weapon System Cost	-	-	-	0.006	4,500	27.000	0.006	2,250	14.598	0.006	10,002	60.339	-	-	-	0.006	10,002	60.339

### Remarks:

FY22 amount reflects a 25M reduction in the FY22 Appropriation Act.

Milestone C decision action items closure and LRIP award expected 3QFY22.

PSC Contractor Services: Engineering, Professional, and Administrative Support Services (EPASS) and/or other contract support.

PSC Other Government Costs: Travel, Government Purchase Card (GPC) and/or other government costs.

LI 356120 - FUZES Air Force

Exhibit P-5, Cost Analysis: PB 2023 Air Force Date: April 2021 Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Item Number / Title [DODIC]: FMU-139D/B 3011F / 01 / 18 356120 / FUZES ID O - d -

ID Code (A=Service Ready, B=Not Service Ready): A		M	DAP/MAIS Code:			
Resource Summary	Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Procurement Quantity (Units in Each)	-	29,013	2,150	20,000	-	20,000
Gross/Weapon System Cost (\$ in Millions)	-	75.918	6.197	61.189	-	61.189
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	75.918	6.197	61.189	-	61.189
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	75.918	6.197	61.189	-	61.189
(The following Resource Summary rows are for informa	tional purposes only. The co	rresponding budget reques	s are documented elsewher	re.)		*
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Millions)	_	0.003	0.003	0.003	_	0.003

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

	į i	Prior Years	S		FY 2021			FY 2022		FY	' 2023 Bas	e	FY 2023 OCO			F۱	2023 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Hardware - Hardware End Iter	m Cost Cost																	
Recurring Cost																		
FMU-139 D/B Fuzes	-	-	-	0.002	29,013	66.207	0.002	2,150	4.297	0.003	20,000	55.714	-	-	-	0.003	20,000	55.714
Subtotal: Recurring Cost	-	-	-	-	-	66.207	-	-	4.297	-	-	55.714	-	-	-	-	-	55.714
Subtotal: Hardware - Hardware End Item Cost Cost	-	-	-	-	-	66.207	-	-	4.297	-	-	55.714	-	-	-	-	-	55.714
Support - FMU-139D/B, PGM	SPT, Qual Te	st Cost		'	'		'				'		'			'	'	
PSC Contractor Services	-	-	-	-	-	9.561	-	-	1.750	-	-	5.325	-	-	-	-	-	5.325
PSC Other Government Costs	-	-	-	-	-	0.150	-	-	0.150	-	-	0.150	-	-	-	-	-	0.150
Subtotal: Support - FMU-139D/B, PGM SPT, Qual Test Cost	-	-	-	-	-	9.711	-	-	1.900	-	-	5.475	-	-	-	-	-	5.475
Gross/Weapon System Cost	-	-	-	0.003	29,013	75.918	0.003	2,150	6.197	0.003	20,000	61.189	-	-	-	0.003	20,000	61.189

### Remarks:

- FY22 reflects a \$5M reduction in the FY22 Appropriations Act.
- Under the current contract price bands can vary based on USN and FMS purchases. Total max production capacity is 50,000 per year.
- Lot 5 is not currently on contract, but the program office is working a follow-on contract to procure future lots.

PSC Contractor Services: Engineering, Professional, and Administrative Support Services (EPASS) and/or other contract support. PSC Other Government Costs: Travel, Government Purchase Card (GPC) and/or other government costs.

**UNCLASSIFIED** 

Page 5 of 5 P-1 Line #15

LI 356120 - FUZES Air Force

Volume 1 - 97



Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force

Date: April 2021

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F: Procurement of Ammunition, Air Force / BA 02: Weapons / BSA 1: Small

357010 / Small Arms

Arms

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

Line Item MDAP/MAIS Code: N/A

Line item MDAF/MAIS Code. N/A												
	Prior			FY 2023	FY 2023	FY 2023					То	
Resource Summary	Years	FY 2021	FY 2022	Base	oco	Total	FY 2024	FY 2025	FY 2026	FY 2027	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	-	20.142	10.093	16.395	-	16.395	30.642	31.302	32.015	32.732	-	173.321
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	20.142	10.093	16.395	-	16.395	30.642	31.302	32.015	32.732	-	173.321
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	20.142	10.093	16.395	-	16.395	30.642	31.302	32.015	32.732	-	173.321
(The following	Resource Sum	mary rows are fo	or informational p	urposes only. Th	ne corresponding	g budget request	s are documente	ed elsewhere.)			ĺ	
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-

## **Description:**

FY21 funding totals include \$6.217M appropriated for Overseas Contingency Operations.

FY22 funding totals include \$5.775M requested for Direct War and/or Enduring Requirements.

FY23 funding totals include \$5.412M requested for Enduring Requirements.

Small Arms encompasses small caliber, hand fired weapons (pistols and rifles) used to support air base ground defense, aircrew protection, Office of Special Investigations, security functions, and other activities requiring small, portable firearms. This line also procures various accessories needed to improve or maintain existing weapons.

Next Gen Carbine, Next Gen Squad Weapon, M240B Machinegun (7.62mm), M249 Automatic Rifle (5.56mm), M4A1 Carbine (5.56mm - Auto), APC9K, and Glock Handgun are FY23 New Starts.

PEs associated with this P-1 line are 0207227F, 0207580F, 0408011F and 0804731F.

**UNCLASSIFIED** 

LI 357010 - Small Arms Air Force Page 1 of 3 P-1 Line #16

Exhibit P-40, Budget Line Item Justification: PB 2023 Air Force

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F: Procurement of Ammunition, Air Force / BA 02: Weapons / BSA 1: Small Arms

357010 / Small Arms

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

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Date: April 2021

Line Item MDAP/MAIS Code: N/A

	Exhibits Schedule				Prior Years	FY 2021	FY 2022	FY 2023 Base	FY 2023 OCO	FY 2023 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-40a	SMALL ARMS Items Less Than \$5M				- / -	- / 20.142	- / 10.093	- / 16.395	- / -	- / 16.395
P-40	Total Gross/Weapon System Cost				- 1 -	- / 20.142	- / 10.093	- / 16.395	- 1 -	- / 16.395

<sup>\*</sup>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:

LI 357010 - Small Arms

This program, Small Arms P-40A Category SMALL ARMS ITEMS LESS THAN \$5 MILLION Item M4A1 Carbine (5.56mm - Auto), is a new start.

FY2023 Baseline funding in the amount of \$24.361M procures Next Generation Carbines, Next Generation Squad Weapons, M240B Machine Guns (7.26mm), M4A1 Carbines (5.56mm-Auto), and allows for annual replacement of condemned items.

FY23 Enduring Requirements funding procures Suppressors (3.412M), and Optics (2.000M).

Funding increased to support Enduring Requirements, and allow for annual replacement of condemned items.

UNCLASSIFIED
Page 2 of 3

P-1 Line #16

Exhibit P-40a, Budget Item Justification For Aggregated Items: PB 2023 Air Force

Date: April 2021

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

3011F / 02 / 1 357010 / Small Arms

Aggregated Items Title: SMALL ARMS Items Less Than \$5M

			P	rior Year	 s		FY 2021			FY 2022		FY	2023 Bas	se	FY	2023 OC	;o	FY	2023 Tot	lal
Item Number / Title [DODIC]		MDAP/ MAIS Code	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost												
MALL ARMS ITEMS LES	SS TH	IAN \$5 N	MILLION																	
Suppressors	Α		-	-	-	-	-	-	0.002	900	1.440	-	-	-	-	-	-	-	-	
Next Gen Carbine	Α		-	-	-	-	-	-	-	-	-	-	-	0.000	-	-	-	-	-	0.0
Next Gen Squad Weapon	Α		-	-	-	-	-	-	-	-	-	-	-	0.000	-	-	-	-	-	0.0
Optics	Α		-	-	-	-	-	16.784	-	-	2.071	-	-	1.754	-	-	-	-	-	1.
M18 GO	Α		-	-	-	-	-	0.028	-	-	0.028	-	-	0.000	-	-	-	-	-	0.0
M18	Α		-	-	-	-	-	-	-	-	0.070	-	-	-	-	-	-	-	-	
AN/PEQ-15 Laser Designator	Α		-	-	-	-	-	-	-	-	0.054	0.001	1,200	1.426	-	-	-	0.001	1,200	1.
M2A1 (.50 Cal Machine Gun)	Α		-	-	-	-	-	-	-	-	0.000	-	-	-	-	-	-	-	-	
M240B Machinegun (7.62mm)	Α		-	-	-	-	-	-	-	-	-	0.011	150	1.655	-	-	-	0.011	150	1.
M205 Tripods	Α		-	-	-	-	-	-	-	-	-	0.002	400	0.847	-	-	-	0.002	400	0.
M249 Automatic Rifle (5.56mm)	Α		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
M4A1 Carbine (5.56mm - Auto)	Α		-	-	-	-	-	-	-	-	-	0.001	4,425	3.363	-	-	-	0.001	4,425	3.
APC9K	Α		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Glock Handguns	Α		-	-	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MOD PROJECTS PARTS PROCUREMENT	Α		-	-	-	-	-	0.230	-	-	0.220	-	-	0.228	-	-	-	-	-	0.
FIRST DESTINATION TRANSPORTATION	Α		-	-	-	-	-	1.000	-	-	0.500	-	-	4.622	-	-	-	-	-	4
PMA- CONTRACTOR SERVICES	Α		-	-	-	-	-	1.400	-	-	1.350	-	-	2.100	-	-	-	-	-	2
PMA-GPC	Α		-	-	-	-	-	0.100	-	-	0.010	-	-	0.100	-	-	-	-	-	0.
PMA-TRAVEL	Α		-	-	-	-	-	0.100	-	-	0.100	-	-	0.100	-	-	-	-	-	0.
PMA-RMIS CORPORATE TAX	Α		-	-	-	-	-	0.250	-	-	0.250	-	-	0.200	-	-	-	-	-	0.
Hold for Price Adjustments	Α		-	-	-	-	-	0.250	-	-	4.000	-	-	0.000	-	-	-	-	-	0.
ubtotal: SMALL ARMS I HAN \$5 MILLION	TEMS	S LESS	-	-	-	-	-	20.142	-	-	10.093	-	-	16.395	-	-	-	-	-	16.
otal			-	_	-	-	-	20.142	-	_	10.093	-	-	16.395	-	-	_	-	-	16.3

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

Remarks:

Unit costs for FY22 are estimates and subject to change.

LI 357010 - Small Arms Air Force UNCLASSIFIED
Page 3 of 3

P-1 Line #16

Volume 1 - 101

